Comprehensive Amendment Addressing Electronic Reporting for Commercial Vessels

Amendment 54 to the Fishery Management Plan for the Snapper
Grouper Fishery of the South Atlantic Region
Amendment 4 to the Fishery Management Plan for the Dolphin and
Wahoo Fishery of the Atlantic
Amendment 35 to the Fishery Management Plan for Coastal Migratory
Pelagic Resources in the Gulf of Mexico and Atlantic Region
Amendment 57 to the Fishery Management Plan for the Reef Fish
Resources of the Gulf of Mexico

Public Hearing Draft





Fishery Impact Statement | Regulatory Impact Review | Regulatory Flexibility Analysis

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Definitions, Abbreviations and Acronyms Used in the FMP

ABC	acceptable biological catch	FCURR	the current instantaneous rate of fishing mortality
ACL	annual catch limit	_	
AM	accountability measure	FMSY	the rate of fishing mortality expected to achieve MSY under equilibrium conditions
ACT	annual catch target		and a corresponding biomass of B _{MSY}
В	a measure of stock biomass in		
	either weight or other	Foy	the rate of fishing mortality
	appropriate unit		expected to achieve OY under
			equilibrium conditions and a
$\mathbf{B}_{\mathbf{MSY}}$	the stock biomass expected to		corresponding biomass of
	exist under equilibrium		B_{OY}
	conditions when fishing at		
	F_{MSY}	FEIS	final environmental impact
		EN CD	statement
Boy	the stock biomass expected to	FMP	fishery management plan
	exist under equilibrium	ENALL	C* 1
	conditions when fishing at	FMU	fishery management unit
	F_{OY}	M	natural mortality rate
BCURR	The current stock biomass	IVI	natural mortanty rate
DCURK	The current stock biolinass	MARMAR	Marine Resources Monitoring
CPUE	catch per unit effort	141711414171	Assessment and Prediction
CICL	eaten per unit errort		Program
DEIS	draft environmental impact		Togram
	statement	MFMT	maximum fishing mortality
			threshold
EA	environmental assessment		an conord
		MMPA	Marine Mammal Protection
EEZ	exclusive economic zone		Act
EFH	essential fish habitat	MRFSS	Marine Recreational Fisheries
			Statistics Survey
F	a measure of the		
	instantaneous rate of fishing	MRIP	Marine Recreational Information
	mortality		Program
F30%SPR	fishing mortality that will	MSFCMA	Magnuson-Stevens Fishery
	produce a static SPR = 30%		Conservation and
			Management Act

DR	AFT	DRAFT		DRAFT
MSST	minimum stock size threshold			
MSY	maximum sustainable yield		SAFMC	South Atlantic Fishery Management Council
NEPA	National Environmental Policy Act		SEDAR	Southeast Data, Assessment, and Review
NMFS	National Marine Fisheries Service		SEFSC	Southeast Fisheries Science Center
NOAA	National Oceanic and Atmosphe	eric	SERO	Southeast Regional Office
OF			SIA	social impact assessment
OFL	overfishing limit		SPR	spawning potential ratio
OY	optimum yield		SSC	Scientific and Statistical
RIR	regulatory impact review		SSC	Committee

Amendment 54 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region

Amendment 4 to the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic

Amendment 35 to the Fishery Management Plan for Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region

Amendment 57 to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico

Proposed action: Maintain the reporting requirements for commercial

vessels reporting through the Coastal Fisheries Logbook Program but require transmission of reports be done electronically using available

software.

Lead agencies: Amendment – South Atlantic and Gulf of Mexico

Fishery Management Councils

Categorical Exclusion – National Marine Fisheries Service (NMFS), Southeast Regional Office

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Chapter 1. Introduction

1.1 Overview of the Commercial Coastal Fisheries Logbook Program

1.1.1 History of the Program

In April 1990, the commercial coastal fishery logbook (commercial logbook) was implemented for federally permitted vessels in the Gulf of Mexico (Gulf) reef fish fishery. Initially, a single page (8.5 x 11 inch) logbook was mailed in duplicate (with one form for fishermen's records) to permit holders by the Permits and Regulations Branch of the Southeast Regional Office (SERO). Participants were instructed to mail completed logbook forms to the Southeast Fisheries Science Center (SEFSC) Miami Laboratory. For permit holders residing within the state of Florida, only 20% were selected to submit logbook records, while all other Gulf states' residents were mandated to report. This determination was made since data were available from the Florida trip ticket program and those data for the sampled vessels could be used in conjunction with the trip ticket data to expand the total fishery sampling universe.

Originally, the commercial logbook contained trip information (i.e., vessel ID number, landing location and dealer, date of landing, type/quantity of gear). Additionally, information on fishing area and depth was collected. Fishermen could report up to three areas and three average depths. Fishing area was obtained using the Gulf of Mexico shrimp statistical grid system, included on the logbook form. Fishermen also reported landed weight (gutted or whole weight) of catch for each species along with the condition. Four gear types could be selected (trap, bottom longline, buoy gear, and hook-and-line) for each trip. This survey methodology was used from 1990 through 1991.

Beginning in 1992, the SEFSC coastal fisheries logbook program (CFLP) was modified in several ways and expanded to include federal permit holders in the South Atlantic snapper grouper fishery. First, the 20% selection of permit holders within the state of Florida was changed to 100% selection. Additionally, the paper form was expanded to a legal size to accommodate additional data collection fields. For trip information, the number of days away from port was included in the survey and the data field stipulating the fishing area spaces was removed. Gear type was slightly modified to better distinguish between hybrid fishing approaches where only a portion of the gear is anchored. For catch information, species-specific fields for fishing area and gear type were added. However, the survey was limited to one entry for these fields per species resulting in lack of resolution with only one area fished or gear type being attributable to any individual species.

The program was also expanded to include a selection of 20% of the permit holders operating in the South Atlantic snapper grouper fishery. This expansion resulted in the creation of two different logbook forms between the Gulf and South Atlantic. The logbook header was different for each to indicate the appropriate regional characterization and some of the pre-coded species listed on the two forms were different to reflect the predominant catches in the two areas.

Program participants in the South Atlantic were instructed to send completed logbooks to the SEFSC Beaufort Laboratory.

Beginning in 1993, the 20% program selection criteria was changed to 100% selection for the South Atlantic snapper grouper permit holders. Vessels that targeted shark species under the fishery management plan for Highly Migratory species were also included in the CFLP, and the survey form was modified again. Changes to the logbook form included: the data field for fishing areas was replaced to collect data on number of discards, "spearfishing" and "other" were added as gear types, vessel ID number was used in lieu of permit number, and fishermen were instructed to switch from average time per set for traps and longline gear to total time. In 1994, a designation was included for gear type to differentiate between spearguns and power heads. In 1995, an additional data field was added to indicate "target" species.

In 1996, a determination was made to instruct program participants to mail all commercial logbook forms to the SEFSC Miami Laboratory and several changes were made to the logbook form. The discard column was replaced with a column to report fishing area and a more detailed map was added of the Florida Keys to improve reporting accuracy. A separate no-fishing form was created. The gear type category was modified to differentiate between cast net and gillnet fishing. Lastly, a categorical input was included to specify the fishery (South Atlantic snapper grouper, Gulf reef fish, or shark).

In 1999, commercial logbook instructions were changed to clarify the distinction between handline and trolling gear. Additionally, a data field to record the trip start date was included. This change was made to bring the forms into compliance with the Atlantic Coastal Cooperative Statistics Program (ACCSP) standard for data collection. The term for the date when the trip was landed was changed from "landed date" to "unload date". Also implemented in 1999 was the South Atlantic Fishery Management Council's (South Atlantic Council) Comprehensive Sustainable Fisheries Act Amendment which modified the Snapper Grouper and Coastal Migratory Pelagic (CMP) Fishery Management Plans to include reporting requirements as specified by ACCSP. As a result, CMP commercially permitted vessels were required to report to the coastal logbook program (SAFMC 1998; Action 2b)¹.

In early 2001, the l commercial logbook was modified to allow entry of the state trip ticket number, provided by the dealer. Several states in the southeast (North Carolina, Georgia, Florida, Alabama, and Louisiana) have trip ticket programs that require dealers to report all commercial landings for each trip, and these data correspond closely to logbook data. The inclusion of this data field allowed for direct comparisons between the programs.

Additionally, in July 2001, the SEFSC initiated a new data collection program to help provide better estimates of the numbers of marine animals that were discarded on commercial fishing trips. For this discard survey, a stratified random sample of 20% of the active SERO-issued commercial permit holders is administered a supplemental discard form for a 12-month period. The sample selections are made in July of each year and the selected permit owners are required to complete and submit the discard form for any commercial fishing trips taken on the selected vessel(s) during August through July. Fishermen are not selected for the next four years after

 $^{^{1}\,\}underline{https://safmc.net/documents/2022/04/comprehensive-sustainable-fisheies-act-amendment.pdf/}$

they have submitted the discard form for a year. However, if fishermen are selected to report and do not comply, they are selected the following year and if they fail to report their discards the second year, sanctions are levied against their permit renewal.

Another data collection program was also developed in 2001 to collect economic information at the trip-level. For the economic survey, added as a "Trip Expense" section at the bottom of the trip form, fishermen are surveyed about the cost of various expenditures and revenue (i.e., costs of fuel and bait, crew wages, species-specific price per pounded for landings etc.).

To reduce the burden to fishers, only a sample of roughly 20% were required to report the information, but the questions were printed on each form (leading to significant "voluntary" reporting of economic data). The sampling design was based on historical activity. The new form was implemented in 2002. During the first years, only vessels with South Atlantic commercial fishing permits were selected to report the economic information. Vessels with Gulf of Mexico commercial fishing permits were added in 2005.

Originally, eight questions collected information on the quantity, price, and total expenditures on fuel, on the quantity and total expenditures on ice and bait separately, and on the total expenditures for "other trip expenses" as a general category (including groceries). In addition, three questions asked about the payments to the crew and captain; if the payments included the owner's salary or not; and if the owner was on board or not (Yes or No questions). Finally, a column was added to the Catch Section on the logbook form for the fishers to report the price per pound for each species that was landed and sold on the trip. Currently, both the discard and economic survey portion of the program are voluntary, unless selected by the SEFSC, wherein reporting is mandatory for one year.

In addition to these major program changes, several changes were made to the SEFSC standard catch-effort logbook form in 2001. A separate gear category was added for bandit rig (electric reels). On previous forms, commercial fishermen were asked to record the gear parameter data (i.e., number of lines, average number of hooks per line, and an estimate of the total fishing time) for this type of gear in the "Handline" category. Because of the importance of this gear type for certain fisheries, an additional gear type column was added to separate bandit reel fishing from other Handline fishing, to increase the specificity of fishing behavior description. Another change was made to provide space for the fishermen to record the state-issued license number for the dealer who purchased the landings. On previous forms, only the name or alias of the dealer was included. For many situations, the fishermen also know the dealer's license number and can record it. This additional information increases the likelihood that the correct dealer will be included in the coastal fisheries database.

The only changes that were made to the SEFSC coastal fisheries logbook program forms between 2002 and 2003 were modifications to the Trip Expense section of the form. The wording of certain questions was changed, as well as the instructions, to aid in correct interpretation. No major changes were made to the commercial logbook forms between 2005 and 2006, but the price per pound column was removed from the Catch Section in 2005, and the owner's salary question was dropped in 2006.

In 2007, several small details were added and changed, and commercial fishermen were sent a letter notifying them of these specific updates. The vessel operator name and operator number fields were added, and some formatting shifted to accommodate the new lines. Checkboxes were added to the traps, longline, and gill net gears so that fishermen could indicate the specific type used. Set soak times were also added for these gears, in addition to the total soak times required on the previous logbook version. Finally, all hook and line gears were combined into one section, with rows for number of lines, number of hooks, and total hours fished for hand, electric, and trolling gears.

Also, in 2007, the Trip Expense Section of the SEFSC coastal fisheries logbook was substantially modified. The two questions about the quantity of bait and ice were dropped, and the general category for other trip expenses was broken into two questions to separate the cost of groceries from the "other trip expenses" (now labeled miscellaneous expenses). Importantly, a question to collect the total revenue from the trip sales was added in 2007.

The only update to the 2008 SEFSC commercial coastal fisheries logbook was to change the name of the "electric" gear to "bandit." No changes or additions were made in 2009. In 2010, to clarify trips in which the catch was sold to multiple dealers, a check box was added for fishermen to indicate if this described their situation. Also in 2010, individual forms were preprinted with a Vessel Trip Report (VTR) number, a unique serial number used to identify reports.

In 2012, the SEFSC coastal fisheries logbook added buoy gear to the hook and line section. In previous versions, users were instructed to report this gear as "Other." Additionally, the Trip Expense Section was changed so that the general category of other trip expenses (miscellaneous expenses) was again broken into two questions to separate the total cost of "trip tackle and other supplies" from the rest. Also, the labor cost question was split into two categories to separate the captain's share from the crew share. An additional question was added to separately collect expenditures on trip-level IFQ allocation purchases (only applicable for Reef Fish (permit holders).

On the 2014 version of the SEFSC commercial coastal fisheries logbook, the labor cost questions were re-consolidated into a single question for both hired crew and hired captain (if any), with emphasis on expenditures for hired labor only. The question on total cost of fuel and cost of tackle was dropped. Also, a new Yes or No question was added asking if the payment for the catch had been determined at the time the logbook was mailed. This allowed fishermen to opt out on reporting revenue and labor cost if the price of the fish, i.e., revenue, was not yet provided by the dealer. Since these changes to the Trip Expense Section, the form has not been changed and is currently the logbook in use in 2023.

1.1.2 Consideration of other overlapping commercial reporting programs throughout the Gulf of Mexico and Atlantic

Commercial permit holders with the snapper-grouper, coastal migratory pelagics, and dolphinwahoo fisheries may have overlapping reporting requirements for other fisheries that they participate in.

Vessel owners may possess commercial fishing permits issued by other sections of NMFS or other agencies in addition to their SERO permits, which may have additional reporting requirements for any commercial fishing trips. Examples of other permits include those issued by the NMFS Greater Atlantic Regional Fisheries Office (GARFO), the NMFS Highly Migratory Species Management Division (HMS), or state fishing agencies. may have additional reporting requirements with the Gulf of Mexico Individual Fishing Quota Program (IFQ) or the Wreckfish Individual Transferrable Quota (ITQ) program when participating in those fisheries. It is the responsibility of the permit holder to ensure they are meeting the requirements of all relevant programs.

Gulf of Mexico Individual Fishing Quota Program

The Gulf of Mexico Fishery Management Council manages the commercial harvest of 14 federal reef fish species within an IFQ)Program. Species managed by the IFQ Program individually include red snapper, gag grouper, and red grouper. Other species are managed within a complex and include deep-water groupers (snowy, speckled hind, warsaw, and yellowedge), shallow-water grouper (black grouper, scamp, yellowfin, and yellowmouth), and tilefish (blueline, golden, and goldface). Reporting requirements under the IFQ program will remain unchanged by the proposed modifications to the commercial electronic logbook. The IFQ program operates through a separate reporting system via dealer reports; therefore, it is independent of changes to the SEFSC commercial coastal logbook program. Commercial fishing permit holders for IFQ species will continue to report the required information through the IFQ system and they will separately also continue to report their logbook requirements by doing so through the new electronic logbook software.

Greater Atlantic Regional Fisheries Office

On November 10, 2021, NMFS implemented a new rule requiring all commercial vessels with federal permits issued by the GARFO, for species managed by the Mid-Atlantic or New England Fishery Management Councils, to submit vessel trip reports (VTRs) electronically as eVTRs within 48 hours of the end of a commercial fishing trip (unless required sooner as with some sector allocations) (85 FR 71575). Those permit holders that report logbook information to GARFO must use a NMFS-approved software to submit an eVTR. Currently, the two approved GARFO logbook options are Fish Online and eTrips Mobile 2. Those with GARFO and SERO permits may need to submit multiple reports per commercial fishing trip to remain compliant with the reporting requirements of the two regions.

NMFS Highly Migratory Species Division

NMFS is considering management options to modify or expand reporting requirements for Atlantic highly migratory species (HMS)². All HMS reporting would require electronic submission using an online or mobile reporting application. Specific to commercial vessel reporting, NMFS is considering options for electronic submission of information required on the existing, paper logbooks, as well as a logbook requirement for owners of vessels with Atlantic Tunas General category permits, Atlantic Tunas Harpoon category permits, and/or Swordfish General Commercial permits. Specific to recreational vessel reporting, NMFS is considering a logbook requirement for owners of HMS Charter/Headboat permitted vessels, as well as expanding HMS Angling permit reporting requirements. NMFS is also considering measures to encourage reporting compliance for vessel owners with HMS open access permits. Specific to dealer reporting, NMFS is considering requiring dealers to enter certain fish individually in their dealer reporting programs and a technical change in bluefin tuna reporting requirements. Finally, specific to the HMS Exempted Fishing Permit Program, NMFS is considering offering an electronic reporting platform, as well as some technical changes to reporting requirements.

1.1.3 Current Reporting Requirements

The CFLP collects information on fishing effort and catch of federally managed species, as well as economic information for fishery participants. The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires that NMFS and regional fishery management councils prevent overfishing and achieve the optimum yield from federally managed fish stocks on a continuing basis. These mandates are intended to ensure that fishery resources are managed for the greatest overall benefit to the nation. Data collection programs, such as the CFLP, provide essential information required to assess stock status and monitor harvest. The CFLP records the commercial fishing and non-fishing activity of fishermen via logbooks submitted for each trip or each month they did not make commercial fishing trips.

Each December, the SEFSC commercial logbook program mails SERO-issued commercial permit holders a carbonless carbon paper logbook of approximately 100 pages containing 3 sections (instructions, fishing trip reporting forms, and no monthly activity reporting forms) along with postage paid return envelopes. Permit holders are instructed to report trip level fishing activity within 7 days after finishing a trip or after a month without any fishing activity and mail the federal copy of the form to the SEFSC. Permit holders are instructed to maintain the carbon copy of the form for their personal records.

1.1.3.1 Description of the Current SEFSC Coastal Fisheries Logbook

The data fields described below, along with economic data fields, are listed in Table 1.1.3.1. A copy of the paper logbook form and instructions on completing the form are in Appendix B.

² Advance Notice of Proposed Rulemaking: Electronic Reporting Requirements for Atlantic Highly Migratory Species | NOAA Fisheries

Information such as the name and address of a vessel operator and owner is used to identify the respondent and the legal entity controlling the fishing practices of the vessel. The legal entity information is essential in monitoring the reporting compliance, where revocations of the operator's permit or fines are involved. Because many vessels are owned by corporations or other legal entities, identification of the operator on the logbook form allows NMFS to sanction the entity as well as the individual vessel operator as necessary or required by the regulations.

Data on the date of departure, date returned, days fished, duration of tows or sets, units of gear, and mesh size used are all designed to help analysts quantify actual fishing effort. Fishing effort is needed to standardize differences in productivity among vessels or fishing grounds by establishing a rate of catch per unit effort (CPUE). These data allow comparisons over time, area, and gear type of catches made by a variety of harvesters. Comparisons of CPUE with time are significant indicators of the biological status of the fisheries. CPUE indices, especially if data on fishing effort are sufficiently detailed to adjust for changes in effort, can provide critical information on the status of the stock and the level of fishing mortality needed to achieve biomass targets.

Area fished and depth of fishing are variables that are used to establish fishing locations and are another component of fishing effort estimation. This information can be linked to other oceanographic and biological information to predict species availability, reproduction, and other important features of fishery management. For example, location of capture can be correlated to sea surface temperature measured by satellite to predict possible migration patterns. In addition, area or zone fished is used to cross reference locations with fishing restrictions (such as closed spawning areas).

Catch is the other component of the CPUE indices needed to assess fish stocks. Descriptions of the quantity of each species landed is the basic measure of fishing success, from which fishermen, biologists and economists infer conclusions about the status of the fishery.

The name and ID number of the dealer, and port of landing are data used to cross reference the quantity of fish landed for sale (reported by the fisher) with the quantity that is handled (processed) by the market (reported by the dealer).

A separate form or response is required when a vessel does not commercially fish during an entire calendar month. These no-fishing report forms are necessary for NMFS to confirm that the vessel did not fish instead of failing to report. The information on the no-fishing form is minimal, i.e., only the vessel ID, vessel name, and the month in which the vessel did not fish. Owners are instructed to check the specific permits that they own but did not use during the month (a check box is provided for ease of identifying the permits).

NOAA Fisheries is mandated to assess the biological, economic and social impacts of management actions. Data are needed to complete this mandate. While there is considerable fishery-dependent and –independent data collected on fish stocks, there is far less information collected on the economics of fisheries. Economic analyses use data obtained from the Commercial Coastal Logbook Program and state Trip Ticket Programs to assess impacts on the commercial sector; however, they are not enough because they lack cost information. The

southeast coastal logbook fisheries economic surveys (economic surveys) get that necessary information.

The economic surveys collect economic data on commercial fishing trips and vessels in the following federally permitted fisheries: Gulf of Mexico Reef Fish, Coastal Migratory Pelagics (King and Spanish Mackerel), South Atlantic Snapper Grouper, Atlantic Dolphin Wahoo, and Sharks. Data are collected by two separate surveys: one at the trip-level and one at the annual, vessel-level. At the beginning of each year, approximately 20% of all vessels with valid permits for the above fisheries are selected. These vessels are required to complete the trip expense section on the logbook form for each commercial fishing trip they take in these fisheries for the entire calendar year. Trip economic expenses questions on the trip logbook currently include fuel used and price per gallon; bait, ice, grocery and miscellaneous expenses, payment for catch, hired crew and captain, if any.

Additionally, after the calendar year is over, surveys are mailed to these vessels to collect expense data at the annual, vessel-level. This survey focuses on supplemental fixed and overhead costs as well as activity in unrelated fisheries. See Appendix B for copies of the trip-level and vessel-level surveys.

The Economic Surveys result in fishery reports, such as NOAA Technical Memoranda NMFS-SERFSC-730 (Economics of the U.S. South Atlantic Snapper-Grouper Fishery) and NMFS-SEFSC-725 (Economics of the Gulf of Mexico Reef Fish Fishery). Information from these reports is used to estimate average net cash flow and net revenue at the trip level, as well as net returns to operations and producer surplus at the vessel level. Those estimates can be found in the description of the economic environment and are useful to assess the economic impacts of a management action on the commercial sector and are particularly useful when assessing the impacts on small commercial fishing businesses.

A copy of the paper logbook form and instructions on completing the form are available in Appendix B.

Table 1.1.3.1. List of current coastal logbook data fields.

Current Paper Logbook Fields
Vessel No
Vessel Name
Trip Start Date
Trip Unload Date
No. of Crew
Days at Sea
Operator Name
Operator Signature
Operator Number
Phone No.
Gear Type used on the trip
Gear Parameters (see Appendix B)

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Depth
Net Depth
Total Hrs Fished
Species Name
Gear predominantly used to catch a given species
Area where majority of a given species was caught
Depth at which majority of a given species was caught
Gutted lbs / Whole lbs
County or Parish, State of Landing
Trip Unload Date
SE Federal Dealer Number
State Trip Ticket No.
Economic Survey (mandatory if selected by SEFSC)
Owner Operated?
Gallons of Fuel
Price per Gallon
Bait Expense
Ice Expense
Grocery Expense
Misc. Trip Expenses
IFQ Allocation Purchased
Has payment for your catch been determined?
Trip Sales (Revenue)
The Bules (Revenue)
Expense for hired crew & hired captain

Note: The economic portion of the survey (highlighted in blue) is voluntary. However, if a permit holder is selected by the SEFSC, economic data fields must be reported for one year.

The CLFP spans the Gulf of Mexico and Atlantic. The current fishing areas are one-degree grids with the latitude and longitude degrees concatenated for each grid cell (Figure 1.1.3.1).

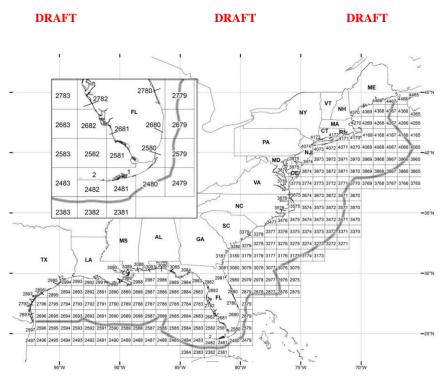


Figure 1.1.3.1. Current spatial extent and locational sampling grids for the commercial coastal logbook program.

1.2 What Action is Being Proposed?

This joint amendment proposes requiring that commercial coastal logbooks, for owners of permits issued by SERO, for the subject amendments be submitted via electronic reporting forms instead of the currently used paper-based forms.

This action would transition the paper-based commercial logbooks under the Coastal Logbook Program for the following Fishery Management Plans to an electronic platform to increase efficiency in reporting with benefits to the fishermen and the agency.

- Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region
- Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic
- Fishery Management Plan for Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region

Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico

Status Quo. The owner or operator of a vessel for which a commercial fishing permit for South Atlantic snapper grouper, Atlantic dolphin and wahoo, coastal migratory pelagic (CMP) species (king or Spanish mackerel and Gulf Cobia), or Gulf reef fish has been issued, or whose vessel fishes for or lands such species (Atlantic snapper grouper species, Atlantic dolphin or wahoo species, Gulf reef fish, or CMP species for sale) in or from state waters adjoining the applicable South Atlantic, Atlantic, or Gulf of Mexico 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 postmarked no later than 7 days after the end of each fishing trip. If no fishing occurred during a calendar month, a report must be submitted on one of the forms postmarked no later than 7 days after the end of that month. Information to be reported is indicated on the form and its accompanying instructions.

Option 1: Maintain the reporting requirements described above but require the fishers to transmit their reports electronically using available hardware and software. Information to be reported is indicated on the electronic form and its accompanying instructions.

1.2.1 Proposed modifications to data fields

To directly integrate the information currently collected by the paper logbook forms to the existing Atlantic Coastal Cooperative Statistics Program (ACCSP) database, slight modifications to the program data fields will be required. Data collection changes are categorized as either added, removed, or modified (Table 1.2.1.1). Note that this table is not an exhaustive list of modifications to successfully transition from paper to electronic reporting.

Table 1.2.1.1. A list of logbook and economic data field additions, removals, and modifications.

Data fields added	Rationale
Trip start time	Necessary to prevent overlapping trip submissions
Trip end date	Necessary to prevent overlapping trip submissions
Trip end time	Necessary to prevent overlapping trip submissions
Trip type	Conditional entry to populate associated data fields
Trip notes	Optional, Not transmitted to SEFSC
Primary area fished	Added data field to be compatible with ACCSP database
Data fields removed	Rationale
Signature	Logbook accuracy verified through certification statement before submission
Has payment of catch been determined?	Answered if trip sales question is filled out
Data fields modified	Rationale
Hours/Days	Defaults to "hours"; Added data field to be compatible with
·	ACCSP database
Disposition category	Defaults to "food"; replaces need for separate discard logbook
Sale disposition	Defaults to "Sold to Dealer"; Added data field to be compatible with ACCSP database

The electronic submission is intended to simplify data collection and improve data quality. For example, the platform will allow for entry of a catch disposition, in which a determination of "discard" may be selected. This advancement will result in the ability to include discard information within the logbook form and render a separate discard information form unnecessary.

1.3 Who is proposing the amendment?

The South Atlantic Fishery Management Council (South Atlantic Council) is responsible for managing snapper grouper species in the South Atlantic region, and dolphin and wahoo in the Atlantic. The Gulf of Mexico Fishery Management Council (Gulf Council) manages reef fish resources in the Gulf of Mexico and jointly manages coastal migratory pelagic resources (Gulf and Atlantic king and Spanish mackerel and Gulf cobia species) with the South Atlantic Council. The Councils develop amendments to fishery management plans (FMPs) and submit them to the National Marine Fisheries Service (NMFS) who determines whether to approve an amendment to the FMP and to publish a rule implementing the amendment on behalf of the Secretary of Commerce. NMFS is an agency of the National Oceanic and Atmospheric Administration within the Department of Commerce. Guided by the Magnuson-Stevens Act, the Regional Fishery Management Councils work with NMFS and other partners to sustainably manage fishery resources in the US exclusive economic zone.

The South Atlantic and Gulf Councils and NMFS are also responsible for making this document available for public comment. The amendment was made available to the public during the

scoping process, public hearings, and Council meetings. The amendment will also be made available for comment during the rulemaking process.

1.4 Why are the Councils Considering Action (Purpose and Need)?

This amendment would modify the FMPs for South Atlantic Snapper Grouper, Atlantic Dolphin Wahoo, Atlantic and Gulf of Mexico Coastal Migratory Pelagics, and Gulf of Mexico Reef Fish to require commercial logbooks to be submitted via electronic reporting forms instead of the currently used paper-based forms. The Councils have seen the value of moving to an electronic reporting platform for the commercial sector to improve data collection efficiency and accuracy. Paper form usage will eventually be eliminated except for during emergency and catastrophic conditions.

During the December 2012 meeting, the South Atlantic Council approved a motion moving the commercial electronic logbook reporting action out of the Comprehensive Ecosystem-Based Amendment 3 that was being developed and indicated their wish to work with the Gulf Council on a joint amendment to implement an electronic commercial logbook. The Gulf Council approved a similar motion in January 2013 to work jointly with the South Atlantic Council on modifying the submission procedure for the coastal logbook program. The SEFSC conducted a pilot study for commercial electronic logbook reports in 2015. Initially, an amendment incorporating results from year one of the pilot study was planned with a target implementation date of January 1, 2016; however an amendment has yet to be developed.

As of 2021, voluntary commercial electronic logbook reports can be submitted by Southeast Region commercial permit holders through the ACCSP eTRIPS mobile 2 application. The timeline in Table 1.4.1. summarizes the progression of this amendment to date.

Table 1.4.1. Timeline of development of joint commercial electronic logbook amendment.

Date	Activity
2011-2012	South Atlantic Comprehensive Ecosystem Based Amendment 3 (CE-BA
	3) developed, including scoping and public hearings.
December 2012	South Atlantic Council removed commercial logbook reporting action
	from CE-BA 3
February 2013	Gulf Council approved motion to develop Joint South Atlantic/Gulf of
	Mexico Generic Commercial Logbook Reporting Amendment.
June 2013	South Atlantic Council approved a motion to request SEFSC
	presentation on the commercial e-logbook pilot study and directed staff
	to work with Gulf staff to incorporate results form year 1 of the pilot
	study and target regulations to be effective in January 1, 2016.
September 2013	SEFSC presented status of exploratory research project that began in
	August 2013 and indicated the project would last 12 to 18 months. The
	Council requested updates at each Council meeting moving forward.

2015	SEFSC conducted pilot study.
2015-2021	Database development and testing of mobile reporting application (eTRIPS) in cooperation with ACCSP
March 2021	Feedback from Gulf Reef Fish and Gulf Coastal Migratory Advisory Panels that set-based reporting should be revised for SERO commercial logbooks.

The Councils have received periodic updates from the SEFSC during regularly scheduled Council meetings for several years on the transition of the current paper-based Coastal Fisheries Logbook Program to an electronic format. The SEFSC has developed (in coordination with ACCSP) a mobile application to accept electronic submissions. However, because the language implementing commercial reporting requirements in the applicable FMPs and in the existing regulations does not specify that the submission of commercial logbooks can be accomplished via electronic means, each of the applicable FMPs that require paper logbook submissions must be amended to allow for electronic submission. Additionally, the SEFSC will need to develop technical specifications and guidelines to allow other vendors to develop mobile applications for this program.

Purpose and Need

The *purpose* is to modify reporting for commercial fishing vessels issued South Atlantic or Gulf of Mexico permits and currently reporting through the Southeast Coastal Logbook program (Gulf Reef Fish, South Atlantic Snapper Grouper, Atlantic Dolphin and Wahoo, and Coastal Migratory Pelagic Resources of the Gulf and Atlantic), to require that the reports be submitted electronically.

The <u>need</u> is to improve the timeliness and efficiency of the commercial logbook data collection and management program, which will improve monitoring and compliance of federally permitted commercial vessels participating in the Southeast Coastal Logbook program.

1.5 Description of the Biological Environment and Effects of Action

1.5.1 Biological Environment

The actions in this amendment would apply to the fisheries managed under various fishery management plans (FMPs) in the South Atlantic and the Gulf of Mexico. Details regarding the biological and ecological environment for the species managed under this amendment are found in recent amendments to the Snapper Grouper FMP, Dolphin Wahoo FMP, Coastal Migratory Pelagics FMP and the Gulf Reef Fish FMP, and are incorporated by reference, herein.

For a description of the biological environment for the snapper grouper fishery of the South Atlantic, refer to Regulatory Amendment 27 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region. The biological environment for the coastal migratory pelagics fisheries is described in Amendment 34 to the Fishery Management Plan for Coastal Migratory Pelagics (CMP) in the Gulf of Mexico and Atlantic; Amendment 32 to the CMP FMP also describes the biological environment. The biological environment for Gulf Reef Fish was described in Amendment 48 to the Reef Fish FMP. Amendment 10 to the FMP for the dolphin wahoo fishery of the Atlantic describes the biological environment for that fishery.

1.5.2 Biological Effects Analysis

This action is administrative in nature and therefore not expected to have any direct effects, positive or negative, on the biological environment. There may be long-term indirect positive effects from improved availability and quality of commercial fishing data: (1) data on commercial catch and discards would be available more readily to managers because less time would be required to validate electronic submissions, (2) fewer errors are likely to occur and ease of submission may reduce recall bias, and (3) compliance with reporting requirements is expected to improve.

1.6 Description of the Economic Environment and Effects of Action

1.6.1 Economic Environment

1.6.1.1 Overview

This action concerns the commercial sectors of the following four fisheries: Gulf Reef Fish, Coastal Migratory Pelagic Resources (both Gulf and Atlantic), Atlantic Dolphin Wahoo, and South Atlantic Snapper Grouper. For that reason, the following description of the economic environment focuses exclusively on the commercial sectors of those four fisheries.

The COVID-19 pandemic caused large-scale disruptions to the national economy and global markets in 2020. As states implemented a suite of social distancing measures in March 2020 to restrict the spread of the virus, large segments of the economy shutdown causing U.S. gross domestic product (GDP) to contract 9.03% in the second quarter relative to the previous year.

Those measures triggered a series of economic shockwaves in the seafood industry and other part of the economy. The contraction was so severe that a recession was declared for March and April 2020 (NMFS 2021). Commercial fishing landings revenue declined 22% in 2020 relative to the five previous years (2015–2019), with all regions experiencing a significant decline. Depressed market conditions existed in all regions, with high-value products and seafood exports withstanding the worst of these losses, particularly during the initial months of the pandemic.

An average annual total of 666 federally permitted vessels reported making 8,037 trips that harvested reef fish, king mackerel and Spanish mackerel from the Gulf of Mexico from 2017 through 2021 (Table 1.6.1.1). During that same 5-year period, an annual average of 1,030 federally permitted vessels reported making 22,912 trips that harvested dolphin, wahoo, king mackerel, Spanish mackerel and species within the Snapper Grouper (SG) Fishery from the South Atlantic (Table 1.6.1.2). Many of the vessels that reported landings from the Gulf and South Atlantic hold multiple federal permits. Note that there were declines in both the numbers of vessels and their reported trips in 2020 and 2021 in both the Gulf and South Atlantic. All dollar figures stated below (Section 2.2) are in 2021 dollars.

Table. 1.6.1.1. Number of federally permitted vessels that reported trips and landings of Gulf king mackerel, Gulf Spanish mackerel and reef fish, and average number of those trips per federally permitted vessel, 2017 - 2021.

Year	Reported Trips of Federally Permitted Vessels that Landed Gulf King Mackerel, Gulf Spanish Mackerel, and Gulf Reef Fish	Federally Permitted Vessels that Reported Landings of Gulf King Mackerel, Gulf Spanish Mackerel and Gulf Reef Fish	Average Trips per Federally Permitted Vessel that Landed KM, SM, and Reef Fish
2017	9,451	739	13
2018	8,345	719	12
2019	8,144	648	13
2020	7,396	645	11
2021	6,850	578	12
Average	8,037	666	12

Source: SEFSC Socioeconomic Panel (Sep 22) accessed by the SEFSC Economic Query System (December 2022).

Table. 1.6.1.2. Number of federally permitted vessels that reported trips and landings of Dolphin Wahoo, king and Spanish mackerel, and SG from South Atlantic (SA), and average number of those trips per federally permitted vessel, 2017 - 2021.

Year	Reported Trips of Federally Permitted Vessels that Landed Dolphin, Wahoo, King Mackerel, Spanish Mackerel and Snapper Grouper from SA	Federally Permitted Vessels that Reported Landings of Dolphin, Wahoo, King & Spanish Mackerel, and Snapper Grouper from SA	Average Trips per Federally Permitted Vessel
2017	25,494	1,062	24
2018	23,723	1,066	22
2019	24,527	1,067	23
2020	21,331	1,021	21
2021	19,487	932	21
Average	22,912	1,030	22

Source: SEFSC Socioeconomic Panel (Sep 22) accessed by the SEFSC Economic Query System (December 2022).

Any dealer that purchases Gulf reef fish, Atlantic dolphin and wahoo, coastal migratory pelagics, or South Atlantic snapper grouper harvested from federal waters must have a federal Gulf and South Atlantic dealer permit and submit weekly reports. However, to purchase IFQ species or species groups, the dealer must have a Gulf IFQ dealer permit.

1.6.1.2 Gulf Reef Fish

The Gulf Council manages 31 species under the Gulf Reef Fish FMP, and any commercial fishing vessel that harvests or sells these reef fish from the Gulf EEZ must have a valid (non-expired) limited-access reef fish (RF) permit assigned to it. An RF-permitted vessel must report its landings, regardless where the fish are harvested (state or federal waters), to satisfy conditions of the permit.

Any commercial vessel that harvests reef fish under the permit must also have an operating vessel monitoring system (VMS) on board (50 CFR §622.28). Moreover, the owner or operator of a RF-permitted vessel must ensure that the required VMS unit transmits a signal indicating the vessel's accurate position at least once an hour, 24 hours a day every day when out of port or in port and not in dry dock unless exempted under paragraphs (c) and (d) of Section 622.28. A valid RF permit and VMS are not sufficient to harvest the 14 reef fish species managed under two individual fishing quota (IFQ) programs. These two programs are the Grouper-Tilefish (GT) IFQ and Red Snapper (RS) IFQ programs.

Since January 1, 2015, all U.S. citizens and permanent resident aliens have been eligible to obtain a GT-IFQ or RS-IFQ shareholder account to purchase shares and allocation. Shares are a percentage of the commercial quota, while allocation refers to the poundage that one can possess, land, or transfer during a given calendar year. Allocation is annual and expires on December 31. The GT-IFQ program includes 13 species in five share categories. These share categories are gag grouper (GG), red grouper (RG), deep-water grouper (DWG)), shallow-water grouper (SWG), and tilefishes (TF). While the first two share categories concern a single species, the last

three categories are of species complexes commonly caught together. Consequently, in addition to having a valid reef fish permit, a vessel must have a RG share account to harvest red grouper and a GG share account to harvest gag grouper; however, that is not enough. The purpose of the RG or GG share account is to hold IFQ allocation³ and allocation is required to land the applicable IFQ species. To harvest deep-water grouper, shallow-water grouper or tilefish, a vessel must have a DWG share account, SWG or TF share account, respectively, allocation for the applicable species or species group, and a valid reef fish permit. To harvest red snapper, a vessel must have a RS share account and allocation for red snapper. More information about vessels that harvest GT-IFQ species or red snapper and other details of the two IFQ programs are in the Red Snapper and Grouper Tilefish IFQ programs review and are incorporated by reference (GFMC Sept. 2021).⁴

The total number of valid reef fish permits represents the maximum number of vessels that would be able to harvest reef fish in the Gulf EEZ. However, not all RF permits are valid during the course of a calendar year. Permits expire and once expired, the permit holder has up to a year after the expiration date to either renew or transfer the permit. A permit that is not renewed or transferred within that time is terminated, and as shown in Table 1.6.1.2.1, the number of vessels with a valid RF permit has declined. In step with that decline has been the increase in market value of a commercial reef fish permit.⁵ Moreover, substantially less than 100% of those RF-permitted vessels report RF landings in any given year. From 2017 through 2020, an annual average of about 63% of RF-permitted vessels reported landings of reef fish. An annual average of 517 RF-permitted vessels reported landings of reef fish from 2017 through 2021.

Table. 1.6.1.2.1. Number of vessels with a valid RF permit, and number and percentage of those vessels with reported reef fish landings, 2017 - 2021.

Year	Valid RF-Permitted Vessels	RF-Permitted Vessels that Reported RF Landings	Percentage RF- Permitted Vessels with Reported RF Landings
2017	850	564	66.35%
2018	845	549	64.97%
2019	842	517	61.40%
2020	837	496	59.25%
Average	844	532	62.99%
2021	8141	457	NA^2

^{1.} This is the number of vessels with a valid RF permit for at least one day from January 1 through August 26, 2021. Previous years' figures are for the number of permits that were valid for at least one day during the entire calendar year. The number of valid RF permits for the entire calendar year is currently unavailable.

^{2.} The number of RF vessels that reported landings of reef fish is for the entire calendar year, whereas the figure for the number of valid RF permits is only for part of the calendar year (January 1 – August 26). The percentage for the entire calendar year would be at most 56.14% if there is no increase in the number of valid permits after August 26.

³ IFQ allocation is the amount of red grouper or gag grouper, in pounds gutted weight, an IFQ shareholder or allocation holder is authorized to possess, land, or sell of the applicable species during a given fishing year. IFQ allocation is derived at the beginning of each year by multiplying a shareholder's IFQ share times the annual commercial quota for the applicable species.

⁴ See https://gulfcouncil.org/wp-content/uploads/Joint-RS-GT-IFQ-Review-w.appendix-10-27-21-Final_508.pdf.

⁵ For more information about the market price of a commercial reef fish permit, see the Red Snapper and Grouper-Tilefish Individual Fishing Quota Programs Review (2021).

Source: NMFS SERO Sustainable Fisheries Division (SFD) Access Permits database and SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022).

There are restrictions on the use of gear when harvesting reef fish. For a person aboard a RF-permitted vessel to use a bottom longline for reef fish in the Gulf EEZ east of 85°30 W. long., a valid eastern Gulf reef fish bottom longline endorsement must have been issued to the vessel and must be on board (50 CFR §622.20(2)). From 2016 through 2020, there was an annual average of 62 vessels with the endorsement and 98% of those vessels had a homeport in Florida. As of August 26, 2021, there were 62 vessels with a bottom longline endorsement.

The annual average of 517 RF-permitted vessels that reported reef fish landings from 2017 through 2021 (Table 1.6.1.2.1) made 5,871 trips that landed approximately 12.8 million lbs of reef fish. Those reef fish landings had an ex-vessel value of approximately \$60.3 million (Table 1.6.1.2.2). Average ex-vessel revenue per trip from landings of reef fish was \$10,271.

Table 1.6.1.2.2. Gulf RF-permitted vessels and their reported RF trips, RF landings (lbs gw), RF Ex-vessel revenue, and average RF ex-vessel revenue per trip with RF landings, 2017 – 2021.

Year	RF Trips	RF Landings (lbs gw)	RF Revenue	Average RF Landings (lbs gw) per Trip	Ave RF Revenue per RF Trip
2017	6,849	13,904,072	\$63,269,410	2,030	\$9,238
2018	6,027	12,498,242	\$59,093,571	2,074	\$9,805
2019	6,029	12,788,231	\$62,251,786	2,121	\$10,325
2020	5,503	12,166,048	\$57,032,827	2,211	\$10,364
2021	4,949	12,609,904	\$59,870,747	2,548	\$12,098
Average	5,871	12,793,299	\$60,303,668	2,197	\$10,271

Source: SEFSC Socioeconomic Panel (Sep 22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

Reef fish accounted for an average of 96% of annual ex-vessel revenue from all reported landings of RF-permitted vessels (Table 1.6.1.2.3). The average RF-permitted vessel with reef fish landings from 2017 through 2021 had annual total ex-vessel revenue from all landings of \$121,609. The highest annual total revenue for a RF-permitted vessel that reported reef fish landings during this 5-year period was less than \$3.1 million.

Table 1.6.1.2.3. Ex-vessel revenue of RF-permitted vessels from RF landings, jointly landed species, and other species from trips without RF, 2017 – 2021.

Year	RF Revenue	Revenue from Jointly Landed Species	Revenue from Non- RF Trips	Total Revenue	Percentage RF	Ave Total Revenue Per Vessel
2017	\$63,269,410	\$1,170,367	\$1,735,677	\$66,175,453	95.61%	\$117,332
2018	\$59,093,571	\$841,780	\$1,441,437	\$61,376,788	96.28%	\$111,797
2019	\$62,251,786	\$806,816	\$1,312,302	\$64,370,904	96.71%	\$124,509
2020	\$57,032,827	\$586,173	\$1,261,682	\$58,880,682	96.86%	\$118,711
2021	\$59,870,747	\$673,876	\$1,467,705	\$62,012,328	96.55%	\$135,694
Average	\$60,303,668	\$815,802	\$1,443,761	\$62,563,231	96.40%	\$121,609

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

From 2017 through 2021, the average RF-permitted vessel with reported landings of reef fish made a total of 13 trips annually and about 90% (11) of those trips had landings of reef fish (Table 1.6.1.2.4). The average trip with landings of reef fish generated ex-vessel revenue of \$10,410 (from reef fish and jointly caught species), while the average trip without landings of reef fish generated ex-vessel revenue of \$2,295 from 2017 through 2021 (Table 1.6.1.2.5).

Table 1.6.1.2.4. Number of reef fish and non-reef fish trips by RF vessels, total trips, total RF vessels, total trips per RF vessel, and percentage of total trips with reef fish landings, 2017 – 2021.

Year	Total RF Trips	Total Non-RF Trips	Total Trips by RF Vessels	RF Vessels	Total Trips per RF Vessel	Percentage of Total Trips with RF
2017	6,849	803	7,652	564	14	89.51%
2018	6,027	672	6,699	549	12	89.97%
2019	6,029	626	6,655	517	13	90.59%
2020	5,503	534	6,037	496	12	91.15%
2021	4,949	510	5,459	457	12	90.66%
Average	5,871	629	6,500	517	13	90.38%

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022).

Table 1.6.1.2.5. Total ex-vessel revenue of RF-permitted vessels from RF and non-RF trips, number of trips with and without reef fish landings, and average revenue per reef fish and non-reef fish trip, 2017 - 2021.

Year	Total Revenue from RF Trips	Revenue from Non- RF Trips	RF Trips	Non-RF Trips	Average Revenue per RF Trip	Average Revenue per Non- RF Trip
2017	\$64,439,777	\$1,735,677	6,849	803	\$9,409	\$2,161
2018	\$59,935,351	\$1,441,437	6,027	672	\$9,944	\$2,145
2019	\$63,058,602	\$1,312,302	6,029	626	\$10,459	\$2,096
2020	\$57,619,000	\$1,261,682	5,503	534	\$10,470	\$2,363
2021	\$60,544,623	\$1,467,705	4,949	510	\$12,234	\$2,878
Average	\$61,119,470	\$1,443,761	5,871	629	\$10,410	\$2,295

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (October 2022) and BEA GDP deflator (issued October 27, 2022).

Overstreet and Liese (personal communication (pers. comm) SEFSC December 8, 2022) estimated average trip net cash flow and average trip net revenue for trips that land Gulf reef fish by all gears are 38% and 51% of total trip revenue, respectively, which indicates Gulf reef fish trips are profitable. Using those percentages, average trip net cash flow is \$3,991 and average trip revenue is \$5,357 for trips that land reef fish by all gears from 2017 through 2021 (Table 1.6.1.2.6).

Table 1.6.1.2.6. Average economic profit (net revenue) and financial performance (net cash flow) per RF trip with reported landings of Gulf reef fish by all gears, 2017 - 2021.

Average RF Trip Total Revenue	Average RF Trip Net Cash Flow	Average RF Trip Net Revenue
\$10.503	\$3,991	\$5,357

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022), BEA GDP deflator (issued October 27, 2022), and Overstreet and Liese (pers. comm. Liese SEFSC December 8, 2022).

Overstreet and Liese (personal communication Liese SEFSC December 8, 2022) estimate average annual net revenue for operations for vessels that land reef fish by all gears is approximately 32% of annual total revenue, which indicates RF-vessels are profitable. With an average annual total revenue of \$121,609 from 2017 through 2021, average annual net revenue from operations for a vessel that lands reef fish by any gear is \$38,915. Producer surplus at the vessel level is its total annual revenue less the costs of fuel, other supplies, hired crew and the opportunity cost of the owner's time as captain, which is estimated to be about 52%. The

⁶ Trip net cash flow is revenue minus the costs for fuel, bait, ice, groceries, miscellaneous, hired crew, and IFQ purchase for a trip. Trip net revenue is revenue less the costs of fuel, bait, ice, groceries, miscellaneous hired crew, and owner labor. Trip net revenue does not include IFQ purchase or any other transfer payment. Overstreet and Liese used 2014 through 2018 data to generate the estimates.

average economic return on vessel asset value is about 52% \$62,570) of average annual total revenue.⁷

Hook and line gears (buoy, electric (bandit), hand, bottom longline, and trolling) are the most popular gears to harvest reef fish. From 2017 through 2021, hook and line gears (H&L) collectively accounted for about 99% of reef fish landings annually by both weight and value (Table 1.6.1.2.7). About 94% of trips with reported landings of reef fish harvest the species with hook and line gear. Vertical gear (electric, hand, and buoy & trolling hook and line) accounted for about 70% of reported reef fish landings from 2017 through 2021. Both vertical gear and bottom longline account for approximately 99% of landings by weight and value and 94% of reef fish trips. Note that the percentages of vessels that report reef fish landings by gear sums to greater than 100% because there are vessels that use multiple gears to harvest reef fish during the course of a calendar year.

Table 1.6.1.2.7. Average annual percentage (%) of total RF landings (lbs gw), total RF revenue, total RF trips, and RF-permitted vessels with reported reef fish landings by gear, 2017 – 2021.

Average 2017 – 2021	Buoy & Trolling H&L	Electric H&L	Hand H&L	Bottom LL	Divers & Other
% All RF Landings (lbs gw)	0.31%	57.88%	12.16%	28.32%	1.33%
% All RF Revenue	0.30%	56.93%	11.80%	29.86%	1.10%
% All RF Trips	0.55%	45.77%	35.35%	12.65%	5.68%
% All RF Vessels with RF Landings	2.43%	44.69%	46.58%	13.25%	8.85%

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022).

Average reef-fish landings per trip by both weight and value varies considerably by gear. From 2017 through 2021, the average reef fish trip using bottom longline landed 4,932 lbs gw of reef fish with a value of \$24,522, while the average reef fish trip using hand hook-and-line gear landed 755 lbs gw of reef fish with a value of \$3,469 (Table 1.6.1.2.8). As shown in Table 1.6.1.2.9, while the average RF-permitted vessel that used bottom longline harvested 53,145 lbs gw of reef fish valued at \$264,414 annually, the average RF-permitted vessel that used divers (spear or power) landed 3,865 lbs gw of reef fish with a value of \$15,111 annually.

Table 1.6.1.2.8. Average reef fish landings and RF ex-vessel revenue per reef fish trip by gear, 2017 - 2021.

Average 2017 – 2021 per RF Trip	Buoy & Trolling H&L	Electric H&L	Hand H&L	Bottom LL	Divers & Other
RF Landings (lbs gw)	1,261	2,788	755	4,932	518
RF Revenue	\$5,290	\$12,932	\$3,469	\$24,522	\$2,024

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

 $^{^{7}}$ Economic return on vessel asset value is calculated by dividing net revenue from operations by the mean vessel value.

Table 1.6.1.2.9. Average annual RF landings (lbs gw) and RF ex-vessel revenue per RF vessel that reported RF landings, 2017 – 2021.

Average 2017 – 2021 per RF Vessel	Buoy & Trolling H&L	Electric H&L	Hand H&L	Bottom LL	Divers
RF Landings (lbs gw)	3,361	32,225	6,486	53,145	3,865
RF Revenue	\$15,840	\$149,421	\$29,742	\$264,414	\$15,111

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

The relative importance of reef fish per trip with reef fish landings is great. Reef fish landings account for over 95% of total revenue per trip with reef fish harvested by vertical gear, bottom longline and divers (Table 2.2.2.10).

Table 1.6.1.2.10. Average total revenue per RF trip and percentage of that revenue from reef fish by vertical gear, bottom longline, 2017 – 2021.

Average per RF Trip	Vertical Gear	Bottom LL	Divers
Total Revenue	\$8,898	\$24,721	\$2,111
% Total from RF	98.52%	99.20%	95.87%

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022.

Overstreet and Liese (2018) estimate average net cash flow and net revenue per reef fish trip by vertical gear are 38% and 53% of total trip revenue, respectively. Average net cash flow and net revenue for trips that use longline are 36% and 46% of total trip revenue, respectively; and average net cash flow and net revenue for trips that use divers are 38% and 32%, respectively. The estimates of average RF trip net cash flow and RF trip net revenue by gear from 2017 through 2021 are provided in Table 1.6.1.2.11.

Table 1.6.1.2.11. Average total revenue, net revenue (economic profit) and net cash flow (financial performance) per reef fish trip by gear, 2017 - 2021.

Average per RF Trip	Vertical Gear	Bottom Longline	Divers
Total Revenue	\$8,898	\$24,721	\$2,111
Net Revenue	\$4,627	\$11,372	\$676
Net Cash Flow	\$3,381	\$8,900	\$802

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022), BEA GDP deflator (issued October 27, 2022), and Overstreet and Liese (2018).

Florida ranks first by number of vessels with reported reef fish landings and reef fish landings be weight and value (Table 1.6.1.2.13). Texas ranks second, with Louisiana, Alabama and Mississippi in turn.

⁸ Using data from 2014 through 2018. More recent years estimates of net cash flow and net revenue are not currently available.

Table 1.6.1.2.12. Average annual number and percentage (%) of RF-permitted vessels with RF landings, RF Trips, RF landings, RF Revenue, and percentages of RF landings and revenue by state, 2017 – 2021.

Average 2017 – 2021	AL	FL	LA	MS	TX
Total RF Vessels with RF Landings ¹	27	423	32	4	39
Total RF Trips	312	4,458	440	177	501
RF Landings (lbs gw)	378,862	7,964,982	1,678,155	170,865	2,600,434
% RF Landings All States	2.65%	62.24%	13.09%	1.33%	20.39%
RF Revenue	\$1,716,166	\$37,346,864	\$7,260,062	\$406,083	\$13,574,494
% RF Revenue All States	2.83%	61.49%	12.74%	0.68%	22.53%

^{1.} Some permitted vessels land reef fish in more than one state. Consequently, the average total number of unique vessels (543) with landings of reef fish is actually less than the sum across the states.

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

Average annual ex-vessel revenue from reported RF landings per RF-permitted vessel that reports RF landings varies greatly by state. While the average Alabama vessel received \$61,508 annually from landing reef fish from 2017 through 2021, the average Texas vessel received \$349,974 from landing reef fish during that period (Table 1.6.1.2.13). Reef fish represents from approximately 84% to 99% of average annual total ex-vessel revenue per vessel that lands reef fish in a Gulf state (Table 1.6.1.2.14). Almost all (99%) of annual revenue by the average Mississippi or Texas vessel that landed reef fish from 2017 through 2021 derived from reef fish landings. Essentially all trips by Mississippi RF vessels have landings of reef fish.

Table 1.6.1.2.13. Average annual RF landings (lbs gw) and revenue per RF-permitted vessel and per RF trip by state, 2017 - 2021.

State	Ave. Annual RF Landings (lbs gw) per RF Vessel	Ave. Annual RF Revenue per RF Vessel	Ave. RF Landings (lbs gw) per RF Trip	Ave. RF Revenue per RF Trip
AL	13,647	\$61,508	1,236	\$5,708
FL	18,878	\$88,689	1,800	\$8,462
LA	52,433	\$225,751	3,862	\$16,601
MS	45,690	\$108,424	968	\$2,295
TX	67,260	\$349,974	5,232	\$27,275

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (October 27, 2022).

Table 1.6.1.2.14. Average annual revenue from all landings per RF-vessel that reported RF landings by state, 2017 - 2021.

State	Ave. Annual Total Revenue per RF Vessel	Ave. Percentage of Annual Total Revenue from RF	
AL	\$72,989	84.27%	
FL	\$90,032	98.49%	
LA	\$239,739	94.17%	
MS	\$109,465	99.07%	
TX	\$351,884	99.44%	

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (October 27, 2022).

From 2017 through 2021, the individual stock or stock complex that accounted for the largest average percentage of RF-permitted vessels' combined annual reef fish landings by both weight and value was red snapper, followed by red grouper. Red snapper accounted for an average of approximately 50% of annual reef fish landings by weight and approximately 52% by value, while red grouper accounted for 19% of reef fish landings by weight and 21% value (Table 1.6.1.2.15).

Table 1.6.1.2.15. Average annual percentage of RF-permitted vessels' combined reported RF landings (weight and value) by individual stock or stock complex, 2017 – 2021.

Individual Stock/Stock Complex	Average Annual Percentage RF Landings by Weight	Average Annual Percentage RF Landings by Value
Deepwater Grouper ¹	6.45%	7.54%
Gag Grouper ²	3.78%	4.93%
Shallow Water Grouper ³	1.26%	1.55%
Red Grouper ⁴	19.14%	20.99%
Goliath Grouper ⁵	NA	NA
Hogfish	0.09%	0.10%
Greater Amberjack	2.49%	1.08%
Jacks ⁶	0.57%	0.20%
Midwater Snapper ⁷	0.46%	0.41%
Cubera Snapper	0.01%	0.00%
Gray (Mangrove) Snapper	0.74%	0.57%
Lane Snapper	0.19%	0.12%
Mutton Snapper	0.57%	0.44%
Red Snapper ⁸	49.75%	51.64%
Vermilion Snapper	8.06%	5.75%
Yellowtail Snapper	2.91%	2.33%
Tilefish ⁹	3.14%	2.14%
Gray Triggerfish	0.40%	0.20%
Total 31 species	100.00%	100.00%

^{1.} Snowy, warsaw, yellowedge and speckled hind. Managed under GT IFQ.

- 2. Managed under GT IFQ.
- 3. Black, scamp, yellowfin, and yellowmouth. Managed under GT IFQ.
- 4. Managed under GT IFQ.
- 5. Goliath grouper is a prohibited species.
- 6. Almaco jack, lesser amberjack, and banded rudderfish.
- 7. Blackfin, queen, silk, and wenchman.
- 8. Managed under Red Snapper IFQ.
- 9. Blueline, golden, and goldface tilefish. Managed under GT IFQ.

Source: SEFSC Socioeconomic Panel (Sep 22) accessed by the SEFSC Economic Query System (November 2022).

Economic Impacts

Commercial RF vessels' sales of reef fish landings generate beneficial economic impacts in the form of jobs, income, value added and additional sales. From 2017 through 2021, annual landings of Gulf reef fish resulted in \$60,303,668 (Table 1.6.1.2.3) in total ex-vessel revenue on average. In turn, this annual ex-vessel revenue generated 7,211 jobs and about \$219.6 million income, \$310.3 million in value-added, and \$245.5 million in sales impacts per year on average (Table 1.6.1.2.16). When divided across the 5,871 average annual trips that landed reef fish, the average trip resulted in approximately one job, \$37.4 thousand in income, \$52.9 thousand in value-added, and \$101.9 thousand in sales impacts.

Table 1.6.1.2.16. Average annual economic impacts from reported Gulf reef fish commercial landings of RF-permitted vessels, 2017 - 2021.

Business	Jobs	Income (1,000s)	Value- Added (1,000s)	Sales (1,000s)
Harvesters	1,711	\$53,221	\$81,479	\$157,919
Primary Dealers/Processors	548	\$29,673	\$41,249	\$94,024
Secondary Wholesalers/Distributors	266	\$14,867	\$21,273	\$45,243
Grocers	695	\$23,878	\$31,909	\$55,289
Restaurants	3,990	\$97,975	\$134,379	\$245,546
All	7,211	\$219,614	\$310,289	\$598,020

Source: Calculated by NMFS SERO using the model developed for and applied in NMFS (2021).

More information about the annual revenue of vessels that harvest IFQ versus non-IFQ reef fish can be found in the Red Snapper and Grouper-Tilefish IFQ Programs Review and is incorporated by reference. Additional information about trip net cash flow, trip net revenue, annual net cash flow and annual net revenue for vessels that harvest specific IFQ species, such as red snapper and red grouper, can be found in Overstreet and Liese (2018) and is incorporated by reference. Information about ex-vessel prices, allocation (quota lease) prices, and quota share prices can be found in the May 2022 Gulf of Mexico IFQ Pricing Report and is incorporated by reference. Information about Gulf IFQ dealers can be found in Red Snapper and Grouper-Tilefish IFQ Programs Review and is incorporated by reference.

⁹ See https://www.flseagrant.org/publication/gulf-of-mexico-ifq-pricing-report-may-2022/.

1.6.1.3 Gulf and South Atlantic Coastal Migratory Pelagics

The Gulf of Mexico and South Atlantic Fishery Management Councils jointly manage the CMP fishery. The fishery is composed of three stocks, and each stock has two migratory groups. The Gulf king mackerel, Gulf Spanish mackerel and Gulf cobia migratory groups are managed by the Gulf Council and the Atlantic king mackerel, Atlantic Spanish mackerel and Atlantic cobia migratory groupers are managed by the South Atlantic Council. Because each stock has Gulf and Atlantic migratory groups, the following description of the commercial sector of the CMP fishery separates it into Gulf and Atlantic subsectors as appropriate.

Any fishing vessel that harvests king or Spanish mackerel in the Gulf or Atlantic EEZ in excess of the recreational bag limit and sells that harvest must have a valid federal commercial king mackerel or Spanish mackerel permit, respectively, onboard. ¹⁰ No federal permit is required to harvest cobia commercially from those waters. Therefore, the proposed rule would not apply to those who harvest cobia.

The king mackerel (KM) permit is a limited-access permit, whereas the Spanish mackerel (SM) permit is an open-access permit. From 2017 through 2020, there were an annual average of 1,437 KM-permitted vessels and 2,326 SM-permitted vessels. Many of the vessels (1,146) had both valid king mackerel and Spanish mackerel permits (Table 1.6.1.3.1). In 2021, there were 1,389 vessels with a valid KM permit and 1,809 with a valid SM permit as of August 26 of that year.

Table. 1.6.1.3.1. Number of vessels with valid KM permit only, valid SM permit only, and both valid KM and SM permits, 2017 - 2021.

Year	Vessels with KM Permit Only	Vessels with SM Permit Only	Vessels with Both KM and SM Permits
2017	304	1,177	1,149
2018	291	1,248	1,141
2019	280	1,183	1,155
2020	289	1,113	1,137
Average	291	1,180	1,146
20211	363	783	1,026

1.Figures for 2021 are the number of valid permits that were valid for at least one day from January 1 through August 26. Previous year's counts are the numbers of valid permits that were valid for at least one day through the entire calendar year.

Source: NMFS SERO SFD Access Permits database.

The number of vessels with a valid KM and/or SM permit that report landings of king mackerel and/or Spanish mackerel is substantially less than the number of vessels with the respective permit(s). From 2017 through 2021, an annual average of 940 permitted vessels made 16,182 trips that landed king and/or Spanish mackerel from the Gulf and South Atlantic, averaging 17 trips annually per vessel (Table 1.6.1.3.2). The average revenue from one of those trips, which includes jointly caught species, was \$1,134.

¹⁰ The captain/crew of a for-hire fishing vessel with a valid charter/headboat permit for king or Spanish mackerel can sell a bag limit quantity of king or Spanish mackerel, respectively.

Table. 1.6.1.3.2. Number of KM- and/or SM-permitted vessels that reported KM and/or SM landings, trips with KM and/or SM landings, and average number of KM and/or SM trips per permitted vessel, Gulf and South Atlantic combined, 2017 – 2021.

Year	Vessels with KM and/or SM Landings	KM and/or SM Trips	Average KM and/or SM Trips per Vessel	Average Revenue per KM and/or SM Trip
2017	1,007	17,829	18	\$1,198
2018	958	16,569	17	\$1,204
2019	959	17,186	18	\$1,105
2020	936	15,180	16	\$1,060
2021	842	14,146	17	\$1,088
Average	940	16,182	17	\$1,134

Source: SEFSC Socioeconomic Panel (Sep 22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

When king mackerel and Spanish mackerel trips and reported landings are evaluated separately, an annual average of 852 KM-permitted vessels reported landings of king mackerel (Table 1.6.1.3.3) and 513 SM-permitted vessels reported landings of Spanish mackerel (Table 1.6.1.3.4). The average trip with king mackerel landed 365 lbs gw of king mackerel with a value of \$860, and the average KM-permitted vessel made 16 trips annually that landed king mackerel. The average trip with Spanish mackerel landed 380 lbs gw of Spanish mackerel with a value of \$470, and the average SM-permitted vessel made 8 trips annually that landed Spanish mackerel.

Table 1.6.1.3.3. KM-permitted vessels and their reported KM trips, KM landings (lbs gw), KM ex-vessel revenue, average number of KM trips per vessel, and average KM ex-vessel revenue per trip with KM landings, Gulf and South Atlantic combined, 2017 – 2021.

Year	KM-Permitted Vessels with Reported KM Landings	KM Trips	KM Landings (lbs gw)	KM Revenue	Ave. KM Trips per KM Vessel	Ave. KM Revenue per KM Trip
2017	915	15,002	5,476,082	\$12,741,664	16	\$849
2018	848	13,391	5,016,527	\$12,664,751	16	\$946
2019	876	13,963	5,250,073	\$11,744,982	16	\$841
2020	852	12,379	4,479,012	\$10,044,768	15	\$811
2021	768	11,835	4,104,060	\$10,043,737	15	\$849
Average	852	13,314	4,865,151	\$11,447,980	16	\$860

Source: SEFSC Socioeconomic Panel (Sep 22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

Table 1.6.1.3.4. SM-permitted vessels and their reported SM trips, SM landings (lbs gw), SM ex-vessel revenue, average number of SM trips per vessel, and average SM ex-vessel revenue per trip with SM landings, Gulf and South Atlantic combined, 2017 – 2021.

Year	SM-Permitted Vessels with Reported SM Landings	SM Trips	SM Landings (lbs gw)	SM Revenue	Ave. SM Trips per SM Vessel	Ave. SM Revenue per SM Trip
2017	545	4,303	1,615,374	\$2,140,042	8	\$497
2018	542	4,704	1,876,710	\$2,314,327	9	\$492
2019	537	4,956	1,755,771	\$2,014,808	9	\$407
2020	509	4,258	1,610,191	\$2,044,057	8	\$480
2021	432	3,499	1,377,043	\$1,700,616	8	\$486
Average	513	4,344	1,647,018	\$2,042,770	8	\$470

Source: SEFSC Socioeconomic Panel (Sep 22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

From 2017 through 2021, about 59% (13,314) of all annual trips (22,612) by KM-permitted vessels that reported landings of king mackerel had landings of king mackerel (Table 1.6.1.3.5). The average trip with landings of king mackerel generated ex-vessel revenue of about \$1.2 thousand (from king mackerel and jointly caught species), while the average trip without landings of king mackerel generated ex-vessel revenue of about \$2.6 thousand. Average annual revenue for these KM-permitted vessels with reported king mackerel landings was \$47,234.

Table 1.6.1.3.5. Total ex-vessel revenue of KM-permitted vessels from KM and non-KM trips, number of trips with and without king mackerel landings, average revenue per KM and non-KM trip, and average annual revenue per KM-permitted vessel, Gulf and South Atlantic combined, 2017 - 2021.

Year	KM Trips	Non-KM Trips	Ave. Revenue per KM Trip	Ave. Revenue per Non-KM Trip	Ave. Annual Revenue per KM Vessel
2017	15,002	10,470	\$1,247	\$3,014	\$54,933
2018	13,391	9,952	\$1,285	\$2,450	\$49,032
2019	13,963	10,230	\$1,168	\$2,497	\$47,784
2020	12,379	8,549	\$1,094	\$2,132	\$37,289
2021	11,835	7,288	\$1,132	\$3,059	\$46,484
Average	13,314	9,298	\$1,189	\$2,624	\$47,234

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

From 2017 through 2021, about 25% (4,344) of all annual trips by SM-permitted vessels that reported landings of Spanish mackerel had landings of Spanish mackerel (Table 1.6.1.3.6). The average trip with landings of Spanish mackerel generated ex-vessel revenue of \$993 (from Spanish mackerel and jointly caught species), while the average trip without landings of Spanish mackerel generated ex-vessel revenue of \$1,396. Average annual revenue for these vessels was \$43,792.

Table 1.6.1.3.6. Total ex-vessel revenue of SM-permitted vessels from SM and non-SM trips, number of trips with and without Spanish mackerel landings, average revenue per SM and non-SM trip, and average annual revenue per SM-permitted vessel, Gulf and South Atlantic combined, 2017 - 2021.

Year	SM Trips	Non-SM Trips	Ave. Revenue per SM Trip	Ave. Revenue per Non-SM Trip	Ave. Annual Revenue per SM Vessel
2017	4,303	15,010	\$1,198	\$1,572	\$52,763
2018	4,704	13,353	\$1,012	\$1,305	\$40,943
2019	4,956	14,323	\$913	\$1,395	\$45,648
2020	4,258	11,591	\$978	\$1,415	\$40,392
2021	3,499	10,689	\$864	\$1,243	\$37,748
Average	4,344	12,993	\$993	\$1,396	\$43,792

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

When trips and landings of king mackerel from the Gulf of Mexico are evaluated separately from those from the South Atlantic, an annual average of 244 KM-permitted vessels reported landings of king mackerel from the Gulf and 667 reported landings from the South Atlantic from 2017 through 2021 (Tables 1.6.1.3.7 and 1.6.1.3.8). The average Gulf trip with king mackerel landings received \$2,343 from those landings, while the average South Atlantic trip with king mackerel landings received \$553 from its landings of king mackerel.

Table 1.6.1.3.7. Gulf KM-permitted vessels and their reported KM trips, Gulf KM landings (lbs gw), Gulf KM ex-vessel revenue, average number of Gulf KM trips per vessel, and average Gulf KM ex-vessel revenue per Gulf KM trip, 2017 – 2021.

Year	KM-Permitted Vessels with Gulf KM Landings	Gulf KM Trips	Gulf KM Landings	Gulf KM Revenue	Average Gulf KM Trips per KM Vessel	Average Gulf KM Revenue per KM Trip
2017	299	2,890	2,705,663	\$6,277,814	10	\$2,172
2018	256	2,385	2,601,258	\$6,524,283	9	\$2,736
2019	237	2,180	2,431,084	\$5,110,442	9	\$2,344
2020	221	1,960	1,918,832	\$4,215,836	9	\$2,151
2021	205	1,979	1,881,647	\$4,572,243	10	\$2,310
Average	244	2,279	2,307,697	\$5,340,123	9	\$2,343

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

Table 1.6.1.3.8. South Atlantic KM-permitted vessels and their reported KM trips, SA KM landings (lbs gw), SA KM ex-vessel revenue, average number of SA KM trips per vessel, and average SA KM ex-vessel revenue per SA KM trip, 2017 – 2021.

Year	KM-Permitted Vessels with SA KM Landings	SA KM Trips	SA KM Landings	SA KM Revenue	Average SA KM Trips per KM Vessel	Average SA KM Revenue per KM Trip
2017	678	12,112	2,770,419	\$6,463,850	18	\$534
2018	657	11,006	2,415,269	\$6,140,469	17	\$558
2019	694	11,783	2,818,989	\$6,634,540	17	\$563
2020	686	10,419	2,560,180	\$5,828,932	15	\$559
2021	618	9,856	2,222,413	\$5,471,494	16	\$555
Average	667	11,035	2,557,454	\$6,107,857	17	\$553

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

The average KM-permitted vessel with reported king mackerel landings from the Gulf had annual total ex-vessel revenue from all landings of about \$85 thousand, while its counterpart in the South Atlantic had annual total ex-vessel revenue from all landings of about \$29 thousand (Tables 1.6.1.3.9 and 1.6.1.3.10). The highest annual total revenue for a KM-permitted vessel that reported king mackerel landings during this 5-year period was less than \$2.5 million.

Table 1.6.1.3.9. Total ex-vessel revenue from Gulf KM and non-KM trips, number of Gulf trips with and without king mackerel landings, average revenue per Gulf KM and non-KM trip, and average annual revenue per Gulf KM-permitted vessel that reported king mackerel landings, 2017 - 2021.

Year	Gulf KM Trips	Gulf Non- KM Trips	Ave. Revenue per Gulf KM Trip	Ave. Revenue per Gulf Non- KM Trip	Ave. Annual Revenue per Gulf KM Vessel
2017	2,890	1,872	\$3,240	\$9,860	\$93,044
2018	2,385	1,497	\$3,346	\$8,720	\$82,162
2019	2,180	1,806	\$3,187	\$8,054	\$90,696
2020	1,960	1,172	\$2,800	\$6,677	\$60,240
2021	1,979	1,221	\$3,094	\$11,535	\$98,571
Average	2,279	1,514	\$3,151	\$8,981	\$85,278

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (December 2022) and BEA GDP deflator (issued October 27, 2022).

Table 1.6.1.3.10. Total ex-vessel revenue from South Atlantic KM and non-KM trips, number of South Atlantic trips with and without king mackerel landings, average revenue per South Atlantic KM and non-KM trip, and average annual revenue per South Atlantic KM-permitted vessel, 2017 – 2021.

Year	SA KM Trips	SA Non-KM Trips	Ave. Revenue per SA KM Trip	Ave. Revenue per SA Non- KM Trip	Ave. Annual Revenue per SA KM Vessel
2017	12,112	8,598	\$772	\$1,523	\$33,102
2018	11,006	8,455	\$838	\$1,339	\$31,272
2019	11,783	8,424	\$795	\$1,306	\$29,342
2020	10,419	7,377	\$774	\$1,409	\$26,905
2021	9,856	6,067	\$739	\$1,354	\$25,068
Average	11,035	7,784	\$784	\$1,388	\$29,194

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System December 2022) and BEA GDP deflator (issued October 27, 2022).

A permitted KM vessel's annual financial performance can be understood as the difference between its total revenue for the year less the sum of its fixed and variable costs for that year. Liese and Overstreet's annual net cash flow is a measure of a vessel's financial performance as it is the difference between total annual revenue and the costs for fuel, other supplies, hired crew, vessel repair and maintenance, insurance, overhead, and loan payments.¹¹

A commercial king mackerel vessel's economic performance can be measured by the difference between the total revenue received from the sales of the fish landed and the fixed and variable costs of all of the inputs (fuel, bait, ice, crew, groceries purchased for fishing trips, vessel repair and maintenance, and other miscellaneous costs) used, as well as the opportunity costs. ¹² Liese and Overstreet's (2021) net revenue from operations is the best available estimate of annual economic profit (performance) for a king mackerel vessel, although net cash flow is a better measure of financial performance. Annual net revenue from operations for vessels that harvested Gulf king mackerel across all gears was approximately 21.6% of their average annual gross revenue from 2016 through 2018¹³(Liese and Overstreet (2021)). Average net revenue from operations for vessels that harvested South Atlantic king mackerel across all gears was 4.4% of their average annual gross revenue. Hence, using those Gulf percentages, annual net revenue (economic performance) for the average KM-permitted vessel that reports landings of Gulf king mackerel are estimated to be \$18,348. Annual net revenue from operations for the average KM-permitted that reports landings of South Atlantic king mackerel is estimated to be \$1,285 (Table

¹¹ Liese and Overstreet includes permits/licenses, dockage, utilities, rent, etc. that are also necessary to have the vessel in operation.

¹² This is more closely aligned with economic profit as it includes opportunity costs and excludes transfer payments (loan and IFQ payments). An opportunity cost can be understood as the value of the next-best alternative when a decision is made; it is what is given up. For example, when a commercial fishing business uses its vessel, crew and other inputs (bait, gear, etc.) to harvest a particular species during a trip, it gives up the use of that vessel and other inputs to fish for other species during that time. Another example is a commercial fishing vessel owner/captain who moors their vessel at a location that requires a 30-minute longer trip to the fishing grounds rather than mooring the vessel at another location. The opportunity cost is an extra hour per trip of the owner/captain's time.

¹³ Liese and Overstreet's estimates include the opportunity cost of an owner's time as captain of the vessel and fixed costs.

1.6.1.3.11). Liese and Overstreet (2021) also estimate economic returns to vessel asset value of 3.5% (of total revenue) for KM-permitted South Atlantic vessels and 3.8% (of total revenue) for KM-permitted Gulf vessels. Producer surplus is estimated to be 36.1% (\$10,539) for the average South Atlantic KM-permitted vessel and 48.5% (\$41,360).

Table 1.6.1.3.11. Average annual total revenue, economic profit (net revenue for operations) per KM-permitted vessel that reports landings of king mackerel by all gear by Gulf or South Atlantic, 2017-2021.

Average Annual per Vessel	Gulf	South Atlantic	
Total Revenue	\$85,278 (100.0%)	\$29,194 (100.0%)	
Net Revenue from operations	\$18,420 (21.6%)	\$1,285 (4.4%)	

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (December 2022) and BEA GDP Implicit Price Deflator issued October 27, 2022, for average total ex-vessel revenue per vessel and Liese and Overstreet (2021) for net revenue percentage.

The Office of Management and Budget (OMB) Circular A-4 (2003) defines producer surplus as the difference between the amount a producer is paid for a unit of a good and the minimum amount the producer would accept to supply that unit. In the case of commercial fishing, producer surplus is the difference between the total ex-vessel revenue received from sales of landings and the total cost of producing those landings, which is, in effect, profit. Liese and Overstreet (2021) offer up two estimates of profit gained from a trip: trip net cash flow (financial performance) and trip net revenue (economic performance) for a trip that lands Gulf king mackerel. Trip net cash flow is total revenue received from landings from a trip minus the total variable costs of that trip: fuel, bait, ice, groceries, miscellaneous, hired crew, and IFQ purchase, only if the purchase of IFQ is necessary for the trip. Trip net revenue is defined as total revenue received from the trip minus both the total variable trip cost and opportunity cost of the vessel owner's time as captain. 14 For the average vessel that lands Gulf king mackerel, Liese and Overstreet (2021) estimate the average trip net cash flow is 61.6% of total trip revenue and average trip net revenue is 42.7% of total trip revenue for all gears from 2016 through 2018. Using those percentages and the average ex-vessel revenue per trip with Gulf king mackerel landings for all gears, average trip net revenue and trip net cash flow is \$1,334 and \$1,941, respectively (Table 1.6.1.3.12). Liese and Overstreet (2021) similarly estimate trip net cash flow and trip net revenue for trips that landed South Atlantic king mackerel by all gears, and those percentages are used to estimate average trip net revenue and average trip net cash flow of \$227 and \$445, respectively.

Table 1.6.1.3.12. Average trip total revenue, trip net revenue and trip net cash flow per KM-permitted vessel that lands king mackerel by all gear in Gulf and South Atlantic, 2017-2021.

Average per Trip	Gulf	South Atlantic
Total Revenue	\$3,151	\$784
Net Revenue	\$1,345 (42.7%)	\$227 (29.0%)
Net Cash Flow	\$1,941 (61.6%)	\$445 (56.8%)

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (December 2022), BEA GDP Implicit Price Deflator issued October 27 2022, and Liese and Overstreet (2021).

¹⁴ Neither trip net revenue nor trip net cash flow include fixed costs or overhead.

When trips and landings of Spanish mackerel from the Gulf of Mexico are evaluated separately from those from the South Atlantic, an annual average of 149 SM-permitted vessels reported landings of Spanish mackerel from the Gulf and 394 reported landings from the South Atlantic from 2017 through 2021 (Tables 1.6.1.3.13 and 1.6.1.3.14). The average Gulf trip with Spanish mackerel landings received \$169 from those landings, while the average South Atlantic trip with Spanish mackerel landings received \$555 from its landings of Spanish mackerel.

Table 1.6.1.3.13. Gulf SM-permitted vessels and their reported SM trips, Gulf SM landings (lbs gw), Gulf SM ex-vessel revenue, average number of Gulf SM trips per vessel, and average Gulf SM ex-vessel revenue per Gulf SM trip, 2017 – 2021.

Year	SM-Permitted Vessels with Gulf SM Landings	Gulf SM Trips	Gulf SM Landings	Gulf SM Revenue	Average Gulf SM Trips per SM Vessel	Average Gulf SM Revenue per SM Trip
2017	180	789	85,336	\$123,090	4	\$156
2018	157	573	67,643	\$94,693	4	\$165
2019	141	702	65,053	\$91,166	5	\$130
2020	156	641	98,614	\$127,662	4	\$199
2021	113	471	63,983	\$99,253	4	\$211
Average	149	635	76,126	\$107,173	4	\$169

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (December 2022) and BEA GDP deflator (issued October 27, 2022).

Table 1.6.1.3.14. South Atlantic SM-permitted vessels and their reported SM trips, SA SM landings (lbs gw), SA SM ex-vessel revenue, average number of SA SM trips per vessel, and average SA SM ex-vessel revenue per SA SM trip, 2017 – 2021.

Year	KM-Permitted Vessels with SA SM Landings	SA SM Trips	SA SM Landings	SA SM Revenue	Average SA SM Trips per SM Vessel	Average SA SM Revenue per SM Trip
2017	400	3,514	1,530,038	\$2,239,035	9	\$637
2018	418	4,131	1,809,067	\$2,399,589	10	\$581
2019	424	4,254	1,690,718	\$2,042,429	10	\$480
2020	386	3,617	1,511,578	\$2,008,167	9	\$555
2021	342	3,028	1,313,060	\$1,601,363	9	\$529
Average	394	3,709	1,570,892	\$2,058,116	9	\$555

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (December 2022) and BEA GDP deflator (issued October 27, 2022).

The average SM-permitted vessel with reported king mackerel landings from the Gulf had annual total ex-vessel revenue from all landings of about \$67 thousand, while its counterpart in the South Atlantic had annual total ex-vessel revenue from all landings of about \$32 thousand (Tables 1.6.1.3.15 and 1.6.1.3.16). The highest annual total revenue for a SM-permitted vessel that reported Spanish mackerel landings during this 5-year period was less than \$2.5 million.

Table 1.6.1.3.15. Total ex-vessel revenue from Gulf SM and non-SM trips, number of Gulf trips with and without Spanish mackerel landings, average revenue per Gulf SM and non-SM trip, and average annual revenue per Gulf SM-permitted vessel with reported Spanish mackerel landings, 2017 - 2021.

Year	Gulf SM Trips	Gulf Non-SM Trips	Ave. Revenue per Gulf SM Trip	Ave. Revenue per Gulf Non- SM Trip	Ave. Annual Revenue per Gulf SM Vessel
2017	789	2,605	\$2,613	\$4,668	\$79,004
2018	573	2,316	\$2,352	\$3,492	\$60,096
2019	702	2,293	\$1,959	\$4,006	\$74,893
2020	641	2,078	\$1,821	\$4,117	\$62,330
2021	471	1,683	\$1,527	\$3,251	\$54,777
Average	635	2,195	\$2,054	\$3,960	\$67,107

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (December 2022) and BEA GDP deflator (issued October 27, 2022).

Table 1.6.1.3.16. Total ex-vessel revenue from South Atlantic SM and non-SM trips, number of South Atlantic trips with and without Spanish mackerel landings, average revenue per South Atlantic SM and non-SM trip, and average annual revenue per South Atlantic SM-permitted vessel with reported Spanish mackerel landings, 2017 – 2021.

Year	SA SM Trips	SA Non-SM Trips	Ave. Revenue per SA SM Trip	Ave. Revenue per SA Non- SM Trip	Ave. Annual Revenue per SA SM Vessel
2017	3,514	12,405	\$880	\$922	\$36,338
2018	4,131	11,037	\$826	\$847	\$30,516
2019	4,254	12,030	\$741	\$898	\$32,908
2020	3,617	9,513	\$828	\$824	\$28,072
2021	3,028	9,006	\$761	\$867	\$29,582
Average	3,709	10,798	\$807	\$875	\$31,572

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System December 2022) and BEA GDP deflator (issued October 27, 2022).

Liese and Overstreet (2021) estimate that from 2016 through 2018, the average vessel with South Atlantic Spanish mackerel landings had net revenue from operations (economic performance) of -3.9% of its average annual gross revenue, and economic return on vessel asset value of -2.5%. Using the average total revenue of a SM-permitted vessel that reported landings of South Atlantic Spanish mackerel, average net revenue from operations is a loss of \$1,231 (Table 1.6.1.3.17), which indicates SM-permitted vessels in the South Atlantic are not profitable. However, producer surplus for the average South Atlantic SM-permitted vessel is estimated to be 34.6% (\$10,924) of total annual revenue.

¹⁵ Liese and Overstreet (2021) estimate net cash flow (financial performance) for the average vessel that lands South Atlantic Spanish mackerel is 24.4% of its average annual gross revenue. Using the average total revenue of a SMpermitted vessel that reported landings of South Atlantic Spanish mackerel, average annual net cash flow is \$7,682.

More information about the economics of the commercial harvests of king mackerel and Spanish mackerel can be found in Liese and Overstreet (2021) and is incorporated by reference.

Table 1.6.1.3.17. Average economic profit (net revenue) and financial performance (net cash flow) per SM-permitted vessel that reports landings of Spanish mackerel in South Atlantic, 2017-2021.

Annual Average per SM Vessel	South Atlantic
Total Revenue	\$31,572 (100.0%)
Net Revenue	-\$1.231 (-3.9%)

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (December 2022), BEA GDP Implicit Price Deflator issued April 28, 2022, and Liese and Overstreet (2021).

Economic Impacts

From 2017 through 2021, annual combined landings of Gulf and South Atlantic king and Spanish mackerel landings resulted in \$13,490,750 in total ex-vessel revenue on average. In turn, these combined landings and revenues generated 1,593 jobs and other beneficial economic impacts (Tables 1.6.1.2.18).

Table 1.6.1.3.18. Average annual economic impacts from combined reported Gulf and South Atlantic king and Spanish mackerel landings of KM- and SM-permitted vessels, 2017 – 2021.

Business	Jobs	Income (1,000s)	Value- Added (1,000s)	Sales (1,000s)
Harvesters	363	\$11,397	\$17,868	\$35,729
Primary Dealers/Processors	123	\$6,638	\$9,228	\$21,034
Secondary Wholesalers/Distributors	60	\$3,326	\$4,759	\$10,121
Grocers	156	\$5,342	\$7,139	\$12,369
Restaurants	893	\$21,918	\$30,062	\$54,932
All	1,593	\$48,622	\$69,056	\$134,185

Source: Calculated by NMFS SERO using the model developed for and applied in NMFS (2021).

1.6.1.4 Atlantic Dolphin Wahoo

Commercial landings of both Atlantic dolphin and wahoo declined significantly during the pandemic (Table 1.6.1.4.1). On average, approximately 91% of the annual harvest of Atlantic dolphin (by weight) is landed in the South Atlantic states (Table 1.6.1.4.2). The Mid-Atlantic (MA) accounts for an average of approximately 6% of annual landings, while New England (NE) has the remaining 3%. Note that prior to 2021, the South Atlantic's share of dolphin ACL landings was at least about 91%, but in 2021 it fell to about 85%.

Table 1.6.1.4.1. Atlantic dolphin and wahoo commercial ACL landings (lbs ww), 2017 – 2021.

Year	Dolphin Landings	Dolphin ACL	Wahoo Landings	Wahoo ACL
2017	684,676	1,534,485	66,972	70,542
2018	542,363	1,534,485	49,383	70,542
2019	724,098	1,534,485	66,614	70,542
2020	317,882	1,534,485	44,398	70,542
2021	243,342	1,534,485	28,659	70,542
Average	502,472	1,534,484	51,205	70,542

Source: NMFS SERO ACL database, August 31, 2022.

Table 1.6.1.4.2. Percentage of Atlantic dolphin ACL landings (lbs ww) by South Atlantic, Middle Atlantic and New England states, 2017 - 2021.

Year	Mid-Atlantic	New England	South Atlantic	Total
2017	3.83%	4.38%	91.79%	100.00%
2018	4.78%	2.68%	92.54%	100.00%
2019	6.45%	2.29%	91.26%	100.00%
2020	5.03%	0.87%	94.11%	100.00%
2021	10.66%	4.62%	84.71%	100.00%
Average	6.15%	2.97%	90.88%	100.00%

Source: NMFS SERO ACL database, August 31, 2022.

From 93% to 94% of the average annual harvest of Atlantic wahoo (by weight) is landed in the South Atlantic states (Table 1.6.1.4.3). The Mid-Atlantic accounts for an average of approximately 3% to 4% of annual landings, while New England has the remaining 2% to 3%.

Table 1.6.1.4.3. Percentage of Atlantic wahoo ACL landings (lbs ww) by South Atlantic, Middle Atlantic and New England states, 2017 – 2021.

Year	Mid-Atlantic	New England	South Atlantic	Total
2017	4.96%	1.54%	93.50%	100.00%
2018	3.36%	1.36%	95.29%	100.00%
2019	3.61%	2.37%	94.03%	100.00%
2020	4.08%	7.66%	88.27%	100.00%
2021	1.79%	1.53%	96.67%	100.00%
Average	3.56%	2.89%	93.55%	100.00%

Source: NMFS SERO ACL database, August 31, 2022.

Any fishing vessel that harvests and sells dolphin or wahoo from the Atlantic EEZ must have a valid federal Atlantic dolphin wahoo commercial permit issued to that vessel and it must be onboard; however, there is an exception. Federally permitted commercial vessels without a valid federal Atlantic dolphin and wahoo permit can harvest and sell dolphin or wahoo, but their landings are restricted by a trip limit and area restriction. The trip limit for a commercial vessel that does not have the valid federal dolphin and wahoo permit, but has a valid federal commercial vessel permit in any other fishery, is 200 lbs (91 kg) of dolphin and wahoo, combined, provided that all fishing on and landings from that trip are north of 39° N latitude, which is north of Middleburg, Virginia. Consequently, all federally permitted vessels that report commercial landings of Atlantic dolphin and wahoo harvested from the South Atlantic must have a valid ADW permit. There is no trip limit for vessels with an ADW permit; however, once 75% of the dolphin ACL is reached, a trip limit of 4,000 lbs ww is implemented. A condition of the ADW or any other federal commercial permit is that a federally permitted vessel must report all its landings from all waters.

Commercial Atlantic dolphin wahoo (ADW) permits are open-access permits. On average, approximately 89% of vessels with a valid ADW permit had homeports in a South Atlantic state (Table 1.6.1.4.4). Approximately 7% of the vessels had a homeport in a Mid-Atlantic state and 2% had a homeport in a New England state (SERO SFD Access Permits database).

Table 1.6.1.4.4. Number of commercial vessels with a valid Atlantic dolphin wahoo permit and percentage of those vessels by Mid-Atlantic, New England, South Atlantic and other homeport, 2017 - 2021.

Year	Vessels	Percentage MA	Percentage NE	Percentage SA	Percentage Other
2017	2,785	7.15%	2.15%	87.86%	2.84%
2018	2,807	6.88%	2.07%	88.24%	2.81%
2019	2,722	6.25%	1.84%	89.16%	2.76%
2020	2,638	5.65%	2.01%	89.73%	2.62%
Average	2,738	5.79%	2.02%	88.75%	2.76%
2021	2,126*	5.79%	1.88%	88.99%	3.34%

Source: NMFS SERO SFD Access permits database.

In any given year, a large percentage of vessels with a valid ADW permit do not report landings of dolphin or wahoo. For example, from 2017 through 2020, an annual average of about 21% of vessels with a valid ADW permit and homeports in the South Atlantic reported harvesting dolphin and wahoo in the South Atlantic and landing that harvest in a South Atlantic state (Table 1.6.1.4.5).

Table 1.6.1.4.5. Number and percentage of commercial vessels with a valid Atlantic dolphin wahoo permit with a South Atlantic homeport that reported harvesting dolphin and/or wahoo in the South Atlantic and landing that harvest in a South Atlantic state, 2017 - 2021.

Year	SA ADW- Permitted Vessels	SA ADW-Permitted Vessels that Reported SA ADW Landings	Percentage of SA ADW- Permitted Vessels that Reported SA ADW Landings
2017	2,447	542	22.15%
2018	2,477	543	21.92%
2019	2,427	509	20.97%
2020	2,367	422	17.83%
2021	1,8921	414	NA ²

^{1.} As of August 26, 2021. Previous years' figures are for the entire calendar year.

Source: NMFS SERO Sustainable Fisheries Division (SFD) Access permits database for SA ADW-permitted vessels, SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (December 2022) for ADW-permitted vessels that land Atlantic dolphin and/or wahoo in the South Atlantic.

The average ADW-permitted vessel that reported landings (lbs gw) of Atlantic dolphin and/or wahoo harvested from the South Atlantic had four trips annually that landed dolphin and/or wahoo from 2017 through 2021 (Table 1.6.1.4.6). Note, however, that the average number of trips per vessel fell to three in 2020 and 2021.

^{*:} The 2021 figure is the number of permits that were valid for at least one day from January 1 through August 26, whereas figures for the previous years are the numbers of permits that were valid for at least one during the entire calendar year.

^{2.} The maximum percentage of ADW permitted vessels with SA ADW landings would be 21.88%, and that assumes that there would be no increase in the number of vessels with a valid ADW permit for at least one day after August 26 of 2021.

Table 1.6.1.4.6. Number of ADW-permitted vessels with reported landings of ADW harvested from the South Atlantic, reported landings (lbs gw) of SA ADW by those permitted vessels, number of trips with SA ADW landings, average SA ADW landings (lbs gw) per vessel, average SA ADW landings (lbs gw) per trip, and average SA ADW trips per vessel, 2017 – 2021.

Year	ADW- permitted Vessels with SA ADW Landings	SA ADW Landings	SA ADW Trips	Ave. SA ADW Landings per Vessel	Ave. SA ADW Landings per Trip	Ave. SA ADW Trips per Vessel
2017	542	204,696	2,309	378	89	4
2018	543	196,188	2,068	361	95	4
2019	509	183,155	1,989	360	92	4
2020	422	100,645	1,282	238	79	3
2021	414	84,543	1,427	204	59	3
Average	486	153,845	1,815	317	85	4

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (December 2022) for federally permitted vessels that reported landings of Atlantic dolphin and wahoo.

As shown in Table 1.6.1.4.7, total ex-vessel revenue (from all landings) for the combined ADW-permitted vessels that reported landings of dolphin and/or wahoo harvested from the South Atlantic ranged from approximately \$13.57 million to \$22.64 million from 2017 through 2021. During that 5-year period the average permitted vessel that reported harvesting ADW from the South Atlantic had annual revenue of \$37,458 from all landings (Table 1.6.1.4.8), while the average ADW trip had landings of \$2,113 (from both ADW and jointly caught species). All of the ADW-permitted vessels with reported ADW landings had annual revenue from all landings less than \$2.2 million.

Table 1.6.1.4.7. Annual Ex-Vessel Revenue from ADW, Jointly Caught Species, and Trips without ADW, Average Annual Ex-Vessel ADW Revenue per Vessel and Average Total Ex-Vessel Revenue per Vessel that Reported ADW landings harvested from the South Atlantic, 2017 – 2021.

Year	Revenue from ADW	Revenue from Jointly Caught Species	Revenue from Other Trips	Total Revenue
2017	\$946,160	\$3,837,821	\$17,851,078	\$22,635,060
2018	\$837,941	\$3,439,377	\$15,655,865	\$19,933,184
2019	\$707,514	\$3,520,003	\$14,926,979	\$19,154,497
2020	\$384,637	\$2,794,416	\$12,554,178	\$15,733,231
2021	\$343,875	\$2,359,965	\$10,862,271	\$13,566,111
Average	\$644,026	\$3,190,317	\$14,370,074	\$18,204,416

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (December 2022) for ADW-permitted vessels that land Atlantic dolphin and wahoo in the South Atlantic, and BEA GDP deflator (issued October 27, 2022).

Table 1.6.1.4.8. Percentage of annual total revenue from ADW harvested from South Atlantic, average ex-vessel revenue from ADW landings per vessel, average ADW price per pound, and average total ex-vessel revenue per vessel, 2017 – 2021.

Year	Ave. Revenue from ADW per ADW Trip	Ave. Revenue per ADW Trip	Average Annual Revenue per ADW Vessel
2017	\$410	\$2,072	\$41,762
2018	\$405	\$2,068	\$36,709
2019	\$356	\$2,125	\$37,632
2020	\$300	\$2,480	\$37,283
2021	\$241	\$1,895	\$32,768
Average	\$355	\$2,113	\$37,458

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (December 2022) for ADW-permitted vessels that land Atlantic dolphin and wahoo in the South Atlantic, and BEA GDP deflator (issued October 27, 2022).

An annual average of 33 federally permitted vessels landed ADW harvested from Mid-Atlantic and/or Northeast waters (Table 1.6.1.4.9). In 2020, the number fell to 27 and rebounded to 32 in 2021. An annual average of 15 (45.5%) of the vessels had one or more trips with reported ADW landings over 200 lbs.

Table 1.6.1.4.9. Number of federally permitted vessels with MA and NE ADW landings, reported landings of ADW by those vessels and trips with those landings, average ADW landings per vessel, average ADW landings per trip, and average number of ADW trips per vessel, 2017 – 2021.

Year	Federally permitted Vessels with MA and/or NE ADW Landings	MA and NE ADW Landings (lbs ww)	MA and NE ADW Trips	Ave. MA and NE ADW Landings per Vessel	Ave. MA and NE ADW Landings per Trip	Ave. MA and NE ADW Trips per Vessel
2017	34	52,464	192	1,543	283	6
2018	34	33,247	152	978	219	4
2019	40	53,508	231	1,338	232	6
2020	27	9,810	96	363	102	4
2021	32	15,428	132	482	117	4
Average	33	32,891	161	985	205	5

Source: Atlantic States Coastal Cooperative Statistics Program (ACCSP), commercial landings data, accessed October 25, 2022.

Multiple gears are used to harvest Atlantic dolphin and wahoo; however, the following are the gears authorized to harvest ADW in the Atlantic EEZ: automatic reel, bandit gear, handline, pelagic longline, rod and reel, and spearfishing gear (including powerheads). A person aboard a vessel in the Atlantic EEZ that has on board gear types other than authorized

gear types may not possess a dolphin or wahoo; however there is an exception. ¹⁶ From 2017 through 2021, all gears except pelagic longline gear were used to catch 77% of Atlantic dolphin wahoo landings (by weight) harvested from the South Atlantic. Off the coast of North Carolina there is an area where the primary gear to harvest Atlantic dolphin is pelagic longline and from 2017 through 2021, that gear brought in about 23% of Atlantic dolphin wahoo taken from the South Atlantic.

There are no estimates of either trip net cash flow or trip net revenue for vessels that harvest Atlantic dolphin and wahoo across all gears. However, Liese (SAFMC ADW Amendment 10) estimates average trip net cash flow and trip net revenue for vessels that harvest ADW by non-longline gear are 40.2% and 23.5% of ADW trip revenue, which indicate that ADW trips are profitable. Net revenue from operations at the annual vessel level is also estimated at 0.5%, while economic return on the vessel asset value is about 0.6%. Although there are no estimates for vessels that harvest ADW with pelagic longline, there are comparable trip estimates for highly migratory species (HMS) vessels that land ADW, which can be found in ADW Amendment 10, and are incorporated here by reference.

Economic Impacts

From 2017 through 2021, average annual combined landings of Atlantic dolphin wahoo reported by 519 federally permitted vessels resulted in \$781.7 thousand in total ex-vessel revenue on average. ¹⁷ In turn, these combined landings and revenues generated 92 jobs and other beneficial economic impacts (Tables 1.6.1.4.10).

Table 1.6.1.4.10. Average annual economic impacts from combined reported Atlantic dolphin wahoo landings of federally permitted vessels, 2017 - 2021.

Business	Jobs	Income (1,000s)	Value- Added (1,000s)	Sales (1,000s)
Harvesters	21	\$660	\$1,035	\$2,070
Primary Dealers/Processors	7	\$385	\$535	\$1,219
Secondary Wholesalers/Distributors	3	\$193	\$276	\$586
Grocers	9	\$310	\$414	\$717
Restaurants	52	\$1,270	\$1,742	\$3,183
All	92	\$2,817	\$4,001	\$7,775

Source: Calculated by NMFS SERO using the model developed for and applied in NMFS (2021).

¹⁶ The exception is as follows. A vessel in the Atlantic EEZ that possesses both a valid Federal commercial permit for Atlantic dolphin and wahoo and any Federal commercial permit(s) required that allow a vessel to fish using trap, pot, or buoy gear or that is in compliance with the permitting requirements for the spiny lobster fishery of the Gulf of Mexico and South Atlantic as described at 50 CFR § 622.400, is authorized to retain both dolphin and wahoo harvested by rod and reel while in possession of trap, pot, or buoy gear.

¹⁷ Vessels that reported ADW harvested from combined Northeast, Mid-Atlantic and South Atlantic waters.

1.6.1.5 South Atlantic Snapper Grouper

Fifty-five species are managed under the South Atlantic Snapper Grouper FMP; however, five are designated as ecosystem component species, which do not have management measures in place and are not assessed. Any commercial fishing vessel that harvests or sells the 50 non-ecosystem component species from the South Atlantic EEZ must have either a valid (non-expired) trip-unlimited or trip-limited snapper grouper (SG) permit assigned to it. Both are limited-access permits and a condition of either permit is the vessel must report its landings regardless if the fish are harvested from state or federal waters. From 2017 through 2020, an annual average of 545 vessels had a valid trip-unlimited SG permit and an annual average of 109 vessels had a valid trip-limited SG permit, for an average total 654 commercial SG permits (Table 1.6.1.5.1). In addition to a valid trip-unlimited SG permit, on a commercial vessel that harvests wreckfish must also have a commercial wreckfish permit.

Table 1.6.1.5.1. Valid snapper grouper commercial permits, 2017 – 2021.

Year	Trip Unlimited	Trip Limited	Total
2017	554	114	668
2018	549	110	659
2019	543	108	651
2020	535	104	639
Average	545	109	654
20211	516	94	610

^{1.} Not for the entire calendar year, and only through August 26, 2021. Previous years' figures (2017 through 2020) are for the entire calendar year.

Source: NMFS SERO SFD Access Permits database accessed December 2022.

A large percentage of these valid permits are of vessels with homeports in Florida. From 2017 through 2020, an annual average of about 71% of valid SG permits (both trip-unlimited and trip-limited) were attached to vessels with homeports in Florida (Table 1.6.1.5.2). From January 1, 2021 through August 26, 2021, approximately 70% of SG-permitted vessels had homeports in Florida. The combined South Atlantic states combined to account for about 99% of valid SG permits.

 $^{^{18}}$ A trip-limited permit limits the maximum landings of snapper grouper species to 225 lbs, per trip.

¹⁹ A vessel with a trip-limited SG permit cannot obtain a wreckfish permit.

²⁰ A commercial (vessel) wreckfish permit requires that the vessel's owner or operator has a wreckfish individual transferable quota (ITQ) shareholder. From 2017 through 2020, there were 11 annually wreckfish-permitted vessels on average.

Table 1.6.1.5.2. Percentage of valid snapper grouper commercial permits by homeport state, 2017 - 2021.

Year	GA	FL	NC	SC	Other	Total
2017	1.05%	71.71%	18.41%	7.93%	0.90%	100.00%
2018	1.06%	70.41%	19.27%	8.50%	0.76%	100.00%
2019	1.23%	70.66%	19.51%	7.53%	1.08%	100.00%
2020	1.25%	70.11%	20.34%	6.73%	1.56%	100.00%
Average	1.15%	70.72%	19.38%	7.67%	1.07%	100.00%
2021^{1}	1.31%	69.67%	20.66%	6.89%	1.48%	100.00%

^{1.} Not for the entire calendar year, and only through August 26, 2021. Previous years' figures (2017 through 2020) are for the entire calendar year.

Source: NMFS SERO SFD Access Permits database, accessed December 2022.

Far less than 100% of SG-permitted vessels report snapper grouper landings during any particular year. From 2017 through 2020, for example, an annual average of 540 (82.48%) SG-permitted vessels reported SG landings (Table 1.6.1.5.3). Note that the number of SG-permitted vessels that reported snapper grouper landings in 2021 was below the range from 2017 through 2020.

Table 1.6.1.5.3. Number and percentage of SG-permitted vessels that reported SG landings, 2017 – 2021.

Year	SG-Permitted Vessels	SG-Permitted Vessels that Reported SG Landings	Percentage of SG- Permitted Vessels that Reported SG Landings
2017	668	568	85.03%
2018	659	541	82.09%
2019	651	533	81.87%
2020	639	517	80.91%
Average	654	540	82.48%
2021	610 ¹	460	75.41%

^{1.} Not for the entire calendar year, and only through August 26, 2021. Previous years' figures (2017 through 2020) are for the entire calendar year.

Source: NMFS SERO SFD Permits data, accessed December 2022, and SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (January 2023).

From 2017 through 2021, an annual average of about 4.34 million lbs gw of snapper grouper were reported landed by SG-permitted vessels. During that 5-year period, the average SG-permitted vessel that reported SG landings made 19 annual trips and each trip landed an average of 427 lbs gw of snapper grouper (Table 1.6.1.5.4).

Table 1.6.1.5.4. Number of SG-permitted vessels and trips with reported SG landings, total SG landings (lbs gw), average SG landings (lbs gw) per trip and average number of SG trips per vessel, 2017 – 2021.

Year	SG-Permitted Vessels with SG Landings	Trips with SG Landings (SG Trips)	Total SG Landings (lbs gw)	Ave. SG Landings (lbs gw) per SG Trip	Ave. SG Trips per SG- Permitted Vessel
2017	568	11,822	5,519,387	467	21
2018	541	10,606	4,372,853	412	20
2019	533	10,720	4,460,613	416	20
2020	517	9,289	3,822,991	412	18
2021	460	8,375	3,530,674	422	18
Average	524	10,162	4,341,304	427	19

Source: NMFS SERO SFD Permits data, accessed December 2022, and SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (January 2023).

Average ex-vessel revenue for a trip with snapper grouper landings was \$1,810 from 2017 through 2021 (Table 1.6.1.5.5). Snapper grouper accounted for about 93% of that revenue. The average SG-permitted vessel that reported snapper grouper landings had annual total ex-vessel revenue of \$41,626, and snapper grouper accounted for approximately 78% of that average vessel's total annual revenue. Maximum annual revenue for a SG vessel during this 5-year period did not exceed \$2.4 million.

Table 1.6.1.5.5. Revenue from SG landings, jointly caught species and species from non-SG Trips, average revenue per SG trip, and average revenue per SG vessel, 2017 - 2021.

Year	SG Revenue	Jointly Caught Species Revenue	Non-SG Trip Revenue	Total Revenue	Average Revenue per SG Trip	Ave. Total Revenue per SG Vessel
2017	\$21,190,296	\$2,121,458	\$4,092,393	\$27,404,147	\$1,972	\$48,247
2018	\$17,382,498	\$1,405,737	\$3,498,574	\$22,286,809	\$1,771	\$41,196
2019	\$17,741,818	\$1,272,777	\$4,073,003	\$23,087,598	\$1,774	\$43,316
2020	\$15,257,259	\$900,735	\$3,121,760	\$19,279,754	\$1,739	\$37,292
2021	\$14,211,710	\$811,371	\$2,493,823	\$17,516,904	\$1,794	\$38,080
Average	\$17,156,716	\$1,302,416	\$3,455,911	\$21,915,042	\$1,810	\$41,626

Source: NMFS SERO SFD Permits data, accessed December 2022, and SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (January 2023) and BEA GDP deflator (issued October 27, 2022).

Liese (pers. comm. 2022) estimates the average trip net cash flow and average trip net revenue for SG vessels are 43% and 26%, respectively, of total SG trip revenue, indicating the SG trips are profitable. From that, it is estimated that average SG trip net cash flow and average SG trip net revenue are \$778 and \$471, respectively, from 2017 through 2021 (Table 1.6.1.5.6). Note that net cash flow is a proxy for producer surplus (PS) at the trip level.

²¹ Data from 2014 through 2018 were used to produce these estimates for vessels that reported trips with SG landings regardless of gear(s) used.

Table 1.6.1.5.6. Average economic profit (net revenue) and financial performance (net cash flow) per SG trip by all gears, 2017 - 2021.

Average SG Trip Total Revenue	Average SG Trip Net Cash Flow	Average SG Trip Net Revenue
\$1,810	\$778	\$471

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (January 2023) and BEA GDP deflator (issued October 27, 2022) for average SG trip total revenue and Liese (pers. Comm. 2022) for percentages to produce estimates of average SG trip net cash flow and net revenue.

Average annual net revenue from operations for SG vessels is 8% of total annual revenue, respectively, indicating SG vessels are profitable (Liese pers. comm. 2022). From that percentage, average annual net returns to operations is \$3,330, per vessel (Table 1.6.1.5.7). Average economic return from vessel asset value is about 8% (\$3,164) of total vessel revenue. Producer surplus at the vessel level is estimated to be about 24% (\$9,824).

Table 1.6.1.5.7. Average economic profit (net revenue from operations) and financial performance (net cash flow) per SG vessel by all gears, 2017 – 2021.

Average SG Vessel Annual	Average SG Vessel Annual Net	Average SG Vessel Annual Net
Total Revenue	Cash Flow	Revenue from Operations
\$41,626	\$9,158	\$3,330

Source: SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (January 2023) and BEA GDP deflator (issued October 27, 2022) for average SG vessel annual total revenue and Liese (pers. comm. 2022) for percentages to produce estimates of average SG vessel annual net cash flow and net revenue from operations.

Economic Impacts

From 2017 through 2021, annual combined reported landings of snapper grouper of SG-permitted vessels resulted in about \$17.16 million in total ex-vessel revenue on average. In turn, these combined landings and revenues generated 2,026 jobs and other beneficial economic impacts (Tables 1.6.1.5.8).

Table 1.6.1.5.8. Average annual economic impacts from reported snapper-grouper commercial landings of SG-permitted vessels, 2017 - 2021.

Business	Jobs	Income (1,000s)	Value- Added (1,000s)	Sales (1,000s)
Harvesters	461	\$14,494	\$22,724	\$45,438
Primary Dealers/Processors	156	\$8,442	\$11,736	\$26,750
Secondary Wholesalers/Distributors	76	\$4,230	\$6,052	\$12,872
Grocers	198	\$6,794	\$9,078	\$15,730
Restaurants	1,135	\$27,874	\$38,231	\$69,859
All	2,026	\$61,834	\$87,821	\$170,649

Source: Calculated by NMFS SERO using the model developed for and applied in NMFS (2021).

1.6.2 Economic Effects Analysis

The economic effects are described in the Regulatory Impact review which can be found in Chapter 2.

1.7 Description of the Social Environment and Effects of Action

1.7.1 Social Environment

This section uses available permit and landings data to describe select social aspects of the commercial fisheries covered by the respective FMPs addressed by this amendment. Participation in each of the fisheries requires specific permits, and as discussed elsewhere in this section, endorsements are required to deploy specialized types of gear for certain species managed through the FMPs.

Participation in the open access Atlantic dolphin wahoo (ADW) fishery requires a corresponding ADW permit. The coastal migratory pelagic fishery of the Gulf and broader Atlantic requires a Spanish mackerel (SM; open access) permit and/or a king mackerel (KM; limited access) permit. Participation in Gulf reef fish fishery requires a reef fish (RF) permit, which is a limited access permit. Finally, the limited access snapper grouper (SG) fishery of the South Atlantic requires an unlimited (SG1) permit or a 225-lb.-limited (SG2) permit. The limited access RF, SG1, SG2, and KM permits may be renewed even while not actively used to generate landings. For example, 37.5% of the 845 reef fish permits in 2018 did not make landings of reef fish.²² Many participants in all regions hold multiple commercial permits, for example, such as those who participate in both the Gulf reef fish and coastal migratory pelagic fisheries.

The description uses two basic indicators to identify the communities most extensively involved in each fishery: (a) the geographic distribution of permitted vessels during 2020 (the most recent full year for which federal permit data are presently available), based on the permit holder's address, and (b) the proportion of species-specific landings accruing to communities in each region of interest. Landings data are based on the address of the dealer, which may not be located in the same community as the permit holder. Additional information is provided as context where appropriate.

1.7.1.1 Permits and Regional Quotients (RQ) for the Atlantic Dolphin-Wahoo Commercial Fisheries

A total of 2,638 ADW permits were held by vessel owners who reside in communities along the Eastern Seaboard and elsewhere in the nation during 2020, down 3.2% (84 permits) from 2019 and 6.4% (169 permits) from a 2016 through 2020 time-series high of 2,807 in 2018. Nearly 65% (1,730 permits) were held by entities with mailing addresses in Florida during 2020, followed by ~20% (521 permits) in North Carolina, and ~3% (58 permits) in New Jersey. Relatively few permits were held in New England, as the region is on the northern fringe of ocean zones where the species are harvested. A total of 68 ADW permits were held during 2020

²² Table 2.1.1 in Reef Fish Amendment 36B available at https://gulfcouncil.org/wp-content/uploads/B-8b-2022-Jan-RF-36B-PHDraft-1-7-2022.pdf

by persons with mailing addresses in states distant from the East Coast, including Texas, Louisiana, Mississippi, Alabama, West Virginia, Hawaii, Puerto Rico, and the U.S. Virgin Islands.

ADW Permits in South Atlantic States and Communities

During 2020, 2,367 Atlantic ADW permits were held by entities with addresses in the South Atlantic. This is down 2.5% (60 permits) from 2019, and 4.6% (110 permits) from a 2016-2020 high of 2,477 in 2018. The majority are consistently issued in Florida, followed by North Carolina, South Carolina, and Georgia. During 2020, 73% of ADW permits were sent to Florida mailing addresses, with most in Key West. Key West-based addressees held between 215 and 226 D-W permits during 2016 through 2019, but this figure dropped to 194 in 2020.

Table 1.7.1.1. Leading ADW permit-holding communities in the South Atlantic, 2020.

State	Leading Communities	Number of Permits in 2020
Florida	Key West	194
Florida	Port Canaveral	89
Florida	Miami	89
Florida	Marathon	87
Florida	Fort Pierce	79
Florida	Jupiter	78
North Carolina	Morehead City	58
Florida	Sebastian	53
North Carolina	Wanchese	48
Florida	Key Largo	44
North Carolina	Southport	44
Florida	Port Salerno	42
North Carolina	Hatteras	42

Source: NMFS SERO Sustainable Fisheries (SF) Access permits database (accessed June 2023).

ADW Permits in Mid-Atlantic States and Communities

During 2020, 148 ADW permits were held by entities with mailing addresses in the Mid-Atlantic region, down 14.2% (21 permits) from 2019 and 33.8% (50 permits) from a time series high of 198 in 2017. Most permits (58) were held in New Jersey during 2020, with the greatest percentage in Barnegat Light—as has been the case for over a decade.

Table 1.7.1.2. Leading ADW permit-holding communities in the Mid-Atlantic, 2020.

State	Community	Number of Permits in 2020
New Jersey	Barnegat Light	25
Maryland	Ocean City	15
New York	Montauk	10
New Jersey	Cape May	8
Virginia	Virginia Beach	7
New York	New York	5
New Jersey	Sea Isle City	5
New Jersey	Point Pleasant/Point Pleasant Beach	5

State	Community	Number of Permits in 2020
Virginia	Wachapreague	3
Delaware	Wilmington	3
Delaware	Indian River	3

Source: NMFS SERO Sustainable Fisheries (SF) Access permits database (accessed June 2023).

ADW Permits in New England States and Communities

As of 2020, 52 ADW permits were held by entities with mailing addresses in the coastal New England states of Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut. This figure is down from a high of 60 region-specific permits in 2017, but up slightly from 50 such permits in 2019. The greatest percentage were held in Rhode Island during 2020, with most held by entities in Point Judith. Permits are otherwise scattered throughout the region, with two or fewer permits enumerated in 29 New England communities.

Table 1.7.1.3. Leading ADW permit-holding communities in New England, 2020.

State	Community	Number of Permits in 2020
Rhode Island	Point Judith	8
Massachusetts	Nantucket	4
Massachusetts	Gloucester	3

Source: NMFS SERO Sustainable Fisheries (SF) Access permits database (accessed June 2023).

Regional Quotients for Atlantic Dolphin-Wahoo

Figure 1.7.1.1 below depicts communities that accrued the greatest proportions of combined dolphin and wahoo landings documented along the Eastern Seaboard during 2020. Catch from all allowable gear types are incorporated in the landings figures provided here.

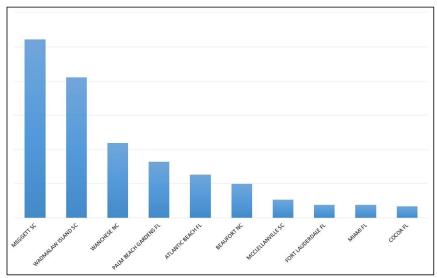


Figure 1.7.1.1. Leading Atlantic communities ranked by RQ of combined dolphin-wahoo landings, RQ values (y-axis) are omitted from the figure to maintain confidentiality. Source: SERO, Community ALS 2020 (accessed June 2023).

1.7.1.2 Permits and RQs for the Gulf of Mexico Reef Fish Fisheries

Commercial Reef Fish Permits in Gulf States and Communities

A total of 837 Gulf reef fish permits were issued during 2020, down slightly from 842 permits in 2019. At 81.1%, most were issued to entities with addresses in Florida during 2020, followed by 8% in Texas, 4.7% in both Louisiana and Alabama, and less than 1% in Mississippi. The total number and state-level distribution of reef fish permits varies little over the period 2016-2020, with the vast majority consistently held for use by participants in Florida. As depicted in Table 1.7.2.1, numerous commercial reef fish permits were held by captains operating from Panama City and Key West during 2020.

Table 1.7.2.1. Leading Gulf reef fish permit-holding communities, 2020.

State	Community	Number of Permits in 2020
Florida	Panama City	72
Florida	Key West	63
Florida	Destin	40
Texas	Galveston	37
Florida	Madeira Beach	31
Florida	Cortez	26

State	Community	Number of Permits in 2020
Florida	Tarpon Springs	25
Florida	Apalachicola	20
Florida	Pensacola	19
Florida	St. Petersburg	16
Florida	Clearwater	14
Alabama	Dauphin Island	13
Florida	Naples	13
Florida	Steinhatchee	11
Florida	Hernando Beach	11

Source: NMFS SERO Sustainable Fisheries (SF) Access permits database (accessed June 2023).

Commercial fishery participants who harvest reef fish using bottom longline gear must possess a Gulf reef fish longline endorsement (LLE). During 2020 and throughout a 2016-2020 timeseries, the greatest proportion of the 62 allotted LLEs were held by commercial operators with mailing addresses in Madeira Beach, Florida, followed closely by those in Cortez, Florida.

Regional Quotients for Gulf Reef Fish

Figure 1.7.2.1 below depicts communities that accrued the greatest proportions of combined reef fish landings documented around the Gulf region during 2020. Landings are based on all allowable gear types used by participants in the respective commercial reef fish harvest sectors

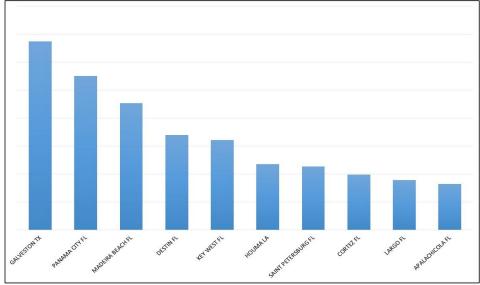


Figure 1.7.2.1. Leading communities ranked by RQ of all Gulf reef fish landings. RQ values (y-axis) are omitted from the figure to maintain confidentiality. Source: SERO, Community ALS 2020.

Commented [MS1]: Missing the rest of this sentence (and discussion?).

1.7.1.3 Permits and RQs for the South Atlantic Snapper Grouper Fisheries

South Atlantic SG1 and SG2 Permits by State and Community

A SG1 or SG2 permit is required for captains/vessels to legally commercially harvest any of the wide range of snapper grouper species in the South Atlantic region. A total of 535 SG1 permits were issued during 2020. At 67.1%, most unlimited permits were issued during 2020 to residents or persons with mailing addresses in Florida, followed by 21.9% in North Carolina, 7.6% in South Carolina, and 1.5% in Georgia. A total of 68 permits of either type were held by individuals scattered throughout South Atlantic communities during 2020. As indicated in Table 1.7.3.1, a high percentage of both permits are held by participants active in waters proximal to Key West.

Table 1.7.3.1. Leading SG permit-holding communities in the South Atlantic, 2020.

Leading Communities: Unlimited S-G Permits	Permits	Leading Communities: 225-lb Trip-Limited S-G Permits	Permits
Key West, Florida	92	Key West, Florida	11
Key Largo, Florida	22	Marathon, Florida	10
Miami, Florida	21	Miami, Florida	9
Marathon, Florida	19	Jupiter, Florida	6
Murrells Inlet, South Carolina	15	Big Pine Key, Florida	5
Little River, South Carolina	15	Key Largo, Florida	4
Port Canaveral, Florida	14	Sebastian, Florida	4
Jacksonville, Florida	13	Wilmington, North Carolina	4
Southport, North Carolina	13	West Palm Beach, Florida	3
Jupiter, Florida	12	Hatteras, North Carolina	3
Morehead City, North Carolina	11		
St. Augustine, Florida	11		
Sneads Ferry, North Carolina	11		
Fort Pierce, Florida	11		
Big Pine Key, Florida	11		
Sebastian, Florida	11		

Source: SERO Sustainable Fisheries (SF) Access permits database (accessed June 2023).

Commercial participants/vessels must possess a limited access golden tilefish longline endorsement to legally deploy bottom longline gear for this SG species in the federal waters of the South Atlantic. A total of 22 such endorsements were issued during 2020 and throughout the 2016 through 2020 time-series. Three or more such endorsements were held during 2020 only in the communities of Port Orange and Fort Pierce in Florida, and in Little River in South Carolina. A total of 32 black sea bass pot endorsements were held in the South Atlantic region during 2020, with three or more such endorsements held only in the communities of Sneads Ferry in North Carolina, Little River in South Carolina, and Ponce Inlet in Florida.

Regional Quotients for Snapper Grouper in the South Atlantic

Figure 1.7.3.1 below depicts communities that accrued the greatest proportions of combined snapper-grouper landings documented around the South Atlantic region during 2020. Landings are based on all allowable gear types used by participants in the respective SG harvest sectors.

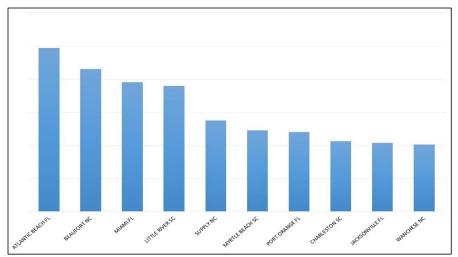


Figure 1.7.3.1. Leading communities ranked by RQ of combined snapper-grouper landings. RQ values (y-axis) are omitted from the figure to maintain confidentiality. Source: SERO, Community ALS 2020 (accessed June 2023).

1.7.1.4 Permits & RQs for Gulf & Atlantic Coastal Migratory Pelagic Fisheries

Gulf and Atlantic Coastal Migratory Pelagic Permits by State and Community

Species addressed by the Coastal Migratory Pelagics (CMP) FMP include king mackerel, Spanish mackerel, and cobia. As noted previously, fishing vessels used to harvest king mackerel in the federal waters of the Gulf of Mexico and Atlantic must operate with a general king mackerel permit (typically used by participants to target the species with hook and line troll gear), and/or a king mackerel gillnet permit (though relatively few vessels use gillnets to harvest king mackerel in the subject regions). Participation in the open access commercial Spanish mackerel fishery requires a generalized commercial Spanish mackerel permit. While commercial harvest of cobia in federal waters of the Gulf or Atlantic does not require a permit, seafood dealers may purchase cobia harvested in federal waters only from harvesters possessing federal Spanish mackerel, king mackerel, or CMP charter/headboat permits. While some harvesters target cobia, the fish are often captured incidentally by persons using hook and line gear for king or Spanish mackerel (NOAA Fisheries 2022).

Regarding the generalized limited access king mackerel permit, a slow but steady attrition of permit holders is noted for the Gulf and Atlantic regions during recent years. The overall number of permit holders diminished from 1,451 in 2016 to 1,445 in 2017, 1,440 in 2018, 1,435 in 2019, and 1,426 in 2020. Attrition notwithstanding, the greatest number of permits have consistently been used by entities with mailing addresses in Key West. The distribution of permits provided in Table 1.7.4.1 below clearly indicates the relative predominance of commercial king mackerel fishing in the Florida Keys, along the east coast of Florida, and along the North Carolina coastline. However, high levels of production are noted of the Gulf community of Destin, Florida, in Figure 1.7.4.1 below. While relatively small numbers of permit holders maintain mailing addresses or residences in select communities along the Gulf of Mexico coastline, even fewer permits are held north of Cape Hatteras. Three such permits were held in the New Jersey communities of Cape May and Barnegat Light during 2020.

Table 1.7.4.1. Leading King mackerel permit-holding communities, Gulf & Atlantic, 2020.

State	Community	Number of Permits in 2020
Florida (Keys)	Key West	100
Florida (East)	Port Canaveral	64
Florida (East)	Jupiter	58
Florida (East)	Sebastian	54
Florida (East)	Fort Pierce	51
Florida (Gulf)	Panama City	42
Florida (East)	Port Salerno	36
Florida (East)	Miami	35
Florida (Gulf)	Destin	31
North Carolina	Southport	29
North Carolina	Hatteras	27
Florida (East)	Stuart	21
North Carolina	Wanchese	20
North Carolina	Carolina Beach	19
Florida (East)	Boynton Beach	19

Source: SERO Sustainable Fisheries (SF) Access permits database (accessed June 2023).

A small and slowly diminishing number of persons have been involved in the king mackerel gillnet fishery over the past decade. A total of 17 individuals held gillnet permits for king during 2020 (and 2019), down from a 21 in 2016 and 24 in 2008. The majority of permit holders have operated from or have maintained mailing addresses in Key West since 2008, with nine such persons doing so in 2020.

As can be noted in Table 1.7.4.2, the distribution of Spanish mackerel (SM) permits is somewhat reflective of that for king mackerel. The greatest number of SM permits are held in Key West, with numerous permits concentrated in a mix of Florida east coast and Gulf communities, and in North Carolina communities. Relatively few SM permits were held outside these regions during 2020 and previous years. More than 2 SM permits were held during 2020 only in the communities of Cape May, New Jersey (six permits), Norfolk and Virginia Beach, Virginia (three permits each), and Nantucket, Massachusetts (three permits).

Table 1.7.4.2. Leading Spanish mackerel permit-holding communities, Gulf & Atlantic, 2020.

State	Community	Number of Permits in 2020
Florida (Keys)	Key West	188
Florida (East)	Port Canaveral	85
Florida (East)	Miami	79
Florida (East)	Fort Pierce	76
Florida (Keys)	Marathon	76
Florida (East)	Jupiter	71
Florida (Gulf)	Panama City	58
Florida (East)	Sebastian	55
Florida (Gulf)	Port Salerno	45
North Carolina	Southport	35
North Carolina	Wanchese	33
North Carolina	Morehead City	32
North Carolina	Beaufort	32
North Carolina	Hatteras	29
Florida (East)	Stuart	28

Source: SERO Sustainable Fisheries (SF) Access permits database (accessed June 2023).

Regional Quotients for CMP Species in the Gulf and Atlantic

Figure 1.7.4.1 below depicts communities that accrued the greatest proportions of combined CMP landings documented around the Gulf and Atlantic regions during 2020. Landings are based on all allowable gear types used by participants in the respective harvest sectors.

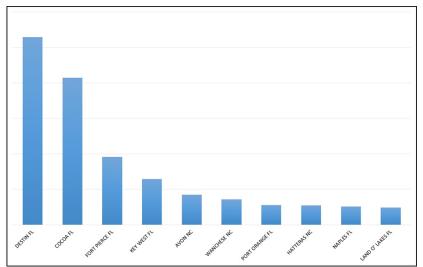


Figure 1.7.4.1. Leading communities ranked by RQ of combined CMP landings. RQ values (y-axis) are omitted from the figure to maintain confidentiality. Source: SERO, Community ALS 2020 (accessed June 2023).

1.7.1.5 Summary of Community Involvement in Multiple Fisheries

As depicted in Table 1.7.3 below, participants (or addressees) in certain communities are involved in multiple fisheries addressed by this amendment. This undoubtedly relates to adaptive/opportunistic strategies engaged by many commercial fishing operations around the nation and world (e.g., see Aguilera et al. 2015). In this case, the capacity to engage in fisheries across the broad South Atlantic, Atlantic, and Gulf regions relates in large part to where fishing vessels are homeported. This is exemplified by permitted vessels operating from the Florida Keys and South Florida, where it is possible to reach both South Atlantic and Gulf of Mexico fishing grounds relatively easily (though it should be noted that fishing vessels can and are periodically moored in harbors adjacent to fishing grounds far from the operator's homeport. The table naturally underrepresents multiplicity of fisheries engagement by commercial fishing vessels active in the Gulf of Mexico since the amendment addresses two FMPs that are focused solely on South Atlantic/Atlantic fisheries and just one focused solely on Gulf-specific fisheries.

Table 1.7.5.1. Top 15 communities ranked in terms of involvement in multiple fisheries, 2020.

Community/State	Atlantic Dolphin- Wahoo	S. Atl. Snapper Grouper (SG1)	Gulf Reef Fish	King Mackerel	Spanish Mackerel	Total Permits
Key West, FL	194	92	63	110	188	647
Port Canaveral, FL	88	14	2	64	85	253
Miami, FL	89	21	5	35	79	229
Jupiter, FL	78	12	1	58	71	220
Palm Beach, FL	79	11	1	51	76	218
Fort Pierce, FL	87	19	7	16	76	205
Sebastian, FL	53	11	4	54	55	177
Port Salerno, FL	42	5		36	45	128
Southport, NC	44	13	1	29	35	122
Morehead City, NC	58	11		13	32	114
Wanchese, NC	48	7		20	33	108
Hatteras, NC	42	6		27	29	104
Key Largo, FL	44	22	1	9	27	103
Beaufort, NC	40	5		12	32	89
Islamorada, FL	40	8	1	7	18	74

Source: SERO Sustainable Fisheries (SF) Access permits database (accessed June 2023).

1.8 Description of the Administrative Environment and Effects of Action

1.8.1 Administrative Environment

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. exclusive economic zone (EEZ), an area extending 200 nautical miles from the seaward boundary of each of the coastal states, and authority over U.S. anadromous species and continental shelf resources that occur beyond the U.S. EEZ.

Responsibility for federal fishery management decision-making is divided between the U.S. Secretary of Commerce (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 FMPs 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 A. In most cases, the Secretary has delegated this authority to NMFS.

The Gulf of Mexico Fishery Management Council (Gulf Council) is responsible for conservation and management of fishery resources in federal waters of the Gulf. These waters extend to 200 nautical miles offshore from the seaward boundary of the states Alabama, Florida, Louisiana, Mississippi, and Texas as those boundaries are defined by law. The Gulf Council has seventeen voting members: one from NMFS; one each from the state fishery agencies of Florida, Alabama, Mississippi, Louisiana and Texas; and 11 public members appointed by the Secretary. Nonvoting members include representatives of the FWS, U.S. Coast Guard (USCG), Department of State, and Gulf States Marine Fisheries Commission (GSMFC).

The Gulf Council has adopted procedures whereby the non-voting members serving on the Gulf Council committees have full voting rights at the committee level but not at the full Gulf Council level. Gulf 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.

The South Atlantic Fishery Management Council (South Atlantic Council) is responsible for conservation and management of fishery resources in the EEZ 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: species in the CMP FMP are managed from New York to Texas and those in the Dolphin Wahoo FMP are 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. Nonvoting 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 South Atlantic Council committees have full voting rights at the committee level but not at the full South Atlantic 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. South Atlantic 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.

1.8.1.1 Gulf of Mexico State Fishery Management

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 state governments of Texas, Louisiana, Mississippi, Alabama, and Florida have the authority to manage their respective state fisheries. Each of the five Gulf states exercises legislative and regulatory authority over their respective state's natural resources through discrete administrative units. Although each agency is the primary administrative body with respect to the state's natural resources, all states cooperate with numerous state and federal regulatory agencies when managing marine resources. A more detailed description of each states primary regulatory agency for marine resources is provided on their respective Web pages (Table 1.8.1.1).

Table 1.8.1.1 Gulf state marine resource agencies and Web pages.

State Marine Resource Agency	Web Page	
Alabama Marine Resources Division	http://www.outdooralabama.com/	
Florida Fish and Wildlife Conservation Commission	http://myfwc.com/	
Louisiana Department of Wildlife and Fisheries	http://www.wlf.louisiana.gov/	
Mississippi Department of Marine Resources	http://www.dmr.ms.gov/	
Texas Parks and Wildlife Department	http://tpwd.texas.gov/	

The Gulf states are also involved in the management of marine fisheries through the Gulf States Marine Fisheries Commission (GSMFC). This commission was created to coordinate state regulations and develop management plans for interstate fisheries. The GSMFC does not possess any regulatory authority.

1.8.1.2 South Atlantic State Fishery Management

The state governments of North Carolina, South Carolina, Georgia, and Florida (on 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 South Atlantic Council 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 South Atlantic Council, 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.

Table 1.8.1.2. South Atlantic state marine resource agencies and Web pages.

State Marine Resource Agency	Web Page
North Carolina Marine Fisheries	https://deq.nc.gov/about/divisions/
	marine-fisheries
South Carolina Marine Resources Division	https://www.dnr.sc.gov/divisions/
	marine.html
Georgia Department of Natural Resources	https://gadnr.org/fisheries
Florida Fish and Wildlife Conservation Commission	http://myfwc.com/

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. The ASMFC does not possess any regulatory authority.

1.8.1.3 Enforcement

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

Neither NOAA/OLE nor the USCG can provide a continuous law enforcement presence in all areas due to the limited resources of NOAA/OLE and the priority tasking of the USCG. To supplement at-sea and dockside inspections of fishing vessels, NOAA entered into Cooperative Enforcement Agreements with all but one of the states in the Southeast Region (North Carolina), which grant authority to state officers to enforce the laws for which NOAA/OLE has jurisdiction. In recent years, the level of involvement by the states has increased through Joint Enforcement Agreements, whereby states conduct patrols that focus on federal priorities and, in some circumstances, prosecute resultant violators through the state when a state violation has occurred. NOAA General Counsel issued a revised Southeast Region Magnuson-Stevens Act Penalty Schedule in 2019, which addresses all Magnuson-Stevens Act violations in the Southeast Region. In general, this Penalty Schedule increases the amount of civil administrative penalties that a violator may be subject to up to the current statutory maximum of \$120,000 per violation. (http://www.gc.noaa.gov/documents/Penalty%20Policy_FINAL_07012014_combo.pdf)

1.8.2 Administrative Effects Analysis

Currently, as a condition of the permit, vessel owners/operators are required to meet the reporting requirements associated with their permit (CFR 50 Section 622.5(a)(1). The information submitted is treated as confidential in accordance with Magnuson-Stevens Act section 402(b) and NOAA Administrative Order 216-100. Electronic reporting is expected to provide the agency with positive benefits, namely increased data quality and timeliness for use in management, and compliance.

It is expected that electronically reporting fishing and harvest activity in logbooks would result in both developmental and long-term costs for maintenance, monitoring and compliance activity. It is also expected that there will be cost savings to the existing program as described in Table 1.8.2.1 below. The budgetary implications and potential development costs to NMFS are estimated in Table 1.8.2.2 below. Additional infrastructure and personnel is expected to be necessary to maintain and process these data. The long-term costs to maintain the program are estimated in Table 1.8.2.3 below.

Electronically reporting commercial logbooks will result in numerous one-time development activities and costs. These costs include the various steps to set-up electronic reporting: creating a technical specification document, vendor approval process, creation of field validations to minimize data errors, creation of Information Technology (IT) infrastructure (e.g., database structural changes, creation of application program interface to receive data, merging and calibration of legacy data to current data for stock assessments and management usage, updating connections to NMFS systems (e.g., Permits, compliance), creation customer service systems (e.g., toll free lines and email), and outreach activities.

Some of the annual, and long-term activities and costs of electronic reporting of commercial logbooks include maintenance, operations and updates for the data systems, websites, and vendor approval process, and customer service. This may include new staff to maintain the systems and answer emails or phone lines.

Cost Savings

While the timeframe for submission of logbooks will not change, it is expected that electronic logbooks will eliminate the time delay from mailing logbooks via the United States Postal Service and the data entry into a NMFS system (see Section 1.1.3.1 for how the current paper reporting system works). Additional time savings may be realized with the validations used in electronic reporting (e.g., field formats, drop down lists, data validations), although this will not capture all data quality validations. The time savings expected from electronic reporting will be a reduction in processing time by approximately 2-3 weeks. This may also decrease the time necessary to move from preliminary data to final data, although other factors may still affect the final data timeline.

It is expected that the contract to process paper logbooks would be discontinued, thereby saving the agency costs and timeliness. NMFS intends to use a similar validation process as that used at the Greater Atlantic Regional Fisheries Office (GARFO) that immediately notifies users of fatal errors and warnings. Fatal errors prohibit transmission to NMFS until resolved, while warnings allow submission. These fatal errors and warnings are expected to improve the quality of the data for use in management. The estimated Commercial Logbook reporting cost savings resulting from the conversion of paper to electronic requirements are listed in Table 1.8.2.1 below.

Table 1.8.2.1. Estimated Commercial Logbook reporting annual cost savings resulting from the conversion from paper to electronic reporting requirements.

Activity	Estimated costs	Lead
Printing of logbooks	\$50,000	SEFSC
Mailing week (actual		
stuffing of envelopes)	\$5,000	SEFSC
Discard selection letter		
printing	\$5,000	SEFSC
Postage	\$5,000	SEFSC
Mailing single books		
throughout the year	\$2,000	SEFSC
QA/QC Labor for Paper		
Logbooks (Data Entry -		
QA/QC)	\$95,000	SEFSC
Data Entry Contract Costs	\$90,000	SEFSC
Mail/UPS to/from CPI for		
data entry	\$4,000	SEFSC
Estimated Total	\$256,000	

Data Submission and Transmission

The move to electronic logbooks will allow fishermen to submit their logbook via NMFS type-approved software. All type-approved software must be approved via the vendor approval process and adhere to the SEFSC technical specifications. NMFS is only considering software approval via applications that allow for instant two-way communications that are created at no cost to the agency. The software will be required to communicate the data back and forth with the SEFSC and its partners. At this time, the commercially approved Vessel Monitoring Systems do not fall under these criteria, as the units are not capable of two-way communication, the cost for the maintenance of the forms for each approved VMS vendor is the burden of the agency, and there would be additional costs to include this dataflow into the commercial logbook database.

Data transmission will be from an approved software vendor to a NMFS Application Program Interface (API). Additional warnings and validations will be built into the API and transmits warnings and errors in real-time to the user. These validations will improve the quality of the data received compared to paper submission. The region is working closely with GARFO and the Atlantic Highly Migratory Species group to work towards one-stop reporting requirements. One-stop reporting allows fishermen that has permits across regions/management units to supply one logbook for all management purposes. This often entails questions relevant to each fishery for which the permits are issued.

 $\textbf{Table 1.8.2.1.} \ \ \textbf{The initial one-time costs for the development of the commercial electronic logbook system.}$

Activity	Estimated costs	Lead
Development of Technical		
Specifications and Vendor		
Approval Process	\$25,000	SEFSC
Create Script and		
Infrastructure to move API		
received data from GARFO		
to SERO	\$25,000	SEFSC
Create Webpages and		
FAQs and Outreach Guides	\$30,000	SEFSC, SERO
		Councils, SEFSC,
Public Hearings (6)	\$30,000	SERO
		Councils, SEFSC,
Outreach Webinars (10)	\$20,000	SERO
Outreach in Mid-Atlantic		
and New England (2)	\$10,000	Council, SEFSC
Create Vendor Website	\$10,000	SEFSC, SERO
Printing and Mailing		
Permit Letters	\$12,000	SEFSC
Voice-Mail Customer		
Service Phone Line	\$5,000	SEFSC
NMFS Data Interface	\$21,000	SEFSC
OLE Data Interface	\$5,000	SEFSC
Merge Old and New Data		
Streams	\$86,000	SEFSC, SERO
Update Compliance		
Modules	\$31,000	SEFSC
Update Data Flows	\$13,500	SEFSC
Build QA/QC Queries	\$105,000	SEFSC
Estimated Total	\$428,500	

Table 1.8.2.2. Estimated Annual Long-Term Maintenance and Service Costs.

Activity	Estimated costs	Lead
Maintain Websites and		
Data Updates Annual	\$5,000	SEFSC
Data System Maintenance	\$5,000	SEFSC
API Maintenance	\$5,000	SEFSC
Customer Support Hours	\$20,000	SEFSC, SERO
Vendor Approval and		
Testing	\$5,000	SEFSC
Outreach	\$5,000	SEFSC
Estimated Total	\$45,000	

1.9 Council's Choice for the Preferred Option

1.9.1 Advisory Panel Recommendations

1.9.1.1 Atlantic Dolphin Wahoo

(to be completed)

1.9.1.2 South Atlantic Snapper Grouper

The Snapper Grouper Advisory Panel discussed the proposed action during their October 18-20, 2022, meeting in Charleston. AP members had the following comments:

- Overall, the AP was supportive of the proposed change to an electronic platform for the coastal logbook.
- An AP member asked whether the "end of year" economic questions would continue to be required.
- AP members asked how reporting requirements would be affected for those who own multiple permits under separate corporations.

1.9.1.3 South Atlantic Mackerel Cobia

The Mackerel Cobia Advisory Panel met in Charleston on October 5-6, 2022. AP members had the following comments on the proposed action:

- Fishermen who have been using eTRIPS in the Northeast region find it easy to use and much preferred to the paper logbook.
- AP members asked whether e-reporting would improve ease of permit renewal.
 Fishermen in the SE are frustrated with the electronic permit renewal process and are hoping electronic submission of logbooks will also improve the permit renewal system.

- AP members inquired as to whether the timeline for logbook submission would be better
 enforced once the system is electronic. In the SE, fishermen sometimes wait much longer
 than 7 days to submit their information.
- In the SE, vessels that are selected to fill out the economic survey do not get paid by the fish house within seven days of submitting their information. The economic data take longer than that to be processed and fishermen have to wait to be paid out. Maybe the timeline for submitting the add-on survey information should be revised.
- In the GARFO region, vessels have to submit an estimate of their catch and a VTR number to the fish house before offloading and then have go in an amend their estimate after offloading. This is different than how it is done in the SE and may need to be considered. There is a disconnect in this respect for vessels that have permits in both regions.
- AP members see improvement in how discard information will be obtained with eTRIPs.
- Question as to the extent that fishermen have access to their data. Some concern over data protection.

1.9.1.4 Gulf of Mexico Reef Fish

The Gulf of Mexico Reef Fish Advisory Panel (RFAP) met in Tampa, Florida, on October 11, 2022. SEFSC staff presented an overview of the commercial costal logbook program, outlined the modifications required to transition from paper logbooks to an electronic submission platform, and provided a demonstration using the e-Trips software. Staff commented that the transition to an electronic platform would reduce the reporting burden for vessels dually permitted across regions, allow for reporting discards within the logbook report, and continue the collection of supplementary economic data. Modifications to the data fields will allow for integration to the ACCSP database and in many cases allow for more efficient reporting. For example, drop-down menus and the creation of "favorites" list allow for quicker input relative to paper logbooks. Additionally, built-in validations would reduce entry errors for users.

The RFAP applauded the work of the SEFSC staff on the development of an electronic reporting for the commercial logbook program. A RFAP member asked if it would be possible to test the eTrips software. SEFSC staff replied that a test account could be requested of ACCSP to try out the software, but that a paper logbook would still need to be submitted. A member asked if there would be a period of time where paper and electronic logbooks would be submitted simultaneously. SEFSC indicated that concurrent submissions would likely be required initially but that, at some point, only electronic submissions would be accepted. The RFAP reached a consensus that transition to electronic submissions would be beneficial for coastal commercial program participants.

Motion: The Reef Fish Advisory Panel recommends that the Commercial Coastal Electronic Logbook Program be implemented as soon as possible. *Motion carried unanimously*

1.9.1.5 Gulf Coastal Migratory Pelagics

The Gulf of Mexico Coastal Migratory Pelagics Advisory Panel (CMPAP) met in Tampa, Florida on December 1, 2022. Below is an excerpt from the CMPAP's report pertaining to this amendment:

SEFSC staff provided an overview of reporting modifications and demonstrated the electronic reporting platform. Electronic reporting would allow for selections of "favorites", automated error identification, and quicker transmission than the current paper forms.

An CMPAP member inquired why trip start and end time data fields were being added. SEFSC staff replied that the extra level of precision was necessary to differentiate situations where two commercial trips may be taken within a calendar day. The Council representative asked if the proposed electronic reporting for the commercial coastal logbook program would be linked to the Individual Fishing Quota (IFQ) reporting platform and SEFSC staff indicated they were not. An CMPAP member clarified that commercial reporting requirements in several data collection programs are in place to ensure that IFQ data is monitored accurately and timely. Another CMPAP member asked about security of the submitted data. SEFSC staff replied that, under the Magnuson-Stevens Act, collected data are confidential and can only be shared between fisheries scientists who have signed non-disclosure agreements. The CMPAP agreed that transition to an electronic reporting platform would be beneficial for the program.

Motion: To recommend that the electronic reporting of the coastal logbook program be implemented post haste.

1.9.1.6 Gulf Data Collection

The Gulf Council's Data Collection Advisory Panel (DCAP) met on February 13, 2022. The DCAP asked if logbook reports could be printed or e-mail after submission. SEFSC staff indicated that the web-based version may have that capability, and noted that a screen shot could be taken as an electronic record. Another DCAP member inquired whether e-Trips was the only software currently approved as an electronic platform. SEFSC responded that it was, but noted that once technical specifications were generated, more vendors would have the ability to participate in the program. The DCAP asked about the implementation timeline and SEFSC indicated that a gradual roll out would be conducted to help program participants transition to electronic reporting. The DCAP was amenable to the proposed program changes and discussed the merits of in-person public hearings instead of exclusively virtual hearings and a mail out. Ultimately, the group decided that staff should determine an appropriate outreach plan for the document.

Motion: The Data Collection Advisory Panel approves the transition from paper logbooks to electronic logbooks. In addition, direct Council staff to work with industry groups to determine what outreach and education would be appropriate to the commercial participants.

The DCAP recognized that no major programmatic changes would occur with the transition to electronic reporting. However, the AP also acknowledged that some level of training would be

advantageous to help program participants. The AP suggested some training be conducted prior to the implementation of any program changes.

Moton: The Data Collection Advisory Panel recommends Gulf Council and NOAA staff work with ACCSP, and other vendors to create a method for industry to beta test the Commercial Coastal Logbook Program prior to the implementation of the Commercial Coastal Logbook Program Amendment.

1.9.2 Public Comments and Recommendations

1.9.2.1 South Atlantic

(to be completed)

1.9.2.2 Gulf of Mexico

(to be completed)

1.9.3 Councils' Conclusions

(to be completed)

Chapter 2. Regulatory Impact Review

2.1 Introduction making the title longer as a test

2.1 Introduction

The National Marine Fisheries Service (NMFS) requires a Regulatory Impact Review (RIR) for all regulatory actions that are of public interest to satisfy the obligations under Executive Order (E.O.) 12866, as amended. In conjunction with the analysis of direct and indirect effects in the "Environmental Consequences" section of this Amendment, the RIR: 1) provides a comprehensive review of the level and incidence of impacts associated with a regulatory action; 2) provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives which could be used to solve the problem; and 3) ensures that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost effective way. The RIR also serves as the basis for determining whether any proposed regulations are a "significant regulatory action" under certain criteria provided in Executive Order (E.O.) 12866. In addition, the RIR provides some information that may be used in conducting an analysis of the effects on small entities pursuant to the Regulatory Flexibility Act (RFA). This RIR analyzes the effects this regulatory action would be expected to have on the commercial sectors of the South Atlantic snapper grouper, Atlantic dolphin wahoo, Gulf of Mexico and Atlantic coastal migratory pelagics, and Gulf of Mexico reef fish fisheries.

2.2 Problems and Objectives

The problems and objectives for the proposed actions are presented in Section 1.4 of this amendment and are incorporated herein by reference.

2.3 Description of Fisheries

A description of the commercial fisheries for South Atlantic snapper grouper, Atlantic dolphin wahoo, Gulf of Mexico and Atlantic coastal migratory pelagics, and Gulf of Mexico reef fish is provided in Section 1.6 of this amendment and is incorporated herein by reference.

2.4 Effects of Management Measures

Currently under the status quo, commercial fishermen participating in the South Atlantic snapper grouper, Atlantic dolphin wahoo, Gulf of Mexico and Atlantic coastal migratory pelagics, and Gulf of Mexico reef fish fisheries are required to submit logbooks in paper form. In addition to the time that is necessary to fill out these logbooks, commercial fishermen must also take time to prepare and mail the logbooks to the Southeast Fisheries Science Center (SEFSC). In doing so, postage fees are required, there is a several day to several week delay in the logbook data being processed by the SEFSC, and there is the opportunity for the logbook entries to get lost in the process. Additionally, there is an administrative cost to processing paper logbook data to an electronic form so it can be more widely used in fisheries science and management.

To submit logbooks electronically, commercial fishermen would need access to an internet equipped device such as a laptop, tablet, or smartphone. While this would result in an additional cost for those that do not already have such a device or internet service, it is assumed that most commercial participants have existing access that would allow them to submit logbooks electronically. As such, the implementation of an electronic logbook is not expected to result in a notable increase in costs for commercial fishermen.

The switch from paper to electronic commercial logbooks, along with proposed modifications to the commercial logbook forms, is expected to result in positive economic effects for commercial fishermen and the SEFSC. The transition from paper to electronic logbooks is expected to streamline the logbook submission process by progressively eliminating the mailing, handling, and data entry of logbooks received.

Commercial fishermen will no longer have to fill out and mail paper logbooks; thereby resulting in time and postage savings. It is expected that filling out electronic logbooks would take less time than completing and mailing paper forms. Given the diversity in commercial logbook forms and the absence of average estimates for the amount of time needed to fill out each type of logbook, the average time savings expected to result from the transition to electronic form submissions cannot be quantified. Should these estimates become available in the future, the value of the expected time savings per logbook would correspond to the opportunity costs of time saved. Because the electronic submission of commercial logbooks will provide an instantaneous (or quasi-instantaneous) confirmation of receipt, commercial fishermen will benefit from the assurance that their logbooks were received and would no longer be subject to administrative challenges and adverse effects that may result from misplaced (or lost in the mail) logbooks and from requests for clarification or corrections through logbook send-backs.

Although fishermen's adoption of electronic commercial logbook is expected to be gradual, the switch from paper-based to electronic logbooks is expected to eliminate handling and data entry steps in the long term. The full implementation of electronic submission may lower the SEFSC's logbook processing burden as well as costs and could result in a timelier availability of logbook data. In addition, the accuracy of the data collected may improve because some fishermen's errors, e.g., erroneous entries that would not be possible in the electronic forms, incomplete logbooks, and data entry errors will be eliminated. Additional benefits of the transition to electronic logbook would be expected to result from the voluntary reporting of discards because it would no longer require a separate form.

In summary, with the exception of the economic benefits expected from savings in postage fees, components of the aggregate economic effects expected to result from a transition from paper-based to electronic-based commercial logbooks in the Southeast region are not quantifiable at this time. However, aggregate economic effects that would result from switching to electronic logbooks are expected to be positive and net economic benefits would increase due to anticipated time saved by commercial fishermen, decreasing need for (and elimination in the long term) data entry of paper-based logbook, and postage fees savings.

2.5 Public Costs of Regulations

The preparation, implementation, enforcement, and monitoring of this or any federal action involves the expenditure of public and private resources, which can be expressed as costs associated with the regulations. Costs to the private sector are discussed in the effects of management measures. Estimated public costs associated with this action are in 2021 dollars and include:

South Atlantic Council costs of document preparation, meetings, public hearings, and information dissemination \$X

NMFS administrative costs of document preparation, meetings, and review \$X

TOTAL \$X

The estimate provided above does not include any law enforcement costs. Any enforcement duties associated with this action would be expected to be covered under routine enforcement costs rather than an expenditure of new funds. The estimated Council and NMFS administrative costs directly attributable to this amendment and the rulemaking process would be incurred prior to the effective date of the final rule implementing this amendment.

2.6 Net Benefits of Regulatory Action

It is important to specify the time period being considered when evaluating benefits and costs. According to OMB's FAQs regarding Circular A-4,²³ "When choosing the appropriate time horizon for estimating costs and benefits, agencies should consider how long the regulation being analyzed is likely to have resulting effects. The time horizon begins when the regulatory action is implemented and ends when those effects are expected to cease. Ideally, analysis should include all future costs and benefits. Here as elsewhere, however, a 'rule of reason' is appropriate, and the agency should consider for how long it can reasonably predict the future and limit its analysis to this time period. Thus, if a regulation has no predetermined sunset provision, the agency will need to choose the endpoint of its analysis on the basis of a judgment about the foreseeable future."

For current purposes, the reasonably "foreseeable future" is considered to be the next 10 years. There are two primary reasons for considering the next 10 years the appropriate time period for evaluating the benefits and costs of this regulatory action rather than a longer (or shorter) time period. First, this regulatory action does not include a predetermined sunset provision. Second, based on the history of management in many fisheries in the South Atlantic and Gulf of Mexico, regulations such as those considered in this amendment are often revisited within 10 years or so.

The analyses of the changes in economic benefits indicates an increase of \$X in net economic benefits to the commercial sector in the first year of implementation. In discounted terms and over a 10-year time period using the analyses provided in this amendment, the total net present value of the change in net economic benefits is \$X using a 7% discount rate and \$X using a 3% discount rate (2021 \$).

²³ See p. 4 at https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/OMB/circulars/a004/a-4_FAQ.pdf

The estimated non-discounted public costs resulting from the regulation are \$\mathbb{X}\$ (2021 \$). The costs resulting from the amendment and the associated rulemaking process should not be discounted as they will be incurred prior to the effective date of the final rule. Based on the quantified economic effects, this regulatory action is expected to increase net economic benefits to the Nation. Over a 10-year time period, the quantified change in net economic benefits is expected to be \$\mathbb{X}\$ using a 7% discount rate and \$\mathbb{X}\$ using a 3% discount rate (2021 \$). On an annualized basis over a 10-year time period, the total net present value of the change in net economic benefits is \$\mathbb{X}\$ using a 7% discount rate and \$\mathbb{X}\$ using a 3% discount rate (2021 \$).

2.7 Determination of Significant Regulatory Action

Pursuant to E.O. 12866, a regulation is considered a "significant regulatory action" if it is likely to result in: 1) an annual effect of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; 2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; 3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights or obligations of recipients thereof; or 4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this executive order. Based on the information provided above, these actions have been determined to not be economically significant for the purposes of E.O. 12866. In absolute terms, the expected total costs and benefits of this amendment are \$X by the first year of implementation (2021 \$). This is also the year of maximum cost and benefits in absolute terms.

Chapter 3. Regulatory Flexibility Act Analysis

3.1 Introduction

The purpose of the Regulatory Flexibility Act (RFA) is to establish a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure such proposals are given serious consideration. The RFA does not contain any decision criteria; instead the purpose of the RFA is to inform the agency, as well as the public, of the expected economic effects of various alternatives contained in the regulatory action and to ensure the agency considers alternatives that minimize the expected economic effects on small entities while meeting the goals and objectives of the applicable statutes (e.g., the Magnuson Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act)).

With certain exceptions, the RFA requires agencies to conduct an initial regulatory flexibility analysis (IRFA) for each proposed rule. The IRFA is designed to assess the effects various regulatory alternatives would have on small entities, including small businesses, and to determine ways to minimize those effects. An IRFA is primarily conducted to determine whether the proposed regulatory action would have a significant economic effect on a substantial number of small entities. In addition to analyses conducted for the Regulatory Impact Review (RIR), the IRFA provides: 1) a description of the reasons why the action is being considered by the agency; 2) a succinct statement of the objectives of, and legal basis for, the proposed regulatory action; 3) a description and, where feasible, an estimate of the number of small entities to which the proposed regulatory action will apply; 4) a description of the projected reporting, record-keeping, and other compliance requirements of the proposed regulatory action, including an estimate of the classes of small entities that will be subject to the requirements of the report or record; 5) an identification, to the extent practicable, of all relevant federal rules, which may duplicate, overlap, or conflict with the proposed rule; and 6) a description of any significant alternatives to the proposed regulatory action which accomplish the stated objectives of applicable statutes and would minimize any significant economic effects of the proposed regulatory action on small entities. If there is expected to be no significant impact on a substantial number of small entities, an IRFA is not required and a threshold analysis is sufficient.

3.2 Statement of the need for, objectives of, and legal basis for the rule

The coastal commercial logbook program collects information on fishing effort and catch of federally managed species. Data collection programs, such as the coastal logbook program, provide essential information required to assess stock status and monitor harvest. The commercial coastal logbook program records the commercial fishing and non-fishing activity of fishermen via logbooks submitted for each trip or each month they did not make commercial fishing trips. More information about the need for and objectives of these actions can be found in Chapter 1 of this document. The Magnuson-Stevens Act provides the legal basis for this proposed rule.

3.3 Description and estimate of the number of small entities to which the proposed action would apply

The proposed rule would directly apply to businesses that own or operate commercial fishing vessels that are permitted to fish in federal waters for Gulf reef fish, king mackerel (Gulf or Atlantic), Spanish mackerel (Gulf or Atlantic), Atlantic dolphin wahoo, and South Atlantic snapper grouper. A permit must be valid to land fish that apply to the permit. See Table 3.3.1 below for the number of valid commercial permits.

Table. 3.3.1. Average annual number of valid commercial permits by region, 2017 – 2020.

	Atlantic Dolphin Wahoo ¹	King Mackerel ²	Spanish Mackerel ¹	Gulf Reef Fish ²	Atlantic Snapper Grouper ²
Gulf				844	
South Atlantic	2,738				654
Combined		1,437	2,326		

^{1.} Open access permit.

Source: NMFS SERO Access Permit Counts database.

A permit holder must comply with record keeping and reporting requirements whether a permitted vessel is actively fishing or not. If a permitted vessel is not actively fishing, the vessel's owner or operator must submit a No-Fish Report for each month it is not fishing. A No-Fish Report can be submitted either electronically through the Southeast Fisheries Electronic Reporting System (FERS) website 5 or by mail, and cannot be faxed or emailed.

From 2017 through 2020, an annual average of from 114 to 2,200 permitted vessels were not actively fishing for species that they were permitted to harvest in the EEZ (Table 3.3.2). However, vessels tend to hold multiple permits and, although a vessel may be inactive under one permit, it can be actively fishing under another permit. Consequently, the sum of inactive vessels across the fisheries or species below exceeds the actual number of vessels that are not

Limited access permit.

²⁴ It follows that the maximum number of No-Fish Reports a vessel owner or operator can submit is 12 during any calendar year

²⁵ FERS allows southeast commercially permitted vessels to register and submit "No Fishing" reports online.

fishing and whose owners or operators must submit No-Fish Reports. Note that the percentage of inactive permitted vessels is highest for those permitted to harvest dolphin wahoo and Spanish mackerel, which are both open-access permits.

Table. 3.3.2. Average annual number of active and inactive permitted fishing vessels by permit and region, 2017 - 2020.

	Atlantic Dolphin Wahoo	King Mackerel	Spanish Mackerel	Gulf Reef Fish	Atlantic Snapper Grouper
Active Gulf				532	
Inactive Gulf				312	
Total Gulf				844	
Active SA	538				540
Inactive SA	2,200				114
Total SA	2,738				654
Active Combined		873	533		
Inactive Combined		564	1,793		
Total Combined		1,437	2,326		

Source: NMFS SERO Access Permit Counts database for total permits and SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) for active permits.

Currently, the owner or operator of an active fishing vessel must maintain a fishing record of a trip on a form available from the SRD. These completed fishing records must be submitted to the Southeast Fisheries Science Center (SEFSC) Science and Research Director (SRD) postmarked no later than 7 days after the end of each fishing trip. Information to be reported is indicated on the form and its accompanying instructions.

An average annual total of 666 federally permitted vessels reported making 8,037 trips that harvested reef fish, king mackerel and Spanish mackerel from the Gulf of Mexico from 2017 through 2021 (Table 2.2.1.1). The average of those 666 federally permitted vessels reported 12 annual trips with landings of reef fish, king mackerel and/or Spanish mackerel and average annual revenue from all landings was \$94,001 (Table 3.3.3). During that same 5-year period, an annual average of 1,030 federally permitted vessels reported making 22,912 trips that harvested dolphin, wahoo, king mackerel, Spanish mackerel and species within the Snapper Grouper (SG) Fishery from the South Atlantic (Table 2.2.1.2). The average of those 1,030 federally permitted vessels reported 22 annual trips with landings of dolphin, wahoo, king mackerel, Spanish mackerel and/or snapper grouper, and average annual revenue from all landings was \$25,498 (Table 3.3.3).

Table. 3.3.3. Average annual revenue (2021 dollars) from all landings for directly affected commercial vessels by region, 2017 – 2021.

Year	Average Gulf Vessel	Average South Atlantic Vessel
2017	\$88,800	\$29,313
2018	\$85,684	\$25,258
2019	\$97,258	\$25,533
2020	\$91,958	\$24,000
2021	\$106,306	\$23,386
Average	\$94,001	\$25,498

SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

For RFA purposes, NMFS has established a small business size standard for businesses, including their affiliates, whose primary industry is commercial fishing (50 CFR 200.2). A business primarily involved in the commercial fishing industry (North American Industrial Classification Code (NAICS) code 11411) is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates) and its combined annual receipts are no more than \$11 million for all of its affiliated operations worldwide. Average annual revenue from all landings for the 666 Gulf vessels and 1,030 South Atlantic are less than \$11 million. If each vessel represents a unique commercial fishing business, then both the average Gulf vessel and average South Atlantic vessel directly affected by this proposed rule are operated by small businesses. However, there is considerable variation in average annual revenue across the four fisheries as described in Section 2.2. For example, the average Gulf reef fish vessel had annual revenue from all landings of \$121,609, while the average South Atlantic king mackerel vessel had annual total revenue of \$29,138 (Table 3.3.4). The vessel with the largest annual revenue had revenue from all landings of approximately \$3 million. Therefore, all of the businesses that are directly affected by the proposed rule are small.

Table. 3.3.4. Average annual revenue per vessel from all landings for directly affected commercial vessels by region and fishery, 2017 – 2021.

	ADW	Reef Fish	Snapper Grouper	King Mackerel	Spanish Mackerel
Gulf		\$121,609		\$84,943	\$31,483
South Atlantic	\$37,231		\$41,626	\$29,138	\$66,220

SEFSC Socioeconomic Panel (Sep22) accessed by the SEFSC Economic Query System (November 2022) and BEA GDP deflator (issued October 27, 2022).

3.4 Description of the projected reporting, record-keeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for the preparation of the report or records

This proposed regulatory action would change existing reporting requirements for federally permitted commercial fishing vessels that operate in the Gulf Reef Fish, Coastal Migratory Pelagic, Atlantic Dolphin Wahoo and Atlantic Snapper Grouper Fisheries. Currently, Gulf and South Atlantic commercial permit holders are sent a carbonless carbon paper logbook of approximately 100 pages containing 3 sections (instructions, fishing trip reporting forms, and no monthly activity reporting forms) along with postage-paid return envelopes. Permit holders are instructed to report trip level fishing activity within 7 days after finishing a trip or after a month without activity and mail the federal copy of the form to the SEFSC. Permit holders are instructed to maintain the carbon copy of the form for their personal records. However, those with inactive vessels can choose to submit their No-Fishing reports electronically as stated earlier.

This proposed action would move the paper-based commercial logbooks under the Coastal Logbook Program for the aforementioned four fisheries to an electronic platform. To directly integrate the information currently collected by the paper logbook forms to the existing Atlantic Coastal Cooperative Statistics Program (ACCSP) database, slight modifications to the program data fields would be required. Overall, five required data fields would be added, five data fields would be removed, and three would be modified.²⁶

3.5 Identification of all relevant federal rules, which may duplicate, overlap or conflict with the proposed rule

A commercial fishing vessel may operate in multiple regions and fisheries, and therefore may have multiple federal permits. Holders of commercial reef fish, snapper-grouper, dolphin wahoo, king mackerel and Spanish mackerel permits may have overlapping reporting requirements for other fisheries that they participate in. For example, some South Atlantic commercial permit holders also participate in fisheries in the mid-Atlantic and/or Northeast.

The Gulf Council manages the commercial harvest of 14 reef fish species within an Individual Fishing Quota Program (IFQ). The IFQ program operates through a separate reporting system via dealer reports; and therefore, is independent of changes to the coastal logbook program. Those IFQ permit holders will continue to report the required information through the IFQ system and they will report their commercial catch through the electronic form. Reporting requirements under the IFQ program will remain unchanged by this proposed rule.

²⁶ See Section 1.2.1 for more information.

Since November 10, 2021, all commercial vessels with federal permits issued by the Greater Atlantic Regional Fisheries Office (GARFO) for species managed by the Mid-Atlantic or New England Council to submit vessel trip reports (VTRs) electronically as eVTRs within 48 hours of the end of a trip (unless required sooner as with some sector allocations).

3.6 Significance of economic effects on small entities

Substantial number criterion

If implemented, this proposed regulatory action would affect all of the small businesses that own or operate fishing vessels that actively participate in the aforementioned fisheries. As stated previously, 666 Gulf permitted vessels would, on average, make 12 trips each annually; and 1,037 South Atlantic permitted vessels would, on average, make 22 trips each annually. This action is not expected to affect either the number of active vessels or the number of their fishing trips.

Significant economic effects

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

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

All entities directly regulated by this regulatory action have been determined to be small entities. Thus, the issue of disproportionality does not arise in the present case.

<u>Profitability:</u> Do the proposed regulations significantly reduce profits for a substantial number of small entities?

The switch from requiring completion and submission of paper forms to electronic completion and submission is not expected to have a significant impact on small businesses. Instead, it is expected to reduce duplication or overlap of existing record keeping and reporting requirements. Because the proposed electronic submission requirements can be accomplished at low/no cost, no adverse impacts are expected from the proposed action. Moreover, the conversion to electronic reporting for the commercial fishing sector is expected to improve data efficiency and accuracy, which would benefit the small businesses in the long run. Therefore, this action would not have a significant economic impact on a substantial number of small businesses.

Chapter 4. References

(to be updated)

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Appendix A. Fishery Impact Statement (FIS)

Appendix B. Current Paper Logbook Instructions and Form

UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION. NATIONAL MARINE FISHERIES SERVICE

2021 SOUTHEAST COASTAL FISHERIES TRIP REPORT

A Vessel Trip Report
for
GULF OF MEXICO REEF FISH
SOUTH ATLANTIC SNAPPER-GROUPER
KING AND SPANISH MACKEREL
SHARK
ATLANTIC DOLPHIN/WAHOO

YOU ARE ADVISED THAT DISCLOSURE OF THE INFORMATION REQUESTED IN THIS REPORT IS MANDATORY FOR THE PURPOSE OF MANAGING THE FISHERIES IN ACCORDANCE WITH THE FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976 (16 U.S.C. 1801 ET. SEQ.). FAILURE TO REPORT OR FILING A FALSE REPORT MAY RESULT IN CIVIL OR CRIMINAL SANCTIONS. SEE, E.G., 16 U.S.C. 1857, 1858, 1859; 18 U.S.C. 1001.

NAME OF VESSEL			
PERMIT NUMBER			
NOAA FORM 88-191	OMB Control NO. 0648-0016 (Revised 05-20)	Expiration Date 11/3	30/2022

2021 SOUTHEAST COASTAL FISHERIES TRIP REPORTING INSTRUCTIONS

Please read instructions carefully.

These forms are to be used to report all fishing activity related to Gulf of Mexico Reef Fish, South Atlantic Snapper-Grouper, King and Spanish Mackerel, Shark and Atlantic Dolphin/Wahoo permits. Under current regulations, ALL fishermen are responsible for maintaining a fishing logbook and submitting a TRIP REPORT FORM for EVERY commercial fishing trip related to the permits listed above. A commercial trip is defined as a trip for profit with NO paying customers onboard. Any commercial trip that targets a federally managed species listed under any of the permit types listed above must be reported, even if no landings were made. For trip reports submitted, please report all landed species regardless of management status. Please do not submit more than one report per trip, even if landings were sold to multiple dealers. If no such trip is taken during a calendar month, you are responsible for submitting a NO FISHING REPORT FORM (forms located at the back of the logbook).

All Trip Report Forms must be submitted no later than seven (7) days after the completion of each trip (the date of landing). No Fishing Report Forms must be submitted seven (7) days after the end of a month for which you are reporting no fishing activity. Completed forms are to be mailed to (in the envelopes provided):

National Marine Fisheries Service Logbook Program P.O. Box 491500 Key Biscayne, Florida 33149-9916

When additional forms or envelopes are needed, include a note with your Trip or No Fishing report submission. Include your name, address and your vessel identification number. If you have any questions, please contact the Logbook Program at (305) 361-4581, or go to our website at https://grunt.sefsc.noaa.gov/vrsr/

Please print all requested information clearly. A form with incomplete or unclear information cannot be entered into the database and will be returned. This missing form may cause you to be out of compliance with federal regulations and your permit renewal denied.

The following instructions are for the LOGBOOK TRIP REPORT FORM:

You must fill out a separate form for EACH fishing trip made. A trip is the period of time during which 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. The trip begins when the vessel leaves port to go fishing and ends when the vessel returns to port. A commercial trip is defined as a trip for profit with NO paying customers on board. DO NOT report multiple trips on one form. DO NOT submit more than one form for each fishing trip. All information for one fishing trip should be entered on one form. There are four sections on each form.

VESSEL SECTION (at the top) - Fill in each information block as described below:

Signature - The person responsible for the completeness and accuracy must sign the form to verify all information.

 $\boldsymbol{Vessel\ Name}$ - Enter the vessel name as it appears on the permit.

Vessel ID Number - Enter the official US Coast Guard documentation number or state registration number for the vessel as it appears on the permit.

Operator Name - Enter the name of the person responsible for the operation of the vessel during the trip. Operator Number (optional) — For shark permit holders. Please put the NHID Number of the operator for the trip. The NHID Number is a unique identifier ("New Hampshire Identifier") assigned by NMFS to each operator who has attended the "Handling and Release Workshop." For permit holders of other fisheries please use a unique number such as your saltwater products number to help establish a catch history that can be linked to the operator instead of the vessel.

Phone Number - Include a phone number where you can be reached.

Trip Start Date - Enter the numerical date (month, day and year) when the vessel departed for the trip.

Trip Unload Date - Enter the numerical date (month, day and year) when the catch for a single trip was unloaded at a dealer. If the catch was unloaded at more than one dealer, enter the date when the catch was unloaded at the **first** dealer.

Days at Sea - Enter the number of calendar days spent away from port. Include traveling time to and from fishing area. Count any fraction of a day as a whole day. If you left in the morning and returned any time before midnight, you would enter '1.'

Number of Crew - Enter the total number of people that fished during the trip. The captain is to be included in the number of crew.

County or Parish *and* **State** (of **Unloading**) - Enter the name of the county and the state where the boat returned to the dock after the trip. Do not use code numbers.

Dealer Name - Enter the complete name of the seafood dealer to whom you sold your catch. If the catch was unloaded at more than one dealer, enter the name of either the dealer where the **majority** of the catch was sold, or in the case of equal sales, the first dealer where the catch was sold and check the applicable box below. If you kept all of the catch, write in "PERSONAL USE." If there was no catch, please write in "NO CATCH."

Dealer Number - Enter the Federal dealer number issued by the NOAA Fisheries Southeast Regional Office. Please do not use state dealer codes.

State Trip Ticket Number - Please include the trip ticket number from your state sales receipt. Check box for multiple dealers - If the landings were sold to more than one dealer, or if the landings were sold to one dealer and a portion of the landings were kept for personal use, please check this box.

NOTE: No catch trips - please complete the top four sections (vessel, date, county, and gear) and send in a logbook for trips with fishing effort but no landings by writing "NO CATCH" in the dealer name box. Reports are 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.

GEAR SECTION - Check the box in the header for each type of gear used on the trip: traps, longline, trolling, line, hook & line/bandit, buoy, diving or other gear. Fill in ALL the information required in the block under each gear type you checked.

Traps - This category includes fish traps or fish pots. This category does not include lobster or crab traps.

Check one box for trap type.

Hauls - Enter the total number of hauls made. For example, if you used 10 traps and pulled each trap 3 times, enter 30 trap hauls. Include hauls with no catch. # Traps Used - Enter the number of traps that were used.

Trap Soak Time - Enter the average time in HOURS that each trap was in the water for each set. For example, if you used 10 traps and pulled each trap 3 times every 4 hours, then Trap soak time would be 4 hours.

Total Soak Time (optional) - Enter the total time in HOURS that the traps were in the water for the trip. For example, if you hauled 30 traps and each trap was in the water for 4 hours, then Total soak time would be 120 hours.

Mesh - Mesh size refers to the size of the openings in the material that covers the trap. Enter the mesh size in inches (a mesh size of 1 in. x 2 in. should be entered as 1x2, a mesh size of $1\frac{1}{2}$ in. x $1\frac{1}{2}$ in. should be entered as 1.5x1.5).

In the catch section, enter a ${\bf T}$ in the column labeled 'Gear' next to each species caught primarily with trap gear.

Longline - This gear refers to mid-water or bottom longline.

Check one box for longline type.

Sets - Enter the number of times this gear was set for the entire trip.
of Hooks per Line - Enter the average number of hooks used per line.
Set Soak Time (hrs) - Enter the average time in hours that the hooks were in the water. For example, if you made 4 sets and each set was 2 hours, then the set soak time would be 2 hours. If uncertain of what the average set time might be, use the time between the last hook set to the last hook retrieved.

le	Traps (T ■ Fish) Other
	Total # Trap Hauls	30
	# Traps Used	10
	Trap Soak Time (hrs)	4
	Total Soak Time (hrs)	120
	Mesh: 1.5 X 1.5	\square X

Longline Bottom	(L) PLL Other
# Sets	4
# Hooks per Line	800
Set Soak Time (hrs)	2
Total Soak Time (hrs)	8
Length (miles)	5

Total Soak Time (optional) - Enter the total time in hours that this gear was used. For example, if you made 4 sets and each set was 2 hours, then total time fished would be 8 hours.

Length (miles) - Enter the average length in miles of the line used. In the catch section, enter $\bf L$ in the column labeled 'Gear' next to each species caught primarily with longline gear.

Gill Net - This gear refers to all gill nets (Strike, Drift or Anchor)

Check one box for gillnet type. Two or more gillnet types can be checked if 2 or more sets were made.

Sets - Enter the number of times that this gear was set.

Length (yards) - Enter the average length of the net in yards.

Depth (yards) - Enter the average depth of the net in yards.

Set Soak Time (hrs) - Enter the average set time in hours that this gear was used. For example, if you made 4 sets and each set was 2 hours, then Set Soak Time would be 2 hours. For strike and run-around nets with soak times less then 1 hour please report 1.

Mesh - Enter the size of the net opening in **inches**. The size should be measured as the distance between two diagonal knots when the mesh is stretched fully closed

In the catch section, enter $\mathbf{G}\mathbf{N}$ in the column labeled 'Gear' next to each species caught primarily with gill net gear.

_	
	Drift □Anchor Strike □Other
# Sets	2
Length (yards)	400
Depth (yards)	6
Set Soak Time (hrs)	2
Mesh:	25
	5.5

Hook & Line - This gear includes all hook and lines (Handlines, Electric, Trolling, Buoy).

Lines/Buoys - Enter the number of lines or the number of buoy gear units/configurations used.

Hooks per Line/Buoy - Enter the number of hooks per line, or hooks per buoy gear unit, used for the majority of time fished. Do not provide multiple values. Total Hrs Fished - Enter the total time in hours that the gear was in the water fishing.

Gears 'H' and 'E' should be recorded for drift and anchored fishing. 'TR' should be recorded for fishing when boat is under power. 'B' should be recorded for fishing with buoy gear.

Hook Line	I (H) ∣Hand	□(E) Bandit	(TR Trolling)□(B) Buoy
# Lines	3			
# Hooks per Line	2			
Total Hrs Fished	6			

In the catch section, enter an 'H' in the column labeled 'Gear' next to each species caught primarily with Rod & Reel or Handlines. Enter an 'E' in the column labeled 'Gear' next to each species caught primarily with Electric or Bandit reels. Enter a 'TR' in the column labeled 'Gear' next to each species caught primarily with hook and line while the boat was moving under power (including Greenstick). Enter an 'B' in the column labeled 'Gear' next to each species caught primarily with Buoy gear.

Diving - This gear includes spearguns, Hawaiian slings, powerheads, bangsticks and hand nets caught while diving. Check S for gear without explosive devices (i.e.,

spearguns, Hawaiian slings, hand nets or by hand). Check **P** for gear with explosive devices (i.e., powerheads or bangsticks).

of Divers - Enter the total number of divers that were in the water.

Total Hrs Fished - Enter the total time in hours that diver(s) were in the water.

In the catch section, enter an S or P in the column labeled 'Gear' next to each species taken primarily by divers.

Other Gear - This gear includes cast nets, gigs, lobster pots, stone crab pots and any other type of gear. Please do not record Electric Reels, Bandits, or Rod & Reels here (see instructions above).

Type of Gear - Enter the name of the gear.

Hrs Fished - Enter the total time in hours this gear was used. In the catch section, enter an **O** in the column labeled 'Gear' next to each species caught primarily with other gear.

Divers s	. /	(P) Power
# of Divers	2	
Total Hrs Fished	5	

Other Gear (O)						
Туре	cast net					
Total F Fished	Irs 6					

NOTE: **SE VTR** # - This number can be provided to your dealer to be included on your state trip ticket and your discard logbook. Do not change, modify or create this number.

CATCH SECTION - Catch is defined as the pounds of fish **by species** that were caught and kept. Kept fish are either sold or kept for personal use so please record everything you bring back. Space is provided at the bottom of the log for entering species not listed.

You must enter a weight, gear, area and depth for each species reported.

Gutted Column - Enter the number of pounds caught and kept in gutted form of each species. **Whole Column** - Enter the number of pounds caught and kept in whole form of each species. Do not enter a number in both gutted and whole column for a species unless you actually kept fish in both forms.

Do not include fractions of pounds.

Do not enter the number of fish, only enter the weight in pounds.

Gear Column - Enter the gear code (T, L, GN, H, E, TR, B, S, P or O) for the type of gear that was primarily used to catch each species. Gear definitions and codes are in the parentheses next to the type of gear in the GEAR SECTION.

Only report one gear code for each species caught.

Area Column - Enter the numeric code for the fishing area where the majority of your catch of each species was made. Maps with numeric codes and associated latitudes and longitudes are on page 5 of these instructions.

Do not use state codes or LORAN coordinates.

Depth Column – Enter the bottom depth in **feet** where the majority of each species was caught. Do not record depth in fathoms or meters.

TRIP EXPENSE SECTION - Fill in the information blocks on each log as described below. NOTE: This section is only mandatory if you received separate notification that your vessel was selected to report economic data in 2021.

Owner Operated? - Check YES if the vessel's owner worked as captain or crew member on this trip. Check NO if the owner was not on board.

Gallons of Fuel Used on This Trip - Enter gallons of fuel actually used during this trip.

Price per Gallon - Enter price per gallon paid for fuel when you last refueled.

Bait Expense - Enter total cost of bait (frozen, dead, live, and chum) purchased for this trip. Enter zero if there was no monetary expenditure for bait.

Ice Expense - Enter total cost of ice purchased for this trip. Enter zero if there was no monetary expenditure for ice.

Grocery Expense - Enter total cost of groceries purchased for this trip. Enter zero if there was no monetary expenditure for groceries.

Misc. Trip Expenses - Enter the sum of other trip-related expenses, such as oil and other lubricants, frequently purchased tackle and supplies, gas for dive tanks, packing fees and other costs that you usually incur each trip. Please do not include costs that may occur infrequently during the year, such as lost anchors and chains, lost tackle or gear, new gear purchases, major repairs to hull or engine and so forth. Enter zero if there were no trip-related monetary expenditures other than for fuel, bait, ice, groceries, IFQ allocation, and/or payments to hired crew and hired captain.

IFQ Allocation Purchased for This Trip - Enter monetary expenditures for transferred IFQ allocation that you purchased from an IFQ shareholder **for this trip only**. Please do not include the 3% cost recovery fee associated with the IFQ program. Enter zero if there was no monetary expenditure for IFQ allocation related to this trip, such as a) you did not land IFQ species on this trip; b) you used your assigned IFQ allocation on this trip; or c) you received allocation from an IFQ shareholder through barter.

Has the payment for your catch been determined? - Check YES if you know, or can reasonably estimate, the payment you will receive for your catch at the time of submitting the Logbook Trip Report Form for this trip. Check NO if the payment is unknown at this time. Trip Sales (Revenue) - Enter the total trip revenue earned from the sale of your catch, or a good estimate thereof. Provide GROSS sales, do not subtract commissions, cost recovery, or IFQ-related payments.

Expense for HIRED Crew & HIRED Captain - If applicable, enter total monetary payments to HIRED crew and/or HIRED captain for their labor for this trip. **Do <u>not</u>** include any payments made to an *owner-operator* (as compensation for their labor on this trip or otherwise). Similarly,

do not include any fixed salary payments made to an owner-operator. Enter zero if there were no monetary payments to HIRED crew and/or HIRED captains for labor.

The following instructions are for the No Fishing Report Form:

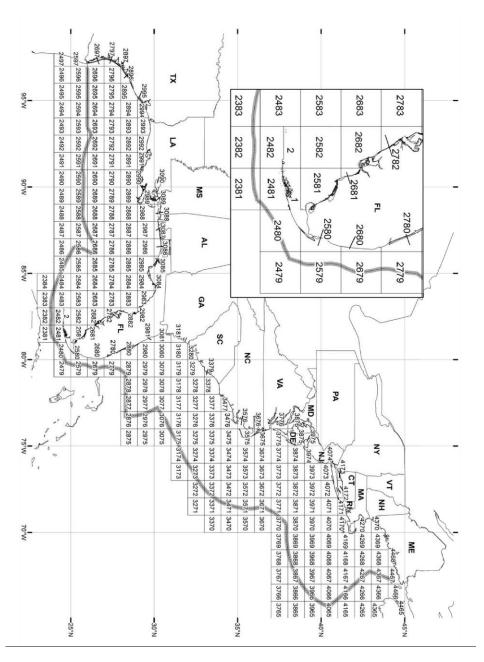
If a permitted vessel did NOT fish during a calendar month, a No Fishing Report Form must be submitted. No Fishing Report Forms are in the BACK of the logbook, behind the Trip Report Forms. Please note the following:

A separate form must be completed for each month no fishing occurred.

Put a check by each permit for the fishery(ies) that no fishing occurred. Do not submit more than one form for each month, multiple fisheries can be reported on one form. Do not check fisheries for which you do NOT have a permit.

Public reporting burden for this collection of information is estimated to average 20 minutes per response for fishing forms and 2 minutes to submit a no-fishing response including the time for reviewing the instructions, searching the existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspects of this burden to Dr. Dave Gloeckner, NOAA Fisheries Service, 75 Virginia Beach Drive, Miami, Florida 33149. This reporting is required under and is authorized under 50 CFR 622.5(a)(1). Information submitted will be treated as confidential in accordance with NOAA Administrative Order 216-100. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection displays a currently valid OMB Control Number. The NMFS requires this information for the conservation and management of marine fishery resources. These data will be used to monitor quotas in this fishery.

Data about prices, trip expenses and labor payments will be used to evaluate the economic effects of proposed regulations in the fishery.



Statistical Grid Map – Grid numbers follow lines of latitude and longitude*. The first two digits in the four digit grid numbers are latitude degrees, and the second two digits are longitude degrees.

^{*}NOTE for Florida Keys Areas – Statistical grids 2481 and 2482 have been split along the border between the Gulf of Mexico and South Atlantic regions. The areas NORTH of the Florida Keys are to be reported as historical areas 1 or 2. Areas SOUTH of the Florida Keys are to be reported as areas 2480, 2481, or 2482.

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MAIL THIS COPY TO NMFS, P.O. BOX 491500, KEY BISCAYNE, FL 33149

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NO FISHING REPORTING FORM		OMB Control No. 0648-0016 Expiration Date 11/30/2022 Version Date 05/20
NMFS Use Only: Opened:	Schedule #	
Vessel ID. NO.	Vessel Name:	
During the entire month of , year	_ 	NOT FISH in the s checked below:

	more than one fishery may be checked DO NOT check any fishery if your vessel does not have a permit for it Use Black Ink Atlantic Highly Migratory Species (swordfish/tunas) South Atlantic Snapper-Grouper Gulf of Mexico Reef Fish O
	<u>Shark</u>
	○ King Mackerel
	O Spanish Mackerel
	Atlantic Dolphin/Wahoo
Signature:	<u>Phone: () -</u>

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