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Coastal Migratory Pelagics Sale and Permit Provisions

Amendment 20A

to the Fishery Management Plan for the Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic

Including Environmental Assessment, Fishery Impact Statement, Regulatory Impact Review, and Regulatory Flexibility Act Analysis

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COASTAL MIGRATORY PELAGICS SALE AND PERMIT PROVISIONS

Final Amendment 20A to the Fishery Management Plan for the Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic Region Including Environmental Assessment, Fishery Impact Statement, Regulatory Impact Review, and Regulatory Flexibility Act Analysis

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ABBREVIATIONS USED IN THIS DOCUMENT

ABC	acceptable biological catch
ACL	annual catch limit
ALS	Accumulative Landing System
AP	Advisory Panel
APA	Administrative Procedures Act
ASMFC	Atlantic States Marine Fisheries Commission
CFDBS	Commercial Fisheries Data Base System
CFL	coastal fisheries logbook
CMP	coastal migratory pelagics
Council	Gulf of Mexico and South Atlantic Fishery Management Councils
CZMA	Coastal Zone Management Act
DQA	Data Quality Act
EA	environmental assessment
EEZ	exclusive economic zone
EFH	essential fish habitat
EIS	environmental impact statement
EJ	environmental justice
ESA	Endangered Species Act
FDA	Food and Drug Administration
FMP	fishery management plan
Gulf	Gulf of Mexico
Gulf Council	Gulf of Mexico Fishery Management Council
GMFMC	Gulf of Mexico Fishery Management Council
HACCP	Hazard Analysis and Critical Control Points
HAPC	habitat area of particular concern
HBS	Headboat Survey
IRFA	initial regulatory flexibility analysis
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MMPA	Marine Mammal Protection Act
mp	million pounds
MRFSS	Marine Recreational Fisheries Survey and Statistics
MRIP	Marine Recreational Information Program
MSY	maximum sustainable yield
NEPA	National Environmental Policy Act
NEFSC	New England Fisheries Science Center
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
nm	nautical mile
OMB	Office of Management and Budget
RA	Regional Administrator
RFA	Regulatory Flexibility Act
RIR	regulatory impact review
RQ	regional quotient
Secretary	Secretary of Commerce

SEDAR	Southeast Data, Assessment and Review
SEFSC	Southeast Fisheries Science Center
SERO	Southeast Regional Office
South Atlantic Council	South Atlantic Fishery Management Council
SSC	Scientific and Statistical Committee
TPWD	Texas Parks and Wildlife Department
USCG	United States Coast Guard
ww	whole weight

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FISHERY IMPACT STATEMENT

The Magnuson-Stevens Fishery Conservation and Management Act requires that a fishery impact statement (FIS) be prepared for all amendments to fishery management plans. The FIS contains an assessment of the likely biological, social, economic, and administrative effects of the conservation and management measures on fishery participants and their communities. It also considers participants in the fisheries conducted in adjacent areas under the authority of another Regional Fishery Management Council, and the safety of human life at sea.

Amendment 20A to the Fishery Management Plan for the Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic (FMP) consists of three management actions jointly developed by the Gulf of Mexico and South Atlantic Fishery Management Councils (Councils). The Councils considered three actions in this amendment, but ultimately determined to only take action on two of them. The first action addresses the sale of bag limit caught king and Spanish mackerel. The second action addresses the elimination of latent federal commercial permits in the king mackerel fishery. The Council decided not to modify or remove latent federal permits for king mackerel at this time. The third action addresses the elimination or modification of the current income requirement for obtaining or renewing a commercial coastal migratory pelagics fishing permit.

Biological Effects

The proposed modifications are anticipated to have little to no effect on the physical and biological environment. The first action may result in a reduction in landings if anglers elect not to harvest fish they can no longer sell. Concurrently, landings may increase in the South Atlantic and Gulf regions as states create and implement state fishing tournament permit systems. Because there is a moratorium on new permits, effort in the king mackerel fishery could be expected to remain at levels similar to present conditions, with little to no change in the current biological impact on the fishery. The third action would continue the practice of allowing existing coastal migratory pelagic fishermen to renew their permits, so long as they submit their permit materials in time. The impacts of the third action are expected to be more economic than biological.

Economic Effects

Based on the limited data available, maximum adverse economic effects that are expected from the first action are estimated at $2.3 million (in 2011 dollars), approximately. Economic effects are not expected to result from the second action because no changes to harvest levels or to other customary uses of king mackerel resources are anticipated. The third action is expected to result in indirect economic benefits by affording Spanish and king mackerel permit applicants more flexibility in determining the income generating activities they might pursue. Specifically, it would allow commercial permit applicants to increase their participation in activities not related to commercial fishing and limit their involvement in commercial fishing without fearing the loss of their permit.

Social Effects

Under the first action, a system would be established in the South Atlantic in which all bag limit sales are prohibited except for tournament sales, which could negatively impact for-hire crew in

the South Atlantic who depend sale of fish caught on for-hire trips to supplement their income. The first action would also set up a system in the Gulf region in which the only permitted bag limit sales are from for-hire trips on dually permitted vessels and from state-permitted tournaments. This would benefit for-hire crew in the Gulf region but will result in conflicting rules for Florida, particularly fishermen in the Florida Keys. Although not all bag limit sales would cease, the first action would be expected to reduce the overall level of recreationally caught fish that are sold and counted towards the commercial annual catch limit, which would help address the equity concerns for the commercial sector. The tournament sales provisions in the first action would be expected to result in broad social benefits associated with how tournaments contribute to local economies and communities. Tournaments are an important part of the recreational sector and can contribute to the local economy through increased tourism and recreational participants, in addition to providing proceeds to charitable organizations that are important to the local communities.

Elimination or restriction of inactive king mackerel commercial permits in the second action would have likely resulted in some significant negative impacts on fishermen, fish houses, and future participants. The lack of a change in management in the second action could have negative impacts on fishermen who actively participate in the king mackerel fishery by not removing potential effort (and competition), particularly if future data indicate that there is decreased stock biomass or some other limitation to resource access to currently active fishermen. Although at this time no information suggests that the stock is unable to support fishing pressure from all vessels with valid king mackerel permits, there has been some concern from fishermen that increased localized effort may be impacting the stock, and could increase if inactive permits become active.

Positive social impacts may be expected from the third action for those engaged in commercial fishing who need to diversify their livelihood strategies due to economic needs, or have been impacted by an event that has affected the resource or access to the resource (such as a hurricane or oil spill). Removing the income requirement can provide commercial fishermen with a measure of flexibility to earn income from other means and still retain the permit.

Safety at Sea

None of the actions in this amendment are anticipated to force vessels to participate in the fishery under adverse weather or ocean conditions. Therefore, no additional safety-at-sea issues would be created.

CHAPTER 1. INTRODUCTION

What Actions Are Being Proposed?

Actions in this amendment will address issues associated with coastal migratory pelagic (CMP) permits, including whether to require commercial permits for sale of fish caught under the bag limit, eliminate some permits, and modify conditions for obtaining and holding permits.

Who Is Proposing the Action?

The Gulf of Mexico (Gulf) and South Atlantic Fishery Management Councils (Councils) are proposing the actions. The Councils develop the amendment to the fishery management plan and approve the regulations that are submitted to the National Marine Fisheries Service (NMFS) who ultimately approve, disapprove, or partially approve the actions in the amendment on behalf of the Secretary of Commerce. NMFS is an agency in the National Oceanic and Atmospheric Administration.

Who's Who?

- Gulf of Mexico and South Atlantic Fishery Management Councils – Determine a range of actions and alternatives, and recommend action to the National Marine Fisheries Service
- National Marine Fisheries Service and Council staffs – Develop alternatives based on guidance from the Councils and analyze the environmental impacts of those alternatives
- Secretary of Commerce – Approves, disapproves, or partially approves the amendment as recommended by the Councils

Why Are The Councils Considering Action?

This amendment was originally Amendment 19 but was re-numbered as Amendment 20A because a generic action in the South Atlantic was not previously considered. Concerns have arisen that recreational sales of bag limit caught fish, which are counted toward commercial quotas, are contributing to early closures of the commercial sector. In addition, potential double counting of these fish could lead to erroneous landings estimates impacting stock assessment results. Thus, this amendment explores alternatives to address bag limit sales. This amendment also explores the effect of increased participation in the commercial sector relative to the capacity of the fishery to determine if the number of permits should be reduced, and if restrictions on the permits should be eased or tightened. Lastly, this amendment examines the utility of the current income requirement, which is designed to award federal commercial fishing permits to active commercial fishermen.

1.1 Background

Currently, fishermen do not need a valid federal commercial permit to sell CMP species (i.e., king mackerel, Spanish mackerel, and cobia) that were harvested in the exclusive economic zone (EEZ) in compliance with the applicable recreational bag limits and other state laws. The

Councils are considering whether to require a valid federal commercial permit to sell king mackerel and Spanish mackerel harvested from the Gulf and Atlantic EEZ. At this time the Councils chose to not consider a commercial permit requirement to sell cobia.

All fish harvested in the EEZ that are sold are considered commercial harvest and count towards a species' commercial quota, whether or not the fisherman has a federal commercial permit. This includes fish caught and sold by commercial fishermen without a valid federal commercial permit, fish caught by recreational fishermen and sold by them or for-hire crew members, or fish donated to dealers during tournaments. The Councils are concerned that landings from trips by recreational fishermen that are sold may contribute significantly to the commercial quota and lead to early closures in the commercial sector. Prohibiting sale of fish caught under the bag limit should improve the accuracy of data by eliminating "double counting" – harvest from a single trip counting towards both the commercial quota and recreational allocation. This practice occurs when the same catches are reported through recreational surveys and commercial trip tickets and logbooks.

NMFS issues king mackerel limited access permits and Spanish mackerel open access permits. These permits are required for commercial fishermen in the Gulf, South Atlantic, or Mid-Atlantic to retain fish in excess of the bag limit for the respective species. The king and Spanish mackerel commercial permits are each valid for fishing in the Gulf, South Atlantic, and Mid-Atlantic regions, respectively. However, both species have separate regulations for two migratory groups, Gulf and Atlantic, which are developed by the respective Councils. Currently, sale of fish caught under the bag limit is allowed for both groups.

In recent years, increased restrictions on other species may have resulted in more individuals fishing for king mackerel. Although the king mackerel commercial permit is limited access, a large number of permits were issued, and some fishermen have continued to renew their permits even if they were not actively fishing for king mackerel. Those individuals may now be re-entering the king mackerel component of the CMP fishery, increasing effort and possibly increasing the likelihood of quota closures. Reducing the number of king mackerel commercial permits based on historical landings is also considered in this amendment.

To obtain or renew a king or Spanish mackerel commercial permit, a minimum amount of the applicant's earned income must be derived from commercial or charter fishing. This requirement is difficult to enforce and has recently been removed as a requirement to obtain or renew a Gulf reef fish permit. No other federal permit in the Southeast Region has an income requirement except the spiny lobster permit, which mirrors requirements by Florida. This amendment considers removing the earned income requirement to obtain or renew a king or Spanish mackerel commercial permit.

1.2 Purpose and Need

Purpose for Action

The purpose of this amendment is to consider modifications to the coastal migratory pelagics permit requirements and restrictions, including modification of the sales provisions and consideration of whether a reduction in effort through permit reductions is needed.

Need for Action

The need for the proposed actions is to achieve optimum yield using the best available data while ensuring the fishery resources are utilized efficiently and promoting safety at sea.

1.3 History of Management

The CMP FMP, with Environmental Impact Statement (EIS), was approved in 1982 and implemented by regulations effective in February 1983. Managed species included king mackerel, Spanish mackerel, and cobia. The CMP FMP treated king and Spanish mackerel as unit stocks in the Atlantic and Gulf. The CMP FMP established allocations for the recreational and commercial sectors harvesting these stocks, and the commercial allocations in the Gulf were divided between net and hook-and-line fishermen. The following is a list of management changes relevant to CMP permits. A full history of the management can be found in Amendment 18 to the CMP FMP (GMFMC/SAFMC 2011), and is incorporated here by reference.

Amendment 1, with EIS, implemented in September 1985, established commercial fishing permits and bag limits for king mackerel.

Amendment 2, with environmental assessment (EA), implemented in July 1987, recognized two migratory groups and established charter/headboat permits.

Amendment 5, with EA, implemented in August 1990, extended the management area for Atlantic migratory groups of mackerels through the Mid-Atlantic Council's area of jurisdiction; deleted a provision specifying that bag limit catch of mackerel may be sold; and provided guidelines for corporate commercial vessel permits.

Amendment 6, with EA, implemented in November 1992, changed commercial permit income requirements to allow qualification in one of three proceeding years.

Amendment 8, with EA, implemented in March 1998, established a moratorium on commercial king mackerel permits until no later than October 15, 2000, with a qualification date for initial

participation of October 16, 1995; and increased the income requirement for a king or Spanish mackerel permit to 25% of earned income or $10,000 from commercial sale of catch or charter or headboat fishing in one of the three previous calendar years, but allowed for a one-year grace period to qualify under permits that are transferred.

Amendment 9, with EA, implemented in April 2000, established a moratorium on the issuance of commercial king mackerel gillnet endorsements; allowed transfer of gillnet endorsements to immediate family members (son, daughter, father, mother, or spouse) only; and prohibited the use of gillnets or any other net gear for the harvest of Gulf migratory group king mackerel north of an east/west line at the Collier/Lee County line, Florida.

Amendment 12, with EA, implemented in October 2000, extended the commercial king mackerel permit moratorium from its current expiration date of October 15, 2000, to October 15, 2005, or until replaced with a license limitation, limited access, and/or individual fishing quota or individual transferable quota system, whichever occurs earlier.

Amendment 14, with EA, implemented in July 2002, established a three-year moratorium on the issuance of charter/headboat CMP permits in the Gulf unless sooner replaced by a comprehensive effort limitation system. The amendment also included provisions for eligibility, application, appeals, and transferability.

Amendment 15, with EA, implemented in August 2005, established an indefinite limited access program for the commercial king mackerel fishery in the EEZ under the jurisdiction of the Gulf, South Atlantic, and Mid-Atlantic Councils.

Amendment 17, with supplemental EIS, implemented in June 2006, established a limited access system on charter/headboat CMP permits. Permits are renewable and transferable in the same manner as currently prescribed for such permits.

Amendment 18, with EA, implemented in January 2012, established annual catch limits, annual catch targets and accountability measures for king mackerel, Spanish mackerel and cobia. The amendment also established Atlantic and Gulf migratory groups for cobia; modified the framework procedures; and removed the following species from the fishery management unit: cero, little tunny, dolphin and bluefish.

Amendment 19, with EA and as part of the first Comprehensive Ecosystem-based Amendment, updated spatial essential fish habitat and habitat of particular concern information in the South Atlantic region for the CMP FMP.

Amendment 21, with EA and as part of the second Comprehensive Ecosystem-based Amendment, limited the possession of managed species in the special management zones off of South Carolina to the recreational bag limit for coastal migratory pelagic species.

CHAPTER 2. MANAGEMENT ALTERNATIVES

2.1 Action 1 – Sale of King and Spanish Mackerel

Alternative 1: No Action – No federal permit requirement to sell king and Spanish mackerel. Sale of king and Spanish mackerel harvested under the bag limit in or from the exclusive economic zone (EEZ) of the Gulf of Mexico (Gulf) or Atlantic is allowed for persons that possess the necessary state permits. However, if a commercial closure has been implemented, the sale or purchase of king or Spanish mackerel of the closed species, migratory group, subzone, or gear type, is prohibited, including any king or Spanish mackerel taken under the bag limits.

Alternative 2: Prohibit sale of king mackerel caught under the bag limit in or from the EEZ of the Gulf or Atlantic, with the exception of for-hire trips in which the vessel also holds a federal king mackerel commercial permit. Prohibit sale of Spanish mackerel caught under the bag limit in or from the EEZ of the Gulf or Atlantic, with the exception of for-hire trips in which the vessel also holds a federal Spanish mackerel commercial permit. All sales of king and Spanish mackerel during a commercial closure are prohibited.

Option a. The South Atlantic Council's jurisdiction
Preferred Option b. The Gulf Council's jurisdiction

Alternative 3: Prohibit sale of king and Spanish mackerel caught under the bag limit. For a person to sell king or Spanish mackerel in or from the EEZ of the Gulf or Atlantic, those fish must have been harvested on a commercial trip aboard a vessel with a commercial vessel permit/endorsement. A king mackerel permit is required to sell king mackerel and a Spanish mackerel permit is required to sell Spanish mackerel.

Preferred Option a. The South Atlantic Council's jurisdiction
Option b. The Gulf Council's jurisdiction

Preferred Alternative 4: In addition to Alternative 1, 2, or 3, king or Spanish mackerel harvested or possessed under the bag limit during a fishing tournament may be donated to a dealer who will sell those fish and donate the proceeds to a charity, but only if the tournament organizers have a permit from a state to conduct that tournament, and the transfer and reporting requirements listed below are followed.

Preferred Option a. The South Atlantic Council's jurisdiction
Preferred Option b. The Gulf Council's jurisdiction

Transfer and reporting requirements: A federally licensed wholesale dealer must be present to accept the donated fish directly from the anglers. The wholesale dealer sells the fish and must donate the monetary value (sale price or cash equivalent of value received for the landings) from the sale of tournament-caught fish to a charitable organization as determined by the state. The monetary value received from the sale of tournament-caught fish may not be used to pay for tournament expenses. The wholesale dealer instructs the tournament what records participating anglers must provide (according to their trip ticket or other reporting requirements) and how fish must be handled and iced according to Hazard Analysis and Critical Control Points (HACCP) standards. The fish are reported through normal reporting procedures by the wholesale dealer and must be identified as tournament catch.

Discussion: Currently a federal commercial king mackerel permit is required to harvest king mackerel in excess of the bag limit in the Gulf, South Atlantic, or Mid-Atlantic federal waters. These commercial permits are under limited access; no applications for additional commercial permits for king mackerel will be accepted by the National Marine Fisheries Service (NMFS), but permits can be renewed or transferred. In addition, a limited-access gillnet endorsement is required to use gillnets in the Eastern Zone southern subzone. As of April 4, 2013, there were 1,488 valid or renewable federal commercial king mackerel permits. Harvest of Spanish mackerel in the Gulf, South Atlantic, or Mid-Atlantic federal waters in excess of the bag limit requires a federal commercial Spanish mackerel permit. This permit is open access. As of April 4, 2013, there were 1,748 valid federal Spanish mackerel permits.

Sale of king and Spanish mackerel without a federal commercial permit is allowable if it is consistent with respective state regulations. Most states require a commercial permit, saltwater products license, restricted species endorsement, or some other specific license to sell regulated finfish. Some states have regulations requiring a federal commercial permit to sell king mackerel or Spanish mackerel harvested from state waters, but overall these regulations are neither consistent nor specific. For example in Florida, where highest landings of these species occur, a federal commercial permit is required to harvest more than the bag limit, but only a Saltwater Products License is required to sell king mackerel or Spanish mackerel.

Sales of fish without a federal commercial permit are often referred to 'bag limit sales' or 'sales under the bag limit'. This can refer to fish caught on for-hire trips by crew or clients, which can be sold after the trip to complement the income from the trip. Bag limit sales can also refer to sales by private anglers who may sell king mackerel or Spanish mackerel to offset trip costs or to supplement their income. Additionally, harvest on commercial vessels without a federal commercial permit for king mackerel or Spanish mackerel would still be limited to the recreational bag limit, and sales resulting from this situation would also fall under the reference of 'bag limit sales.' Although landings from a commercial trip amounting to less than the bag limit for king mackerel or Spanish mackerel could be classified as 'under the bag limit', the intent is for 'bag limit sales' or 'sales under the bag limit' to specifically refer to fish harvested on a for-hire trip, or on a private recreational trip on a vessel with no federal permits. The Gulf and South Atlantic Fishery Management Councils (Councils) do not intend to prohibit sale of king mackerel and Spanish mackerel caught by a vessel with a federal king mackerel or Spanish mackerel commercial permit on a trip that does not fall under the definition of a for-hire trip from selling a small number of fish.

All fish from the EEZ that are sold are considered commercial harvest and count towards a species' commercial quota, whether or not the fisherman has a federal commercial permit. This includes fish caught during tournaments that are donated through a dealer. The Councils are concerned that harvest from trips by recreational fishermen may contribute to the commercial quota and lead to early closures in the commercial sector of the fishery. Although this is not a current problem, changes in commercial annual catch limits (ACLs) or effort in the future could be exacerbated by bag limit sales.

Alternative 1 would continue to allow bag limit sales of king mackerel and Spanish mackerel in the Gulf and South Atlantic. **Alternative 2** would prohibit bag limits sales but continue to allow

sale of king and Spanish mackerel caught under the bag limit by for-hire vessels that also have the corresponding federal commercial permits

Both **Alternative 1** and **Alternative 2** would prohibit sale when the commercial season is closed either by species or area fished. Currently, separate Gulf and South Atlantic permits are required for charter/headboats to harvest coastal migratory pelagic (CMP) species. The Gulf permit is limited access and the South Atlantic permit is open access. As of February 5, 2013, there were 1,339 valid or renewable Gulf CMP charter/headboat permits and 1,449 Atlantic CMP charter/headboat permits. In support of **Alternative 1** or **Alternative 2**, for-hire vessel owners argue that fish sales are required to cover the cost of their trips. Competition demands are such that they must keep charter fees sufficiently low while maintaining adequate crew and equipment. This practice occurs when catches are reported through the Marine Recreational Information Program (MRIP) via dockside interviews, and through commercial trip tickets and logbooks. Under **Alternative 2**, **Option a** would continue to allow bag limit sales of king mackerel and Spanish mackerel only from for-hire trips on vessels that also have the federal commercial king mackerel or Spanish mackerel permit in the South Atlantic region, and **Preferred Option b** would allow these bag limit sales in the Gulf region.

Alternative 3 would require a vessel to have onboard a federal king and/or Spanish mackerel commercial permit in order to sell these species. **Preferred Option a** would implement the prohibition on bag limit sales through the South Atlantic region, and **Option b** would prohibit the sale of king and Spanish mackerel caught under the bag limit in the Gulf of Mexico Fishery Management Council (Gulf Council) jurisdictional area only. Prohibition of all bag limit sales of king mackerel and Spanish mackerel (**Alternative 3**) would be expected to improve the accuracy of data by reducing the frequency of "double counting" – harvest from a single trip counting towards both the commercial quota and recreational allocation.

Preferred Alternative 4 includes an exception for donation of tournament-caught fish; **Preferred Option a** would apply to South Atlantic Council jurisdictional waters only, and **Preferred Option b** would apply in Gulf Council jurisdictional waters only. It is a common practice for tournament organizers to donate fish to a dealer, who in turn donates money to a charity. This practice allows for disposal of fish without waste and supports charitable organizations. However, it could be considered trade or barter of fish caught under the bag limit, and therefore would be prohibited, unless an exception is provided. The transfer and reporting requirements above are modified from requirements in use by Florida[1].

An exception for all tournaments would be difficult to enforce; without a definition of what constitutes a "tournament," nothing would prevent a group of vessel owners at a marina, a social organization, church group, or simply a group of friends and neighbors from organizing and establishing a "tournament." Some states have already addressed these details through a state tournament permitting system, so the exception included in this alternative would allow those state-permitted tournaments to continue donating fish. Tournaments in states that do not have a permitting system would be prohibited from selling or donating mackerel.

[1] Memorandum from FWC General Counsel to the Director of Marine Fisheries Management, January 13, 2012.

Sale of tournament-caught mackerel raises health issues because the Food and Drug Administration (FDA) requires processors of fish and fishery products to develop and implement HACCP systems for their operations. When a food safety hazard can be introduced or made worse by a harvester or carrier, the processor should include controls in his HACCP plan that require, as a condition of receipt, demonstration that the hazard has been controlled by the harvester or carrier. Therefore, tournament organizers and the dealer who will take the fish must assure that the fish are properly handled and iced or refrigerated if they are to enter commerce, which may be difficult.

Alternatives 2-4 would not prohibit bag limit sales of king or Spanish mackerel caught in state waters. However, proposed actions in the Generic Seafood Dealer Reporting Amendment (GMFMC/SAFMC 2013) create a universal federal dealer permit that would be required to purchase species managed by the Councils. This would create a dealer permit requirement for king mackerel and Spanish mackerel that does not currently exist. Additionally, the proposed actions in the Generic Seafood Dealer Amendment would require that an individual with the proposed universal federal dealer permit can only buy species managed by the Councils from an individual with a federal commercial permit for the species/complex, even if the fish being sold are from state waters. The only way that sale of recreationally caught king mackerel or Spanish mackerel from state waters could occur (pending approval of both CMP Amendment 20A and the Generic Dealer Amendment) would be a sale between a buyer with the required state purchasing permit but no federal dealer permit and a seller with no federal commercial permit.

Council Conclusions:

The Councils selected the preferred alternatives and options in combination to modify the system to allow certain types of sale of recreationally caught fish in each region. For the Gulf region, the Councils selected preferred alternatives to allow sale of recreationally caught fish only from for-hire trips on dually permitted vessels and from state-permitted tournaments. For the South Atlantic region, the Councils selected preferred alternatives to allow sale of recreationally caught fish only from state-permitted tournaments. The South Atlantic Council also prohibited the bag limit sale of king and Spanish mackerel harvested on a commercial trip in South Atlantic jurisdictional waters for vessels without the appropriate federal king and/or Spanish mackerel commercial permits. The Councils wanted to eliminate bag limit sales of king mackerel and Spanish mackerel, but also include exemptions for recreational sales that are beneficial to the for-hire fleet and communities. The Councils felt that allowing for-hire crew to sell fish from for-hire trips in the Gulf region and allowing sale of fish caught in state-permitted tournaments would reduce the negative impacts of bag limit sales but maintain the positive impacts from for-hire and tournament sales.

2.2 Action 2 – Elimination of Inactive Commercial King Mackerel Permits

Preferred Alternative 1: No Action – Do not eliminate any commercial king mackerel permits.

Alternative 2: Renew commercial king mackerel permits if average landings meet the qualifications of an active permit (defined below). Permits that do not qualify will be invalid, non-renewable, and non-transferable:

> **Option a**. The permit has an annual average of at least 500 lbs of king mackerel from 2002-2011.
> **Option b**. The permit has an annual average of at least 1,000 lbs of king mackerel from 2002-2011.
> **Option c**. The permit has at least 500 lbs of king mackerel in at least one year from 2002-2011.
> **Option d**. The permit has at least 1,000 lbs of king mackerel in at least one year from 2002-2011.

Alternative 3: Allow transfer of inactive commercial king mackerel permits only to immediate family members and allow transfer to another vessel owned by the same entity. Permits will be considered inactive if average landings did not meet the qualifications (defined below):

> **Option a**. The permit has an annual average of at least 500 lbs of king mackerel from 2002-2011.
> **Option b**. The permit has an annual average of at least 1,000 lbs of king mackerel from 2002-2011.
> **Option c**. The permit has at least 500 lbs of king mackerel in at least one year from 2002-2011.
> **Option d**. The permit has at least 1,000 lbs of king mackerel in at least one year from 2002-2011.

Alternative 4: Allow two-for-one permit reduction in the king mackerel commercial fishery similar to the system for Snapper Grouper Unlimited Permits.

Discussion: Establishing participation criteria for future permit renewal is difficult because there is a single commercial king mackerel permit for vessels in the Gulf and Atlantic. Historically, some vessels from the Atlantic have fished on the Gulf group king mackerel quota, particularly in the western zone and the northern subzone off Florida. Additionally, there are different seasons in the Gulf and Atlantic and different zones that have different trip limits. Consequently, setting qualifications based on landings is biased by region because management may not allow fishermen to participate at the same level in different places.

Because king mackerel are migratory, most king mackerel permit holders do not fish exclusively for king mackerel, although king mackerel may make up a substantial portion of their income in a year. Revoking a permit based on a particular level of landings may penalize fishermen that diversify when king mackerel are not present in their area, rather than fishing in other zones.

Another compounding factor is that currently the commercial king mackerel permit is only a permit to exceed the bag limit, and a moratorium on the issuance of new commercial king mackerel permits has been in effect since 1998. Thus, if the regulations are not changed to require these commercial vessel permits to sell king mackerel (Action 1), particularly in Florida, fishermen who qualify for a saltwater products license and a restricted species endorsement can legally harvest bag-limit caught king mackerel from state waters and sell them. These fish would be counted against the commercial quotas in the same manner as harvests from federal waters.

Preferred Alternative 1 would not eliminate any king mackerel permits. Opinions on the necessity of eliminating permits differ among fishermen. Some historical king mackerel fishermen are concerned that permit holders who have not been fishing regularly or fishing at low levels may begin participating more fully. More vessels fishing under the same quota could mean lower catches for each vessel. On the other hand, many king mackerel fishermen diversify and harvest species from multiple fisheries. Although they may be considered "part-time" king mackerel fishermen, king mackerel may contribute a large portion of their income. The migratory nature of the fish promotes this part-time participation for those who do not want to travel long distances. Thus, elimination of permits with low levels of landings could eliminate full-time fishermen that are only part-time king mackerel fishermen because of their diversification.

Alternatives 2 and **3** would eliminate or restrict permits with below some level of king mackerel landings. Table 2.2.1 has estimates of the number of permits that would or would not meet the proposed landings thresholds, and Table 2.2.2 shows the number of permits that would be classified as 'active' at the state level.

As stated earlier, the nature of this component of the fishery is such that most participants only fish king mackerel part time, yet that participation may be a significant part of their annual income. In general the higher the necessary pounds to qualify, the more permits that would be designated as inactive. Table 2.2.1 shows that requiring one year of landings at 500 lbs (**Option c**) or 1,000 lbs **(Option d**) would result in fewer permits designated as inactive than under **Options a** and **b**, which consider the annual average from 2002 to 2011. Ninety-four permits (6%) do not have any landings recorded during 2002-2011.

Table 2.2.1. Estimated number of permits qualifying and not qualifying under Options a-d from Alternatives 2 and 3. Permits are those valid or renewable as of April 4, 2013 (total number of permits = 1,488). The actual number and percentage of permits that would be affected would depend on the number of valid and renewable permits on the effective date of the rule.

	Qualifying	Not Qualifying	% Permits Eliminated/Restricted
Option a Avg ≥500 lb	934	554	37%
Option b Avg ≥1,000 lb	732	756	51%
Option c At least 1 yr ≥500 lb	1,210	278	19%
Option d At least 1 yr ≥1,000 lb	1,102	386	26%

Source: SEFSC logbooks and SERO Permits database.

Table 2.2.2. Estimated number of permits qualifying in each state or region under Options a-d from Alternatives 2 and 3. Permits are those valid or renewable as of February 5, 2013 (note some permits have been terminated between the dates of Table 2.2.1 and Table. 2.2.2).

State[1]	# of Current Permits	# of Permits w/ landings 2011	**Number of Permits Expected to Qualify as Active:**			
			Option a Avg ≥500 lb	**Option b** Avg ≥1,000 lb	**Option c** At least 1 yr ≥500 lb	**Option d** At least 1 yr ≥1,000 lb
NC	241	130	153	114	207	186
SC/GA	35	14	8	4	23	16
FL- East	601	430	471	394	553	520
FL- Keys	200	112	129	96	157	145
FL- West	257	91	103	65	173	146
AL	28	13	12	11	21	17
MS	11	3	3	3	6	4
LA	52	20	33	27	39	39
TX	37	10	15	10	24	21
Other	33	8	10	9	13	13
TOTAL	**1,495**	**831**	**937**	**733**	**1,216**	**1,107**

[1] Based on homeport of vessel associated with the permit.
Source: SEFSC logbooks and SERO Permits database.

Alternatives 2 and **3** include identical options to designate permits as active or inactive, but **Alternative 2** would eliminate inactive permits while **Alternative 3** would make inactive permits non-transferable, except to an immediate family member (husband, wife, son, daughter, brother, sister, mother, or father). **Alternative 3** was suggested by the South Atlantic Mackerel Advisory Panel (AP). Members of the AP felt that some people might fish for other species but retain their king mackerel permit in case they have a bad year otherwise. Members of the AP were reluctant to take away permits from people who had made the effort to renew those permits each year, especially for a species that is not overfished. At the same time, they did not want those permits sold to someone who might start fishing for king mackerel full-time. Allowing transfer of permits only to immediate family members is consistent with the transferability requirements for king mackerel gillnet permits and snapper grouper limited access permits, which were established for the same reason. This alternative would allow permit holders to retain their permits while reducing the chance of a sudden increase in effort. Some additional transferability requirements would be included to be consistent with current requirements in the regulations: 1) allow transfer to another vessel owned by the same entity and 2) allow transfer from an individual to a corporation whose shares are all held by the individual or by the individual and one or more of the following: husband, wife, son, daughter, brother, sister, mother, or father.

Alternative 4 would implement a two-for-one requirement for king mackerel permit transfers, whereby a new entrant would need to surrender two valid king mackerel permits acquired from fishermen exiting the king mackerel portion of the CMP fishery to be issued a king mackerel permit. This would be an identical requirement as the system used for South Atlantic Unlimited Snapper Grouper commercial permits. Like **Alternative 3**, **Alternative 4** would be another passive method to reduce the number of king mackerel permits over time, and could be used as

in place of or in combination with eliminating or restricting inactive permits as designated under **Alternatives 2** or **3.**

Appeals

If an alternative is chosen that eliminates or restricts permits, an appeals process would be established consistent with a process previously approved by the Councils. The appeals process provides a procedure for resolving disputes regarding eligibility to retain king mackerel permits. In the past, the Councils have implemented regulatory actions in a number of fisheries that have included an appeals process for eligibility determinations, e.g., Amendment 29 to the Fishery Management Plan for to the Reef Fish Resources of the Gulf of Mexico and Amendment 18A to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region. In each of these instances, the Councils have utilized a virtually identical process. Because the process has been consistent and has worked well in different circumstances, the Gulf Council determined, without excessive consideration of other options for appeals, that the same process should be used when it established Gulf reef fish longline endorsements. Similarly, the process described in this section mirrors previously approved appeals processes.

Items subject to appeal are the accuracy of the amount of king mackerel landings and the correct assignment of landings to the permit owner. Appeals must contain documentation supporting the basis for the appeal and must be submitted to the Southeast Regional Administrator (RA) postmarked no later than 90 days after the effective date of the final rule that would implement Amendment 20A. Appeals based on hardship factors will not be considered. The RA will review, evaluate, and render final decision on appeals. The RA will determine the outcome of appeals based on NMFS logbooks. Appellants must submit logbooks to support their appeal. Landings data for appeals would be based on logbooks submitted to and received by the Southeast Fisheries Science Center by a date to be determined, for the years chosen in the preferred alternative. If logbooks are not available, the RA may use state landings records. In addition, NMFS records of king mackerel permits constitute the sole basis for determining ownership of such permits.

Council Conclusions:

The Councils chose **Preferred Alternative 1** as their preferred alternative because they were reluctant to take permits away from fishermen. King mackerel fishing is often a part-time occupation because the fish are migratory and not always in a specific area. Although some fishermen follow the mackerel as they migrate and as areas close to commercial fishing, others only fish for king mackerel when they are in the area and rely on other species throughout the year. The South Atlantic Council was interested in a passive reduction of permits through a two-for-one provision; however, both Councils would need to agree because one permit is used in both jurisdictional areas. The South Atlantic Council voted to explore the idea of creating separate permits for each area, and if separate permits are created, implementing a permit reduction system. Until then, they agreed with the Gulf Council to take no action to remove latent permits.

2.3 Action 3 – Modify or Eliminate Income Requirements for Gulf and South Atlantic Commercial Coastal Migratory Pelagic Permits

Alternative 1: No Action – Maintain existing income requirements for Gulf and South Atlantic commercial king and Spanish mackerel permits. To obtain or renew a commercial vessel permit for king or Spanish mackerel, at least 25% of the applicant's earned income, or at least $10,000, must have been derived from commercial fishing or from charter fishing during one of the three calendar years preceding the application.

Preferred Alternative 2: Eliminate income requirements for commercial king and Spanish mackerel permits.

Alternative 3: Modify the current income requirements to allow the Gulf or South Atlantic Council to recommend suspension of the renewal requirements by passage of a motion specifying: a) the event or condition triggering the suspension; b) the duration of the suspension; and c) the criteria establishing who is eligible for the suspension. The affected Council would then request that the Regional Administrator suspend income requirements according to the terms outlined in the motion.

Alternative 4: To obtain or renew a commercial permit for king or Spanish mackerel, at least a percentage (defined below) of the applicant's earned income must have been derived from commercial fishing or from for-hire fishing during one of the three calendar years preceding the application.

Option a: 75%
Option b: 50%

Discussion: Currently, the renewal of both king and Spanish mackerel commercial permits requires 25% of the applicant's income to have come from fishing or $10,000 from commercial or charter/headboat fishing activity in one of the three calendar years previous to the application. The renewal of a commercial spiny lobster permit is the only other commercial permit issued by NMFS with an income requirement. Neither the South Atlantic Charter/Headboat permit nor the Gulf Charter/Headboat permit for CMP has an income requirement. However, the South Atlantic Charter/Headboat permit for CMP is open access while the Gulf Charter/Headboat permit for CMP is under a limited access program. There is no limit on the number of open access permits that may be issued. Limited access means that new entrants must purchase a permit from another permit holder.

When commercial permits for king and Spanish mackerel were established in Amendment 1 (GMFMC/SAFMC 1985), the Councils included a requirement that at least 10% of the applicant's income must come from commercial fishing. The purpose was to 1) limit recreational fishermen from entering the fishery, and 2) require new entrants to establish at least a small amount of income from participation in another commercial fishery. The income requirement was revised in Amendment 6 (GMFMC/SAFMC 1992) to be 10% of earned income from commercial fishing in one of three years prior to applying for the permit, to allow some

flexibility in case of hardships. In Amendment 8 (GMFMC/SAFMC 1996) the requirement was increased to 25% of earned income in one of three years preceding the application and also allowed income from charter and headboat fishing. The Councils concluded that the requirement acted as a screening mechanism to constrain entry into the fishery, while maintaining flexibility in the requirements.

Alternative 1 would maintain the current income requirements for commercial permit renewal. Applicants would continue to complete the Income Qualification Affidavit section on the Federal Permit Application for Vessels Fishing in the Exclusive Economic Zone as proof of meeting permit income qualification requirements for the king and/or Spanish mackerel vessel permits. **Alternative 1** would not account for the fact that these requirements are relatively easy to meet and to circumvent.

Elimination of the income requirement (**Preferred Alternative 2**) would afford more flexibility to fishermen by allowing them to earn a larger proportion of their income in non-fishing occupations. This added flexibility would allow some fishermen to renew their permits even if they did not have the opportunity to earn enough income from fishing. The ability to earn income from fishing could be restricted by several factors, including illness, environmental, natural or man-made disasters, and unforeseen personal circumstances. The elimination of income requirements would also decrease the administrative burden.

Eliminating the existing income qualification requirements (**Preferred Alternative 2**) would eliminate other restrictions associated with the income qualification. For example, the existing income qualification may be satisfied by a vessel operator rather than a vessel owner. However, satisfying the income qualification based on an operator's income places an additional restriction on the use of the permit. Such permits are only valid for use when the qualifying individual is actually operating the vessel and can only be transferred to that individual. Despite this restriction on the use of the permit to authorize fishing activities, the vessel owner is still considered the owner of the permit, and may remove the operator from the permit, subject to the owner meeting the income qualification by the end of the first full tax year after transfer or immediately adding another operator who can meet the income qualification. Removing the income qualification entirely eliminates the need for the additional restriction based on the vessel operator. Thus, the vessel owner would be free to remove the operator from the permit without having to satisfy an income qualification and the permit would be freely transferable by the vessel owner.

Recent events including the Deepwater Horizon MC252 oil spill demonstrate the advantage of the Councils having a protocol for a temporary suspension of income requirements. **Alternative 3** would provide the Councils with such a protocol. The Councils would determine the events or conditions that would trigger the suspension of income requirements, the length of the suspension, and the permit holders eligible for a temporary suspension of income requirements for commercial king and Spanish mackerel permits renewal. Events and conditions that could warrant a temporary suspension of income requirements include oil spills and other man-made disasters, hurricanes and other natural disasters, and economic hardship. Determination of the length of a potential suspension of income requirements could consider issues such as the magnitude and duration of the adverse economic impacts that have already or could result from

the disaster or conditions warranting the suspension. Geographic areas and/or categories of permit holders affected would constitute some of the considerations in the eligibility determination for a temporary suspension of income qualification requirements. It is important to note that **Alternative 3** is intended to apply to regional events that may impair the ability of commercial king or Spanish mackerel fishermen as a group from being able to meet the earned income requirements. **Alternative 3** is not designed to apply to individual fishermen who are unable to meet the requirement due to personal circumstances.

Alternative 4 would increase the required proportion of income for commercial king and Spanish mackerel permits to 75% (**Option a**) or 50% (**Option b**), from the status quo 25% (**Alternative 1**). While some fishermen support elimination of the income requirement, others prefer a mechanism to limit entry into the fishery by non-commercial fishermen. It is likely that an increase in the required portion of earned income under **Alternative 4** would eliminate the renewal eligibility for a proportion of existing king and Spanish mackerel permit holders and constrain new entrants to the Spanish mackerel fishery.

Council Conclusions:
The Councils chose to eliminate the income requirement for renewing commercial permits (**Preferred Alternative 2**) because the requirement is not serving the function for which it was intended. For example, the requirement can be circumvented by putting the permit in the name of a business entity dedicated to commercial fishing; such a business entity would only have income associated with commercial fishing. On the other hand, a permit held in the name of an owner-operator may not qualify to renew his permit if he needed to engage in non-fishing activities, such as assisting in the clean-up efforts following the Deepwater Horizon MC252 oil spill. Furthermore, both the Gulf and South Atlantic Councils' mackerel advisory panels recommended elimination of the income requirement.

CHAPTER 3. AFFECTED ENVIRONMENT

3.1 Description of the Fishery and Status of the Stocks

Two migratory groups, Gulf and Atlantic, are recognized for king mackerel and Spanish mackerel. Commercial landings data come from the Southeast Fisheries Science Center (SEFSC) Accumulated Landings System (ALS), the Northeast Fisheries Science Center (NEFSC) Commercial Fisheries Data Base System (CFDBS), and SEFSC Coastal Fisheries Logbook (CFL) database. Recreational data come from the Marine Recreational Fisheries Statistics Survey (MRFSS), the Marine Recreational Information Program (MRIP), the Headboat Survey (HBS), and the Texas Parks and Wildlife Department (TPWD). All landings are in whole weight.

3.1.1 Description of the Fishery

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

King Mackerel

A king mackerel commercial vessel permit is required to retain king mackerel in excess of the bag limit in the Gulf of Mexico (Gulf) and Atlantic. These permits are limited access. In addition, a limited-access gillnet permit is required to use gillnets in south Florida. For-hire vessels must have either a Gulf or South Atlantic charter/headboat CMP vessel permit, depending on where they fish. The Gulf permit is limited access, but the South Atlantic permit is open access. The commercial permits have an income requirement of 25% of earned income or $10,000 from commercial or charter/headboat fishing activity in one of the three calendar years preceding the application. As of April 4, 2013, there were 1,488 valid or renewable federal commercial king mackerel permits. The number of valid king mackerel permits changes with renewals of expired permits and terminations of expired or revoked permits. A permit can be renewed within one year of its expiration.

For the commercial sector, the area occupied by Gulf migratory group king mackerel is divided into Western and Eastern zones. The Western zone extends from the southern border of Texas to the Alabama/Florida state line. The fishing year for this zone is July 1 through June 30.

The Eastern zone, which includes only waters off Florida, is divided into the East Coast and West Coast subzones (Figure 3.1.1.1A). The East Coast subzone is from the Flagler/Volusia county line south to the Miami-Dade/Monroe county line and only exists from November 1 through March 31, when Gulf migratory group king mackerel migrate into that area. During the rest of the year, king mackerel in that area are considered part of the Atlantic migratory group (Figure 3.1.1.1B).

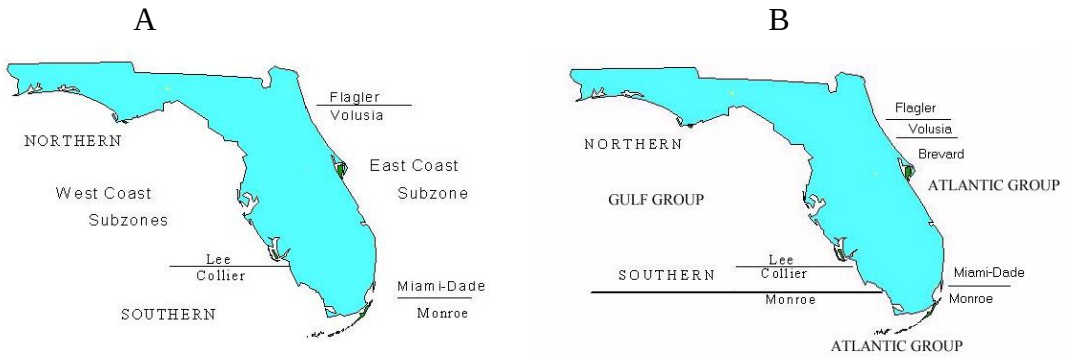

Figure 3.1.1.1. Gulf migratory group king mackerel Eastern Zone subzones for A) November 1 – March 31 and B) April 1- October 31.

The Eastern Zone, from the Alabama/Florida state line to the Monroe/Miami-Dade county line, is further divided into northern and southern subzones at the Lee/Collier county line. The fishing year for hook-and-line gear in both regions runs July 1-June 30; in the Southern Subzone, the gillnet season opens on the day after the Martin Luther King, Jr. holiday. Harvest is allowed during the first weekend thereafter, but not on subsequent weekends.

Management measures for the Atlantic migratory group apply to king mackerel from New York to Florida. The Atlantic migratory group king mackerel fishing year is March 1 through end of February. This migratory group is not currently divided into zones; however, different areas have different trip limits at different times of the year.

Commercial landings of Gulf migratory group king mackerel increased as the total (commercial) quota for the Gulf increased until 1997-1998 when the quota was set at 3.39 million pounds (mp). After that, landings have been relatively steady around the quota. Commercial landings of Atlantic king mackerel have also increased in recent years. The annual average for 2008/2009-2010/2011 was 3.6 mp versus 2.8 mp for the previous ten years (Table 3.1.1.1). However, the landings for the 2011/2012 fishing year were lower than other recent years, especially for the Atlantic migratory group.

Table 3.1.1.1. Annual commercial landings of king mackerel.

Fishing Year	Landings (lbs)	
	Gulf	Atlantic
2000-2001	3,079,256	2,101,530
2001-2002	2,932,532	2,017,251
2002-2003	3,231,723	1,737,833
2003-2004	3,183,778	1,708,341
2004-2005	3,228,862	2,734,198
2005-2006	3,011,990	2,250,990
2006-2007	3,232,497	2,994,818
2007-2008	3,449,030	2,667,227
2008-2009	3,867,599	3,107,996
2009-2010	3,816,157	3,564,108
2010-2011	3,539,492	3,405,650

Source: SEFSC, ALS database; NEFSC, CFDBS database

King mackerel have been a popular target for recreational fishermen for many years. Sixty-eight percent of the Gulf annual catch limit (ACL) and 62.9% of the Atlantic ACL is allocated to the recreational sector. From the late 1980s to the late 1990s, Gulf landings averaged about 4.9 mp per year. In the most recent five years, average annual landings have been about 2.8 mp. The recent five-year average for the Atlantic migratory group recreational landings is 4.9 mp per year (Table 3.1.1.2); however, landings of the Atlantic migratory group are variable over the time period.

Table 3.1.1.2. Annual recreational landings of king mackerel.

Fishing Year	Landings (lbs)	
	Gulf	Atlantic
2000-2001	3,121,584	6,184,541
2001-2002	3,668,540	5,035,061
2002-2003	2,817,537	4,574,235
2003-2004	3,211,497	4,979,506
2004-2005	2,528,457	5,321,449
2005-2006	2,995,716	4,457,679
2006-2007	3,305,567	5,127,178
2007-2008	2,626,527	7,128,545
2008-2009	2,352,510	4,228,245
2009-2010	3,523,777	4,394,015
2010-2011	2,182,980	2,692,771

Source: SEFSC; MRFSS, HBS, and TPWD databases.

Spanish Mackerel

A commercial Spanish mackerel permit is required for vessels fishing in the Gulf or Atlantic. This permit is open access. For-hire vessels must have a charter/headboat CMP permit for the area fished. The commercial permit has an income requirement of 25% of earned income or $10,000 from commercial or charter/headboat fishing activity in one of the previous three calendar years. As of April 4, 2013, there were 1,748 valid federal Spanish mackerel permits.

Gulf migratory group Spanish mackerel are considered a single stock throughout the Gulf from the southern border of Texas to the Miami-Dade/Monroe county border on the east coast of Florida. A single ACL for both commercial and recreational sectors was implemented through Amendment 18 (GMFMC/SAFMC 2011) beginning with the 2012/2013 fishing year. Before that, the commercial and recreational sectors had separate quotas. The fishing year is April 1-March 31.

The area of the Atlantic migratory group of Spanish mackerel is currently divided into two zones: the Northern zone includes waters off New York through Georgia, and the Southern zone includes waters off the east coast of Florida to the Miami-Dade/Monroe county border. One commercial quota is set for both zones, which is adjusted for management purposes. The fishing year for Atlantic migratory group Spanish mackerel is March-February. This fishing year was implemented in August 2005; before then, the fishing year was April-March. Because of the change in fishing year, the 2005/2006 fishing year has only 11 months of landings and has been normalized for comparison with other years.

Landings compiled for the current Southeast Data, Assessment, and Review (SEDAR 28 2013a, 2013b) stock assessment divided the two migratory groups at the boundary between the South Atlantic and Gulf of Mexico Fishery Management Councils (Councils), which is the line of demarcation between the Atlantic Ocean and the Gulf of Mexico, although the management boundary is at the Dade/Monroe County line. Additionally, landings were compiled by calendar year rather than fishing year. For consistency with previous analyses, landings based on the correct management boundary and calendar year are included here.

Commercial landings over the past five years have averaged 1.3 mp annually in the Gulf and 3.7 mp annually in the Atlantic. Commercial landings of Spanish mackerel fell sharply in 1995 after Florida implemented a constitutional amendment banning certain types of nets, but average landings have since increased to near historical levels (Table 3.1.1.3).

Table 3.1.1.3. Annual commercial landings of Spanish mackerel.

Fishing Year	Landings (lbs)	
	Gulf	Atlantic
2000-2001	868,171	2,855,805
2001-2002	782,227	3,091,117
2002-2003	1,707,950	3,257,807
2003-2004	883,090	3,763,769
2004-2005	1,958,155	3,379,347
2005-2006	888,379	3,908,607
2006-2007	1,472,307	3,654,655
2007-2008	863,871	3,086,792
2008-2009	2,273,248	3,190,881
2009-2010	916,614	4,208,116
2010-2011	1,219,484	4,592,708

Source: SEFSC, ALS database; NEFSC, CFDBS database
*For 99/00-04/05, the Atlantic fishing year is Apr-Mar; for 06/07-09/10, the fishing year is Mar-Feb.

Recreational catches of Spanish mackerel in the Gulf have remained rather stable since the early 1990's at around 2.0 to 3.0 mp, despite increases in the bag limit from three fish in 1987 to 10 fish in 1992 to 15 fish in 2000. Recreational landings in the Atlantic also have remained fairly steady over time and averaged around 1.9 mp during the recent five years (Table 3.1.1.4).

Table 3.1.1.4. Annual recreational landings of Spanish mackerel.

Fishing Year	Landings (lbs)	
	Gulf	Atlantic
2000-2001	2,787,773	2,306,607
2001-2002	3,452,981	2,046,039
2002-2003	3,171,235	1,640,822
2003-2004	2,742,270	1,853,294
2004-2005	2,665,269	1,359,360
2005-2006	1,595,375	1,648,291
2006-2007	2,845,347	1,653,413
2007-2008	2,724,757	1,710,276
2008-2009	2,525,443	2,046,806
2009-2010	1,890,143	2,107,213
2010-2011	2,964,339	1,763,640

Source: SEFSC, ACL data sets; MRFSS, HBS, TPWD

Distribution of Fishing Activity

Jurisdiction of the CMP fishery is divided between the federal and state governments. However, Spanish mackerel most commonly occur in state jurisdictional waters (ASMFC Fishery Management Report, Omnibus Amendment to the Interstate Fishery Management Plans for Spanish mackerel, Spot, and Spotted Trout, 2012).

For purposes of the following discussion, the level of activity in the CMP fishery is divided into two mutually exclusive groups: those that harvest quantities of king mackerel and/or Spanish

mackerel greater than the bag limits and those that harvest quantities of these species under the bag limits. Vessels that take CMP in quantities under the bag limits are divided into three groups: commercial fishing vessels, charter vessels and headboats, and angler/recreational vessels.

Commercial fishermen who harvest king and/or Spanish mackerel in federal waters with a permit are limited by daily trip limits, except for those who harvest Spanish mackerel in federal waters of the Gulf where the daily catch is unlimited. Daily trip limits vary by location and gear and may be adjusted when landings reach 75% or another percent of the annual quota (Table 3.1.1.5).

Table 3.1.1.5. Commercial trip limits for king and Spanish mackerel.

Species	Migratory Group	Zone	Subzone	Gear/Fishery	Daily Trip Limit
King Mackerel	Atlantic	Mid & South Atlantic		Hook-&-Line	3,500 lbs
				Gillnet	3,500 lbs
	Gulf	Western		Hook-&-Line	3,000 lbs
		Eastern	East Coast	Hook-&-Line	50 fish[1]
			West Coast: Northern	Hook-&-Line	1,250 lbs[2]
			West Coast: Southern	Hook-&-Line	1,250 lbs[2]
				Gillnet	25,000 lbs
Spanish Mackerel	Atlantic	Northern			3,500 lbs
		Southern			3,500 lbs[3]
	Gulf				Unlimited

1 The daily trip limit increases to 75 fish on Feb 1 if < than 75% of the subzone quota is harvested prior to that date.
2 Trip limit is reduced to 500 lbs per day when 75% of the subzone quota is harvested.
3 The 3,500-lb trip limit begins Mar 1. Unlimited trip limits begin Dec 1 and continue until 75% of quota is harvested and trip limit is reduced to 1,500 lbs. Daily trip limits during the unlimited season: unlimited Mon-Fri and 1,500 lbs on Sat-Sun. In federal waters off Florida's east coast, the trip limit is reduced to 500 lbs through Mar 31 if 100% of the adjusted quota is harvested.

The quantities of CMP that can be harvested within the recreational bag limits are substantially less than those within the commercial trip limits (Table 3.1.1.6). Any vessel in the EEZ without a federal king mackerel or Spanish mackerel commercial permit is restricted to these bag limits.

Table 3.1.1.6. Federal bag and possession limits for king and Spanish mackerel.

Species	Migratory Group	Zone or Location	Daily Bag Limit (Number of Fish per Person)
King Mackerel	Atlantic	Mid Atlantic	3[1]
		South Atlantic, except off FL	3[1]
		Off Florida	2[1]
	Gulf	All	2[1]
Spanish Mackerel	Atlantic	All	15
	Gulf	All	15

[1] Persons on charter fishing trips longer than 24 hours may possess up to 2 bag limits.

It is reasonable to expect that commercial vessels that target CMP species solely or mostly in state waters would not have a federal permit, unless the state where they fish requires a federal permit. Operating within state waters, these non-federally permitted vessels can land quantities above the federal bag limit provided the state does not have a more restrictive regulation. Consequently, a federal permit would be an unnecessary expense.

Another reason why a commercial vessel may not have a CMP permit is if it targets other species in the EEZ and retains CMP species only in small quantities as bycatch. For example, king mackerel and Spanish mackerel are known to be bycatch in the shrimp trawl fishery. If kept by a commercial vessel without a CMP permit, their quantities cannot exceed the bag limits, and when landed and sold, these quantities count against the respective commercial quotas.

However, other reasons for not having a federal king mackerel or Spanish mackerel permit may include the inability to satisfy the income or revenue requirement of obtaining the permit, and/or the cost of obtaining a transferred or new commercial permit may be greater than the economic benefit of having said permit. A limited online search of sales of king mackerel permits found asking prices ranging from $3,500 to $6,000. The cost of acquiring a new Spanish mackerel permit is $25 plus time to complete the application, with its income requirement. As of February 5, 2013, there were 1,339 valid or renewable Gulf CMP charter/headboat permits and 1,449 Atlantic CMP charter/headboat permits.

If coastal migratory pelagics are a commercial vessel's targeted species, it is unlikely that the vessel, without a federal king or Spanish permit, would go into the EEZ to catch those species when it could stay in state waters and harvest quantities greater than the bag limits. A commercial vessel without a federal king or Spanish mackerel permit fishing in federal waters off Florida, for example, could take at the most two king mackerel per person and 15 Spanish mackerel per person during a trip. A commercial trip that targets CMP and includes fishing in federal waters without a federal permit would require economic reasoning beyond just catching and selling CMP. One possible reason for operating in federal waters without a federal CMP permit could be to scout out areas within the EEZ for an upcoming for-hire trip, particularly, if the vessel is permitted for charter fishing in the EEZ.

For-hire fishing vessels must have either a Gulf or South Atlantic charter vessel/headboat CMP permit, depending on where they fish in the EEZ. The Gulf permit is a limited access permit, while the South Atlantic permit is an open access permit. Each charter/headboat permit allows the for-hire fishing vessel to be used to catch any CMP species in quantities no greater than the recreational bag/possession limits in federal waters. Some vessels may have both federal charter vessel/headboat and federal king and/or Spanish mackerel commercial permits. When a vessel is operating as a charter vessel or headboat, a person aboard must adhere to the recreational bag limits. The quantities of CMP species kept by a for-hire vessel are dependent on the size of the bag limits and number of persons onboard during the trip. For example, if 10 persons are aboard during a for-hire trip (including crew) off Florida that is no more than 24 hours long, no more than 20 king mackerel and 150 Spanish mackerel can be landed and sold.

Private recreational fishing vessels must be registered in their state or documented by the U.S. Coast Guard. Saltwater anglers aboard these vessels must be registered with the National

Saltwater Angler Registry or licensed in their exempted state in order to fish for CMP in the EEZ.

All states require a commercial fishing license to sell CMP landed in their waters. Texas requires an additional permit beyond a commercial fishing license to bring any fish taken in the EEZ into state waters. Operators of commercial fishing vessels with a federal king mackerel and/or Spanish mackerel permit and who are commercially licensed in a state can land and sell quantities of these species greater than the respective bag limits (and under quota). At the same time, operators of fishing vessels without one of these federal permits, but who are licensed to fish commercially by a state, can also land and sell quantities of these species greater than the bag limits, provided any quantities of king and/or Spanish mackerel harvested over the bag limits are taken in state waters and the state where these species are landed does not require the corresponding federal permits. Alabama requires both the federal king and Spanish mackerel permits to possess and land quantities above the bag limits, and Florida requires a federal king mackerel permit to possess or land quantities of the species above the bag limits (Table 3.1.1.7). None of the other states requires a federal permit to land and sell quantities above the bag limits; however, they all require a state-issued commercial fishing license.

Table 3.1.1.7. State requirements to land and sell quantities of CMP above bag limits.

State	License/Permit Requirements to Land and Sell Quantities Above Bag Limits
Alabama	Federal king mackerel permit, federal Spanish mackerel permit, commercial fishing license
Florida	Federal king mackerel permit, commercial vessel registration, saltwater products license, restricted species endorsement
Georgia	Commercial fishing license and commercial boat license
Louisiana	Commercial fishing license and commercial boat license
Mississippi	Commercial fishing license and commercial boat license
North Carolina	Standard commercial fisherman license & commercial vessel registration or recreational fishing tournament license
South Carolina	Commercial saltwater fishing license
Texas	General commercial fishing license, commercial fishing boat license

In North Carolina there are recreational fishermen who have a standard commercial fisherman license (SCFL) to exceed the bag limits, such as for king mackerel, but do not sell their catch. Because these fish are not being sold, they are not being captured by the Trip Ticket Program. At the beginning of 2012, there were 3,500 people paying $200 a year for the SCFL and not using it to sell fish. It is unknown if these 3,500 individuals are catching fish or not and, if so, in what quantities. Some recreational fishermen that hold a SCFL do sell their catch to cover the cost of their fishing trip (North Carolina Marine Fisheries Commission, Define a Commercial Fisherman Committee Report, January 2012). Currently, North Carolina is considering a requirement that all individuals who held a SCFL during the 2010 license year that had no recorded sales transactions be required to have at least 12 days of documented fishing activity within a three-year time period to renew their licenses. There may be recreational fishermen in other states who possess a commercial license to exceed the bag limits and do not sell their catch.

The sale of CMP species by charter/headboat operators with a state commercial permit, saltwater product licenses, restricted species endorsement or some other specific license to sell regulated finfish is a historical practice and method of supplementing income in a seasonal business. Often passengers give their catches to the captain and/or crew who sell those fish. Hence, charter/headboat captains and crew participate in the commercial fisheries sector as sellers of fish, although the anglers onboard their vessels harvest these fish under federal recreational bag limits. Some fishing vessels have dual permits, operating as charter/headboats for some fishing trips and as commercial vessels for other trips. Sales of fish caught during a charter fishing trip under the recreational bag limit(s) are permissible if the operator has or crew have sufficient state licenses to sell the catch. These bag-limit sales are counted against the commercial quota, even though the fish are caught by recreational fishermen onboard a for-hire vessel. These fish may also be counted as recreational landings, which results in them being double counted.

Illegal sales of CMP have been found. In 2009, the Florida Fish and Wildlife Conservation Commission charged businesses that operated six charter fishing boats with illegally selling king mackerel (http://freerepublic.com/focus/f-news/2406062/posts). Boats were cited for not reporting the king mackerel that were sold and not having the necessary license and restricted species endorsement to sell the fish.

3.1.2 Status of Stocks

King Mackerel

Both the Gulf and Atlantic migratory groups of king mackerel were assessed by SEDAR 16 (SEDAR 16 2009), and will be assessed again by SEDAR 38 in 2013 through 2014. The SEDAR 16 assessment determined the Gulf migratory group of king mackerel was not overfished and was uncertain whether the Gulf migratory group was experiencing overfishing. Subsequent analyses showed that $F_{Current}/F_{MSY}$ has been below 1.0 since 2002. Consequently, the most likely conclusion is the Gulf migratory group king mackerel stock is not undergoing overfishing. Atlantic migratory group king mackerel were also determined not to be overfished; however, it was uncertain whether overfishing is occurring, and thought to be at a low level if it is occurring.

Spanish Mackerel

The benchmark stock assessment for Spanish mackerel was completed (SEDAR 28 2013a, 2013b) and reviewed by the South Atlantic Scientific and Statistical Committee (SSC) in April 2013 and again in October 2013, and by the Gulf SSC in August 2013. Both SSCs made recommendations to the respective Councils for overfishing level and acceptable biological catch (ABC).

The SEDAR 28 (2013a) stock assessment for South Atlantic migratory group Spanish mackerel determined that the stock is not overfished or experiencing overfishing. The Gulf Council's review (GMFMC 2013) of the SEDAR 28 stock assessment of Gulf of Mexico Spanish mackerel (2013b) determined that the stock was not overfished or experiencing overfishing. The Councils have requested staff begin preparation of a joint framework action to update the ACLs for both migratory groups of Spanish mackerel.

3.2 Description of the Physical Environment

3.2.1 Gulf of Mexico

The Gulf has a total area of approximately 600,000 square miles (1.5 million km^2), including state waters (Gore 1992). It is a semi-enclosed, oceanic basin connected to the Atlantic Ocean by the Straits of Florida and to the Caribbean Sea by the Yucatan Channel. Oceanic conditions are primarily affected by the Loop Current (Figure 3.2.1.1), the discharge of freshwater into the northern Gulf, and a semi-permanent, anti-cyclonic gyre in the western Gulf.

The Gulf is both a warm temperate and a tropical body of water (McEachran and Fechhelm 2005). Based on satellite derived measurements from 1982 through 2009, mean annual sea surface temperature ranged from 73 through 83º F (23-28º C) including bays and bayous (Figure 3.2.1.1). In general, mean sea surface temperature increases from north to south depending on time of year with large seasonal variations in shallow waters (NODC 2012: http://accession.nodc.noaa.gov/0072888).

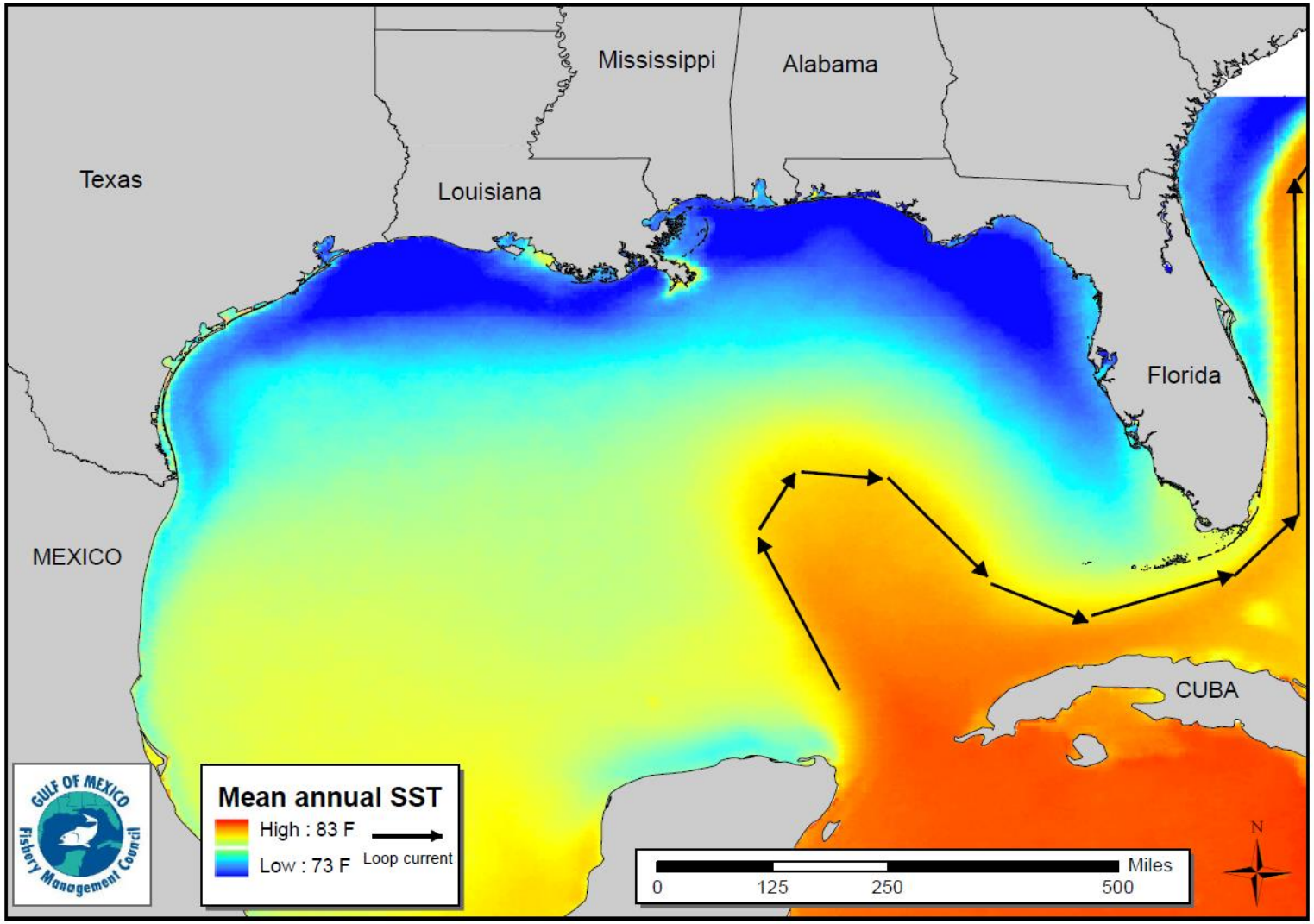

Figure 3.2.1.1. Mean annual sea surface temperature derived from the Advanced Very High Resolution Radiometer Pathfinder Version 5 sea surface temperature data set (http://pathfinder.nodc.noaa.gov).

The following area closures include gear restrictions that may affect targeted and incidental harvest of CMP species (Figure 3.2.2)

Longline/Buoy Gear Area Closure – Permanent closure to use of these gears for reef fish harvest inshore of 20 fathoms (36.6 meters) off the Florida shelf and inshore of 50 fathoms (91.4 meters) for the remainder of the Gulf, and encompasses 72,300 square nautical miles (nm^2) or 133,344 km^2 (GMFMC 1989). Bottom longline gear is prohibited inshore of 35 fathoms (54.3 meters) during the months of June through August in the eastern Gulf (GMFMC 2009), but is not depicted in Figure 3.2. 2.

Madison-Swanson and Steamboat Lumps Marine Reserves - No-take marine reserves (total area is 219 nm^2 or 405 km^2) sited based on gag spawning aggregation areas where all fishing is prohibited except surface trolling from May through October (GMFMC 1999; 2003).

The Edges Marine Reserve – All fishing is prohibited in this area (390 nm^2 or 1,338 km^2) from January through April and possession of any fish species is prohibited, except for such possession aboard a vessel in transit with fishing gear stowed as specified. The provisions of this do not apply to highly migratory species (GMFMC 2008).

Tortugas North and South Marine Reserves - No-take marine reserves (185 nm^2) cooperatively implemented by the state of Florida, National Ocean Service, the Gulf of Mexico Fishery Management Council (Council), and the National Park Service in Generic Amendment 2 Establishing the Tortugas Marine Reserves (GMFMC 2001).

Reef and bank areas designated as Habitat Areas of Particular Concern (HAPCs) in the northwestern Gulf include - East and West Flower Garden Banks, Stetson Bank, Sonnier Bank, MacNeil Bank, 29 Fathom, Rankin Bright Bank, Geyer Bank, McGrail Bank, Bouma Bank, Rezak Sidner Bank, Alderice Bank, and Jakkula Bank - Pristine coral areas protected by preventing the use of some fishing gear that interacts with the bottom and prohibited use of anchors (totaling 263.2 nm^2 or 487.4 km^2). Subsequently, three of these areas were established as marine sanctuaries (i.e., East and West Flower Garden Banks and Stetson Bank). Bottom anchoring and the use of trawling gear, bottom longlines, buoy gear, and all traps/pots on coral reefs are prohibited in the East and West Flower Garden Banks, McGrail Bank, and on significant coral resources on Stetson Bank (GMFMC 2005). A weak link in the tickler chain of bottom trawls on all habitats throughout the Gulf exclusive economic zone (EEZ) is required. A weak link is defined as a length or section of the tickler chain that has a breaking strength less than the chain itself and is easily seen as such when visually inspected. An education program for the protection of coral reefs when using various fishing gears in coral reef areas for recreational and commercial fishermen was also developed.

Florida Middle Grounds HAPC - Pristine soft coral area (348 nm^2 or 644.5 km^2) that is protected by prohibiting the following gear types: bottom longlines, trawls, dredges, pots and traps (GMFMC and SAFMC 1982).

Pulley Ridge HAPC - A portion of the HAPC (2,300 nm^2 or 4,259 km^2) where deepwater hermatypic coral reefs are found is closed to anchoring and the use of trawling gear, bottom longlines, buoy gear, and all traps/pots (GMFMC 2005).

Alabama Special Management Zone – For vessels operating as a charter vessel or headboat, a vessel that does not have a commercial permit for Gulf reef fish, or a vessel with such a permit fishing for Gulf reef fish, fishing is limited to hook-and-line gear with no more than three hooks. Nonconforming gear is restricted to recreational bag limits, or for reef fish without a bag limit, to 5% by weight of all fish aboard (GMFMC 1993).

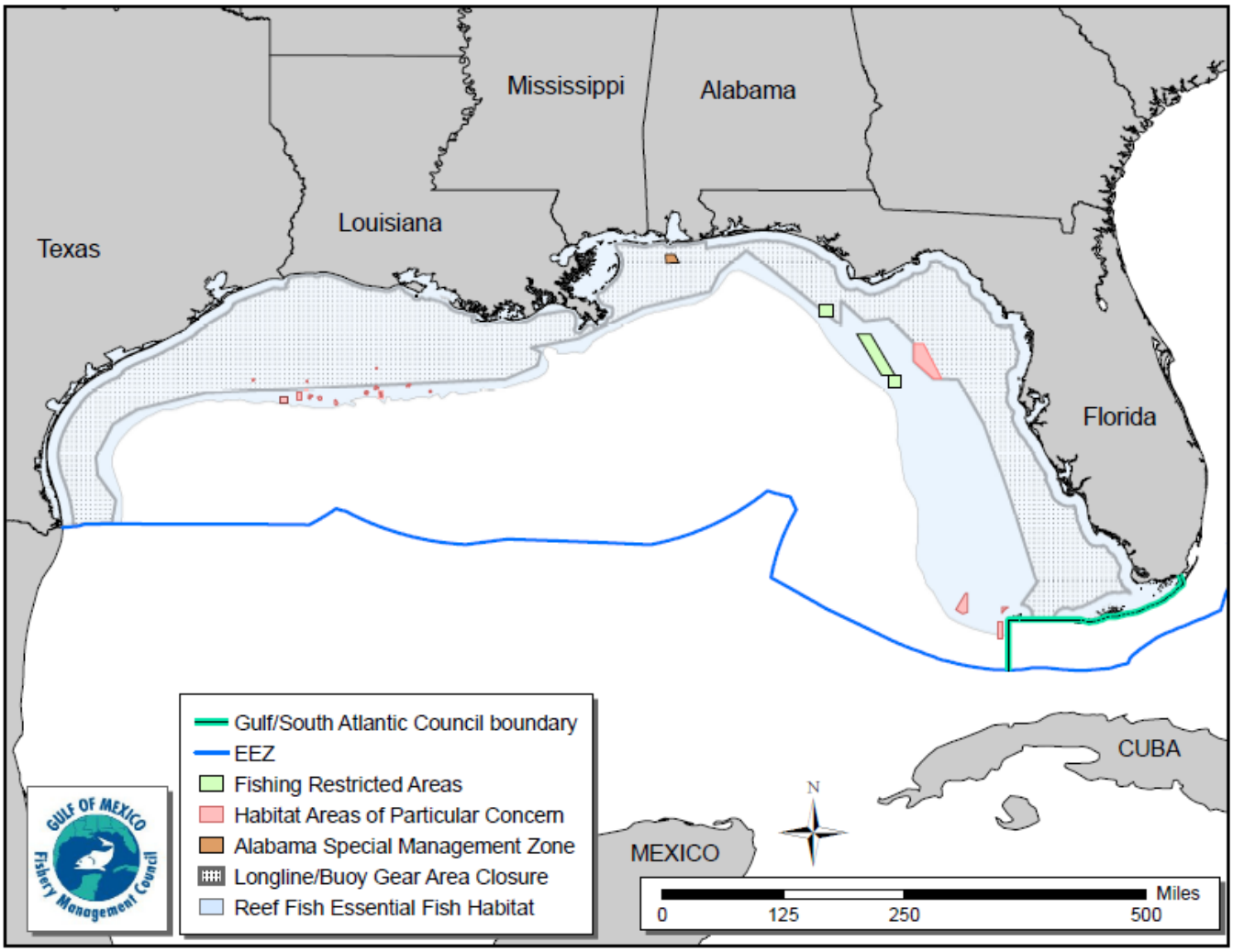

Figure 3.2.2. Map of most fishery management closed areas in the Gulf of Mexico.

3.2.2 South Atlantic

The South Atlantic Council has management jurisdiction of the federal waters (3-200 nm) offshore of North Carolina, South Carolina, Georgia, and Florida. The continental shelf off the southeastern U.S., extending from the Dry Tortugas, Florida, to Cape Hatteras, North Carolina, encompasses an area in excess of 100,000 square km (Menzel 1993). Based on physical oceanography and geomorphology, this environment can be divided into two regions: Dry Tortugas, Florida, to Cape Canaveral, Florida, and Cape Canaveral, Florida, to Cape Hatteras, North Carolina. The continental shelf from the Dry Tortugas, Florida, to Miami, Florida, is approximately 25 km wide and narrows to approximately 5 km off Palm Beach, Florida. The shelf then broadens to approximately 120 km off of Georgia and South Carolina before narrowing to 30 km off Cape Hatteras, North Carolina. The Florida Current/Gulf Stream flows along the shelf edge throughout the region. In the southern region, this boundary current dominates the physics of the entire shelf (Lee et al. 1994).

In the northern region, additional physical processes are important and the shelf environment can be subdivided into three oceanographic zones (Atkinson et al. 1985, Menzel 1993), the outer shelf, mid-shelf, and inner shelf. The outer shelf (40-75 m) is influenced primarily by the Gulf Stream and secondarily by winds and tides. On the mid-shelf (20-40 m), the water column is almost equally affected by the Gulf Stream, winds, and tides. Inner shelf waters (0-20 m) are influenced by freshwater runoff, winds, tides, and bottom friction. Water masses present from the Dry Tortugas, Florida, to Cape Canaveral, Florida, include Florida Current water, waters originating in Florida Bay, and shelf water. From Cape Canaveral, Florida, to Cape Hatteras, North Carolina four water masses found are: Gulf Stream water, Carolina Capes water, Georgia water, and Virginia coastal water.

Spatial and temporal variation in the position of the western boundary current has dramatic effects on water column habitats. Variation in the path of the Florida Current near the Dry Tortugas induces formation of the Tortugas Gyre (Lee et al. 1994). This cyclonic eddy has horizontal dimensions on the order of 100 km and may persist in the vicinity of the Florida Keys for several months. The Pourtales Gyre, which has been found to the east, is formed when the Tortugas Gyres moves eastward along the shelf. Upwelling occurs in the center of these gyres, thereby adding nutrients to the near surface (<100 m) water column. Wind and input of Florida Bay water also influence the water column structure on the shelf off the Florida Keys (Smith 1994; Wang et al. 1994). Further downstream, the Gulf Stream encounters the "Charleston Bump", a topographic rise on the upper Blake Ridge where the current is often deflected offshore resulting in the formation of a cold, quasi-permanent cyclonic gyre and associated upwelling (Brooks and Bane 1978). On the continental shelf, offshore projecting shoals at Cape Fear, North Carolina, Cape Lookout, North Carolina, and Cape Hatteras, North Carolina affect longshore coastal currents and interact with Gulf Stream intrusions to produce local upwelling (Blanton et al. 1981; Janowitz and Pietrafesa 1982). Shoreward of the Gulf Stream, seasonal horizontal temperature and salinity gradients define the mid-shelf and inner-shelf fronts. In coastal waters, river discharge and estuarine tidal plumes contribute to the water column structure.

The water column from Dry Tortugas, Florida, to Cape Hatteras, North Carolina, serves as habitat for many marine fish and shellfish. Most marine fish and shellfish release pelagic eggs when spawning and thus, most species utilize the water column during some portion of their early life history (Leis 1991; Yeung and McGowan 1991). There are a large number of fishes that inhabit the water column as adults. Pelagic fishes include numerous clupeoids, flying fish, jacks, cobia, bluefish, dolphin, barracuda, and the mackerels (Schwartz 1989). Some pelagic species are associated with particular benthic habitats, while other species are truly pelagic.

In the South Atlantic, areas of unique habitat exist such as the Oculina Bank and large expanses of deepwater coral; however, regulations are currently in place to protect these areas. Additionally, there are several notable shipwrecks along the South Atlantic coast in state and federal waters including *Lofthus* (eastern Florida), *SS Copenhagen* (southeast Florida), *Half Moon* (southeast Florida), *Hebe* (Myrtle Beach, South Carolina), *Georgiana* (Charleston, South Carolina), *Monitor* (Cape Hatteras, North Carolina), *Huron* (Nags Head, North Carolina), and *Metropolis* (Corolla, North Carolina). The South Atlantic coastline is also home to numerous marshes and wetland ecosystems; however, these sensitive ecological environments do not extend into federal waters of the South Atlantic. The proposed actions are not expected to alter fishing practices in any manner that would affect any of the above listed habitats or historic resources, nor would it alter any regulations intended to protect them.

3.3 Description of the Biological/Ecological Environment

A description of the biological environment for CMP species is provided in Amendment 18 (GMFMC and SAFMC 2011), and is incorporated herein by reference and summarized below.

The Deepwater Horizon MC252 oil spill affected at least one-third of the Gulf of Mexico from western Louisiana east to the Florida panhandle and south to the Campeche Bank of Mexico. Oil flowed from the ruptured wellhead at a rate of 52,700 – 62,200 barrels/day for a total of 4,928,100 barrels (restorethegulf.gov 2010). The impacts of the Deepwater Horizon MC252 oil spill on the physical environment may be significant and long-term. Oil was dispersed on the surface, and because of the heavy use of dispersants (both at the surface and at the wellhead), oil was also documented as being suspended within the water column (Camilli et al. 2010; Kujawinski et al. 2011). Floating and suspended oil washed onto coastlines in several areas of the Gulf of Mexico along with non-floating tar balls. Whereas suspended and floating oil degrades over time, tar balls are persistent in the environment and can be transported hundreds of miles (Goodman 2003).

Species in the FMP are migratory and move into specific areas to spawn. King mackerel, for example, move from the southern portion of their range to more northern areas for the spawning season. In the Gulf, that movement is from Mexico and south Florida to the northern Gulf (Godcharles and Murphy 1986). However, environmental factors, such as temperature can change the timing and extent of their migratory patterns (Williams and Taylor 1980). The possibility exists that mackerel would be able to detect environmental cues when moving toward the area of the oil spill that would prevent them from entering the area. These fish might then remain outside the area where oil was in high concentrations, but still spawn.

The oil and dispersant from the spill may have (had) direct negative impacts on egg and larval stages. Oil present in surface waters could affect the survival of eggs and larvae, affecting future recruitment. Effects on the physical environment such as low oxygen and the inter-related effects that culminate and magnify through the food web could lead to impacts on the ability of larvae and post-larvae to survive, even if they never encounter oil. In addition, effects of oil exposure may not always be lethal, but can create sub-lethal effects on the early life stages of fish. There is the potential that the stressors can be additive, and each stressor may increase the susceptibility to the harmful effects of the other.

If eggs and larvae were affected, impacts on harvestable-size CMP fish will begin to be seen when the 2010 year class becomes large enough to enter the fishery and be retained. King mackerel mature at ages of 2-3 years and Spanish mackerel mature at age 1-2; therefore, a year class failure in 2010 could be observed as early as 2011 or 2012. The impacts would be realized as reduced fishing success and reduced spawning potential, and would need to be taken into consideration in the next SEDAR assessment.

The oil spill resulted in the development of major monitoring programs by NMFS and other agencies, as well as by numerous research institutions. Of particular concern was the potential health hazard to humans from consumption of contaminated fish and shellfish. NOAA, the Food and Drug Administration, the Environmental Protection Agency, and the Gulf states

implemented a comprehensive, coordinated, multi-agency program to ensure that seafood from the Gulf is safe to eat. In response to the expanding area of the Gulf surface waters covered by the spill, NMFS issued an emergency rule to temporarily close a portion of the Gulf exclusive economic zone (EEZ) to all fishing to ensure seafood safety. The initial closed area (May 2, 2010) extended from approximately the mouth of the Mississippi River to south of Pensacola, Florida, and covered an area of 6,817 square statute miles. The coordinates of the closed area were subsequently modified periodically in response to changes in the size and location of the area affected by the spill. At its largest size on June 2, 2010, the closed area covered 88,522 square statute miles, or approximately 37% of the Gulf EEZ.

The mackerel family, Scombridae, includes tunas, mackerels and bonitos and are among the most important commercial and sport fishes. The habitat of adults in the CMP management unit is the coastal waters out to the edge of the continental shelf in the Atlantic Ocean. Within the area, the occurrence of CMP species is governed by temperature and salinity. All species are seldom found in water temperatures less than 20°C. Salinity preference varies, but these species generally prefer high salinity, less than 36 ppt. The habitat for eggs and larvae of all species in the CMP management unit is the water column. Within the spawning area, eggs and larvae are concentrated in the surface waters.

King Mackerel

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

Spanish Mackerel

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

3.3.1 Reproduction

King Mackerel

Spawning occurs generally from May through October with peak spawning in September (McEachran and Finucane 1979). Eggs are thought to be released and fertilized continuously during these months, with a peak between late May and early July, and with another between late July and early August. Maturity may first occur when the females are 450 to 499 mm (17.7 to 19.6 in) in length and usually occurs by the time they are 800 mm (35.4 in) in length. The most mature ovaries, are found in females by about age 4. Males are usually sexually mature at age 3, at a length of 718 mm (28.3 in). Females in U.S. waters, between the sizes of 446-1,489 mm (17.6 to 58.6 in) release 69,000-12,200,000 eggs. Because both the Atlantic and Gulf

populations spawn while in the northernmost parts of their ranges, there is some thought that they are reproductively isolated groups. Larvae of king mackerel have been found in waters with temperatures between 26-31° C (79-88° F). This developmental period has a short duration. King mackerel can grow up to 0.02 to 0.05 inches (0.54-1.33 mm) per day. This shortened larval stage decreases the vulnerability of the larva, and is related to the increased metabolism of this fast-swimming species.

Spanish Mackerel

Spawning occurs along the inner continental shelf from April to September (Powell 1975). Eggs and larvae occur most frequently offshore over the inner continental shelf at temperatures between 20 to 32°C and salinities between 28 and 37 ppt. They are also most frequently found in water depths from 9 m to about 84 m, but are most common in < 50 m.

3.3.2 Development, Growth and Movement Patterns

King Mackerel

Juveniles are generally found closer to shore than adults (to less than 9 m) and occasionally in estuaries. Adults are migratory, and the CMP FMP recognizes two migratory groups (Gulf and Atlantic). Typically, adult king mackerel are found in southern climates (south Florida and extreme south Texas/Mexico) in winter and farther north in the summer. Food availability and water temperature are likely causes of these migratory patterns. King mackerel mature at approximately age 2 to 3 and have longevities of 24 to 26 years for females and 23 years for males (GMFMC and SAFMC 1985; MSAP 1996; Brooks and Ortiz 2004).

Spanish Mackerel

Juveniles are most often found in coastal and estuarine habitats and at temperatures greater than 25° C and salinities greater than 10 ppt. Although they occur in waters of varying salinity, juveniles appear to prefer marine salinity levels and generally are not considered estuarine-dependent. Like king mackerel, adult Spanish mackerel are migratory, generally moving from wintering areas of south Florida and Mexico to more northern latitudes in spring and summer. Spanish mackerel generally mature at age 1 to 2 and have a maximum age of approximately 11 years (Powell 1975).

3.3.3 Protected Species

The Gulf and South Atlantic CMP hook-and-line fishery is classified in the 2013 MMPA List of Fisheries as a Category III fishery, meaning the annual mortality and serious injury of a marine mammal resulting from the fishery is less than or equal to 1% of the maximum number of animals, not including natural moralities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population.

The Gulf and South Atlantic coastal migratory pelagic gillnet fishery is classified as Category II fishery. This classification indicates an occasional incidental mortality or serious injury of a marine mammal stock resulting from the fishery (1-50% annually of the potential biological removal). The fishery has no documented interaction with marine mammals; NOAA Fisheries

Service classifies this fishery as Category II based on analogy (i.e., similar risk to marine mammals) with other gillnet fisheries.

In a 2007 biological opinion, NOAA Fisheries Service determined the continued existence of endangered green, leatherback, hawksbill, and Kemp's ridley sea turtles, and threatened loggerhead sea turtles was not likely to be jeopardized by fishing for CMP species in the Southeastern United States. Other listed species are not likely to be adversely affected, including ESA-listed whales, Gulf sturgeon, and *Acropora* spp. corals.

3.4 Description of the Economic Environment

3.4.1 Economic Description of the Commercial Fishery

Number of Vessels, Harvest, and Ex-vessel Value
An economic description of the commercial fisheries for the CMP species is contained in Vondruska (2010) and is incorporated herein by reference. Updated select summary statistics are provided in Table 3.4.1.1. Landings information is provided in Section 3.1.

Table 3.4.1.1. Five-year average performance statistics, including number of vessels landing each species, value of the species for those vessels, value of all species for those vessels, and the average value for those vessels.

Species	Number of Vessels	Ex-vessel Value (millions)	Ex-vessel Value All Species (millions)	Average Ex-vessel Value per Vessel
King mackerel, Atlantic migratory group	776	$4.90	$27.24	$35,100
Spanish mackerel, Atlantic migratory group	387	$1.87	$11.99	$31,000
King mackerel, Gulf migratory group	662	$5.38	$32.06	$48,400
Spanish mackerel, Gulf migratory group	208	$0.28	$10.33	$49,700

Notes: Each row should be interpreted individually, as there will be substantial double counting across rows in columns 2 and 4, e.g., the same vessel might fish for different migratory groups of the same or different species.
Five-year averages in column 3 are based on fishing years for king and Spanish mackerels (2007/2008, 2008/2009,…, 2011/2012).
Five-year averages in column 4 are based on calendar years (2007-2011).
All value analyses account for inflation by adjusting dollar amounts reported from 2007-2012 (i.e., current dollars) to 2011 dollars (i.e., constant dollars) using price indices from the Bureau of Labor Statistics, specifically SERIES CUUR0000SA0, CPI-U, ALL ITEMS, NOT SEASONALLY ADJUSTED, BASE=1982-84.
Source: NMFS SEFSC Coastal Fisheries Logbook for landings and NMFS Accumulated Landings System for prices. Note that small amounts (0.03% of king mackerel, 1.95% of Spanish mackerel) are landed in the Northeast and are not counted here. Similar, landings and revenue from State waters by vessels without federal permits are not included.

Economic Activity

An alternative, regional perspective on the economics of the CMP fishery is an economic impact assessment or analysis. The desire to consume CMP species, and availability of these species generate economic activity as consumers spend their incomes on CMP-derived commodities (including services), such as king mackerel purchased at a local fish market and served during restaurant visits. This spurs additional economic activity in the region(s) where CMP species are purchased and fishing occurs, such as jobs in local fish markets, restaurants and fishing supply establishments. It should be clearly noted that, in the absence of CMP species for purchase, consumers would spend their incomes on substitute proteins and other commodities. As such, the economic impact analysis presented below represents a distributional analysis only; that is, it only shows how economic effects can be distributed through regional markets.

Estimates of the average annual economic activity (impacts) associated with the commercial fisheries for CMP species addressed in the amendment were derived using the model developed for and applied in NMFS (2009a) and are provided in Table 3.4.1.2. Business activity for the commercial sector is characterized in the form of full-time equivalent jobs, income impacts (wages, salaries, and self-employed income), and output (sales) impacts (gross business sales). Income impacts should not be added to output (sales) impacts because this would result in double counting.

As noted in Table 3.4.1.1, the annual period refers to the fishing year, as appropriate to the management of the species. The estimates of economic activity include the direct effects (effects in the sector where an expenditure is actually made), indirect effects (effects in sectors providing goods and services to directly affected sectors), and induced effects (effects induced by the personal consumption expenditures of employees in the direct and indirectly affected sectors). Estimates are provided for the economic activity associated with the ex-vessel revenues from the individual CMP species as well as the revenues from all species harvested by these same vessels. The estimates of ex-vessel value in Table 3.4.1.2 are replicated from Table 3.4.1.1.

Table 3.4.1.2. Average annual economic activity associated with the CMP fishery.

Species	Average Ex-vessel Value[1] (millions)	Total Jobs	Harvester Jobs	Output (Sales) Impacts (millions)	Income Impacts (millions)
Atlantic migratory group king mackerel	$4.90	884	115	$64.52	$27.50
- all species[2]	$27.24	4,914	641	$358.66	$152.86
Atlantic migratory group Spanish mackerel	$1.87	337	44	$24.62	$10.49
- all species	$11.99	2,163	282	$157.87	$67.28
Gulf migratory group king mackerel	$5.38	970	127	$70.84	$30.19
- all species	$32.06	5,783	755	$422.12	$179.90
Gulf migratory group Spanish mackerel	$0.28	51	7	$3.69	$1.57
- all species	$10.33	1,863	243	$136.01	$57.97

[1]2011 dollars.
[2]Includes ex-vessel revenues and economic activity associated with the average annual harvests of all species harvested by vessels that harvested the subject CMP species.

Permits
The numbers of commercial permits associated with the CMP fishery on May 29, 2013, are provided in Table 3.4.1.3.

Table 3.4.1.3. Number of permits associated with the CMP fishery as of May 29, 2013.

	Valid[1]	Valid or Renewable
King Mackerel	1,401	1,486
King Mackerel Gillnet	22	23
Spanish Mackerel	1,813	Not applicable

[1]Non-expired. Expired permits may be renewed within one year of expiration.

3.4.2 Economic Description of the Recreational Fishery

The recreational fishery is comprised of the private sector and for-hire sector. The private sector includes anglers fishing from shore (all land-based structures) and private/rental boats. The for-hire sector is composed of the charter vessel and headboat (also called party boat) sectors. Charter vessels generally carry fewer passengers and charge a fee on an entire vessel basis, whereas headboats carry more passengers and payment is per person.

Harvest
Recreational harvest information is provided in Section 3.1.

Effort
Extrapolated recreational effort derived from the MRFSS/MRIP database, which excludes Texas, can be characterized in terms of the number of trips as follows:

Target effort - The number of individual angler trips, regardless of trip duration, where the angler indicated that the species was targeted as either the first or the second primary target for the trip. The species did not have to be caught.

Catch effort - The number of individual angler trips, regardless of trip duration and target intent, where the individual species was caught. The fish caught did not have to be kept.

All recreational trips - The total estimated number of recreational trips taken, regardless of target intent or catch success.

Estimates of average annual recreational effort, 2007-2011, for the CMP species addressed in this amendment are provided in Tables 3.4.2.1-4. In each table, where appropriate, the "total" refers to the total number of target or catch trips, as appropriate, while "all trips" refers to the total number of trips across all species regardless of target intent of catch success. The estimates were evaluated by calendar year and not fishing year. As a result, while the results may not be fully reflective of effort associated with specific stocks (e.g., Gulf migratory group versus Atlantic migratory group for king or Spanish mackerel), the results are consistent with fishing activity based on area fished.

Among the two species examined, Spanish mackerel is subject to more target and catch effort than king mackerel for the Gulf states (Table 3.4.2.1). Spanish mackerel is also subject to more catch effort than target effort, whereas more trips target than catch king mackerel.

The effort situation is somewhat different for the South Atlantic states (Table 3.4.2.2). While Spanish mackerel still records the highest average number of catch trips per year, the difference over king mackerel is not as pronounced as in the Gulf. Further, more trips target king mackerel than Spanish mackerel. Further, both species are subject to more target effort than catch effort. East Florida dominates for both species and effort type.

If examined by mode, in the Gulf, the private mode accounts for the most target and catch effort for king mackerel (Table 3.4.2.3). For Spanish mackerel, however, the shore mode dominates target effort, while the private mode accounts for the most catch trips. In the South Atlantic, the private mode leads for both species and effort type (Table 3.4.2.4).

Table 3.4.2.1. Average annual (calendar year) recreational effort (thousand trips) in the Gulf of Mexico, by species and by state, across all modes, 2007-2011.

	Target Trips					
Species	Alabama	W Florida	Louisiana	Mississippi	Total	All Trips
King Mackerel	84	385	1	1	472	23,600
Spanish Mackerel	68	762	0	1	830	
	Catch Trips					
King Mackerel	49	229	3	2	283	23,600
Spanish Mackerel	83	1,070	18	13	1,185	

Source: NMFS MRFSS/MRIP and SERO.

Table 3.4.2.2. Average annual (calendar year) recreational effort (thousand trips) in the South Atlantic, by species and by state, across all modes, 2007-2011.

	Target Trips					
	E Florida	Georgia	North Carolina	South Carolina	Total	All Trips
King Mackerel	365	11	166	86	629	19,842
Spanish Mackerel	186	4	258	64	512	
	Catch Trips					
King Mackerel	263	7	63	22	355	19,842
Spanish Mackerel	242	9	200	54	505	

Source: NMFS MRFSS/MRIP and SERO.

Table 3.4.2.3. Average annual (calendar year) recreational effort (thousand trips) in the Gulf of Mexico, by species and by mode, across all states, 2007-2011.

	Target Trips				
	Shore	Charter	Private	Total	All Trips
King Mackerel	210	30	231	472	23,600
Spanish Mackerel	534	17	280	830	
	Catch Trips				
King Mackerel	49	94	140	283	23,600
Spanish Mackerel	529	55	600	1,185	

Source: NMFS MRFSS/MRIP and SERO.

Table 3.4.2.4. Average annual (calendar year) recreational effort (thousand trips) in the South Atlantic, by species and by mode, across all states, 2007-2011.

	Target Trips				
	Shore	Charter	Private	Total	All Trips
King Mackerel	102	27	500	629	19,842
Spanish Mackerel	231	8	273	512	
	Catch Trips				
King Mackerel	7	49	298	355	19,842
Spanish Mackerel	189	22	294	505	

Source: NMFS MRFSS/MRIP and SERO.

Tables 3.4.2.5-12 contain estimates of the average annual (2007-2011) target trips and catch trips, by species, for each state and mode.

Table 3.4.2.5. Average annual (calendar year) recreational effort (thousand trips), Alabama, by species and by mode, 2007-2011.

	Shore		**Charter**		**Private**		**Total**	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	38	10	5	10	42	29	84	49
Spanish Mackerel	38	36	2	7	28	40	68	83

Source: NMFS MRFSS/MRIP and SERO.

Table 3.4.2.6. Average annual (calendar year) recreational effort (thousand trips), West Florida, by species and by mode, 2007-2011.

	Shore		**Charter**		**Private**		**Total**	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	172	38	25	83	188	108	385	229
Spanish Mackerel	495	491	15	40	252	539	762	1,070

Source: NMFS MRFSS/MRIP and SERO.

Table 3.4.2.7. Average annual (calendar year) recreational effort (thousand trips), Louisiana, by species and by mode, 2007-2011.

	Shore		**Charter**		**Private**		**Total**	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	0	0	0	1	0	2	1	3
Spanish Mackerel	0	1	0	2	0	15	0	18

Source: NMFS MRFSS/MRIP and SERO.

Table 3.4.2.8. Average annual (calendar year) recreational effort (thousand trips), Mississippi, by species and by mode, 2007-2011.

	Shore		**Charter**		**Private**		**Total**	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	0	0	0	1	1	1	1	2
Spanish Mackerel	0	1	0	6	0	6	1	13

Source: NMFS MRFSS/MRIP and SERO.

Table 3.4.2.9. Average annual (calendar year) recreational effort (thousand trips), East Florida, by species and by mode, 2007-2011.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	18	5	19	35	328	223	365	263
Spanish Mackerel	119	116	1	3	67	123	186	242

Source: NMFS MRFSS/MRIP and SERO.

Table 3.4.2.10. Average annual (calendar year) recreational effort (thousand trips), Georgia, by species and by mode, 2007-2011.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	0	0	0	0	11	7	11	7
Spanish Mackerel	2	2	0	1	2	7	4	9

Source: NMFS MRFSS/MRIP and SERO.

Table 3.4.2.11. Average annual (calendar year) recreational effort (thousand trips), North Carolina, by species and by mode, 2007-2011.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	37	1	2	9	128	53	166	63
Spanish Mackerel	67	41	4	12	187	148	258	200

Source: NMFS MRFSS/MRIP and SERO.

Table 3.4.2.12. Average annual (calendar year) recreational effort (thousand trips), South Carolina, by species and by mode, 2007-2011.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	47	1	5	5	33	16	86	22
Spanish Mackerel	43	31	3	7	17	16	64	54

Source: NMFS MRFSS/MRIP and SERO.

Similar analysis of recreational effort is not possible for the headboat sector because the headboat data are not collected at the angler level. Estimates of effort in the headboat sector are provided in terms of angler days, or the number of standardized 12-hour fishing days that account for the different half-, three-quarter-, and full-day fishing trips by headboats.

Headboat effort and harvest data, however, is collected through the NMFS Southeast Fisheries Science Center Headboat Survey (Headboat Survey) program. The average annual (2007-2011) number of headboat angler days is presented in Table 3.4.2.13. Due to confidentiality issues, Georgia estimates are combined with those of East Florida on the Atlantic, while Alabama is combined with West Florida as part of the summarization process for the Gulf (i.e., as part of the

estimation process and not a result of confidentiality merging). As shown in Table 3.4.2.13, in both regions, Florida dominates, followed by Texas in the Gulf and South Carolina in the South Atlantic.

Table 3.4.2.13. Southeast headboat angler days, 2007-2011.

	Gulf of Mexico				
	Louisiana	**Mississippi**	**Texas**	**West Florida/ Alabama**	**Total**
2007	2,522	0	63,764	136,880	203,166
2008	2,945	0	41,188	130,176	174,309
2009	3,268	0	50,737	142,438	196,443
2010	217	*	47,154	111,018	158,389
2011	1,886	1,771	47,284	157,025	207,966
5-year Average	2,168	1,771**	50,025	135,507	189,471
	South Atlantic				
	East Florida/ Georgia	**North Carolina**	**South Carolina**	**Total**	
2007	157,150	29,002	60,729	246,881	
2008	124,119	16,982	47,287	188,388	
2009	136,420	19,468	40,919	196,807	
2010	123,662	21,071	44,951	189,684	
2011	124,041	18,457	44,645	187,143	
5-year Average	133,078	20,996	47,706	201,781	

Source: Headboat Survey, NMFS, SEFSC, Beaufort Lab.
*Confidential.
**Because the average totals are used to represent expectations of future activity, the 2011 number of trips is provided as best representative of the emergent headboat sector in Mississippi.

Permits

The numbers of CMP for-hire (charter or headboat) permits on March 21, 2013, are provided in Table 3.4.2.14. The for-hire permits do not distinguish between charter vessels and headboats, though information on the primary method of operation is collected on the permit application form. Some vessels may operate as both a charter vessel and a headboat, depending on the season or purpose of the trip. An estimated 79 headboats in the Gulf and an estimated 75 headboats in the South Atlantic participate in the Headboat Survey.

There are no specific federal permitting requirements for recreational anglers to harvest CMP species. Instead, anglers are required to possess either a state recreational fishing permit that authorizes saltwater fishing in general, or be registered in the federal National Saltwater Angler Registry system, subject to appropriate exemptions.

Table 3.4.2.14. Number of CMP for-hire (charter vessel/headboat) permits.

	Valid[1]	Valid or Renewable
Gulf of Mexico	1,210	1,337
Gulf Historical Captain	34	40
South Atlantic	1,475	Not applicable

[1]Non-expired. Expired permits may be renewed within one year of expiration.

Economic Value, Expenditures, and Economic Activity

Participation, effort, and harvest are indicators of the value of saltwater recreational fishing. However, a more specific indicator of value is the satisfaction that anglers experience over and above their costs of fishing. The monetary value of this satisfaction is referred to as consumer surplus. The value or benefit derived from the recreational experience is dependent on several quality determinants, which include fish size, catch success rate, and the number of fish kept. These variables help determine the value of a fishing trip and influence total demand for recreational fishing trips.

The estimated consumer surplus per fish kept for king mackerel to anglers in both the Gulf and South Atlantic, based on the estimated willingness-to-pay to avoid a reduction in the bag limit, is $7 (assumed 2006 dollars; Whitehead 2006). A comparable estimate has not been identified for Spanish mackerel.

While anglers receive economic value as measured by the consumer surplus associated with fishing, for-hire businesses receive value from the services they provide. Producer surplus is the measure of the economic value these operations receive. Producer surplus is the difference between the revenue a business receives for a good or service, such as a charter or headboat trip, and the cost the business incurs to provide that good or service. Estimates of the producer surplus associated with for-hire trips are not available. However, proxy values in the form of net operating revenues are available (D. Carter, NMFS SEFSC, personal communication, August 2010). These estimates were culled from several studies – Liese and Carter (2011), Dumas et al. (2009), Holland et al. (1999), and Sutton et al. (1999). Estimates of net operating revenue per angler trip (2009 dollars) on representative charter trips (average charter trip regardless of area fished) are $146 for Louisiana through east Florida, $135 for east Florida, $156 for northeast Florida, and $128 for North Carolina. For charter trips into the EEZ only, net operating revenues are $141 in east Florida and $148 in northeast Florida. For full-day and overnight trips only, net operating revenues are estimated to be $155-$160 in North Carolina. Comparable estimates are not available for Georgia, South Carolina, or Texas.

Net operating revenues per angler trip are lower for headboats than for charter boats. Net operating revenue estimates for a representative headboat trip are $48 in the Gulf (all states and all of Florida), and $63-$68 in North Carolina. For full-day and overnight headboat trips, net operating revenues are estimated to be $74-$77 in North Carolina. Comparable estimates are not available for Georgia and South Carolina.

These value estimates should not be confused with angler expenditures or the economic activity (impacts) associated with these expenditures. While expenditures for a specific good or service may represent a proxy or lower bound of total value (a person would not logically pay more for

something than it was worth to them), they do not represent the net value (benefits minus cost), nor the change in value associated with a change in the fishing experience.

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

Estimates of the regional economic activity (impacts) associated with the recreational fishery for king and Spanish mackerel were derived using average coefficients for recreational angling across all fisheries (species), as derived by an economic add-on to the MRFSS, and described and utilized in NMFS (2009a) and are provided in Tables 3.4.2.15-18. Business activity is characterized in the form of FTE jobs, income impacts (wages, salaries, and self-employed income), output impacts (gross business sales), and value-added impacts (difference between the value of goods and the cost of materials or supplies). Job and output (sales) impacts are equivalent metrics across both the commercial and recreational sectors. Income and value-added impacts are not equivalent, though similarity in the magnitude of multipliers may result in roughly equivalent values. Neither income nor value-added impacts should be added to output (sales) impacts because this would result in double counting. Job and output (sales) impacts, however, may be added across sectors.

Estimates of the average expenditures by recreational anglers are provided in NMFS (2009b) and are incorporated herein by reference. Estimates of the average recreational effort (2007-2011) and associated economic impacts (2008 dollars) are provided in Table 3.4.2.15. Target trips were used as the measure of recreational effort. As previously discussed, more trips may catch some species than target the species. Where such occurs, estimates of the economic activity associated with the average number of catch trips can be calculated based on the ratio of catch trips to target trips because the average output impact and jobs per trip cannot be differentiated by trip intent. For example, if the number of catch trips is three times the number of target trips for a particular state and mode, the estimate of the associated activity would equal three times the estimate associated with target trips. Table 3.4.2.16 contain estimates of the average annual (2007-2011) target trips, by species, for each state and mode.

It should be noted that output impacts and value added impacts are not additive and the impacts for each species should not be added because of possible duplication (some trips may target multiple species). Also, the estimates of economic activity should not be added across states to generate a regional total because state-level impacts reflect the economic activity expected to occur within the state before the revenues or expenditures “leak” outside the state, possibly to another state within the region. Under a regional model, economic activity that “leaks” from, for example, Alabama into Louisiana, would still occur within the region and continue to be tabulated. As a result, regional totals would be expected to be greater than the sum of the individual state totals. Regional estimates of the economic activity associated with the fisheries for these species are unavailable at this time.

The distribution of the estimates of economic activity by state and mode are consistent with the effort distribution with the exception that charter anglers, on average, spend considerably more money per trip than anglers in other modes. As a result, the number of charter trips can be a fraction of the number of private trips, yet generate similar estimates of the amount of economic activity. For example, as derived from Table 3.4.2.15, the average number of charter king mackerel target trips in West Florida (25,300 trips) was only approximately 13% of the number of private trips (187,979), whereas the estimated output (sales) impacts by the charter anglers (approximately $8.5 million) was approximately 93% of the output impacts of the private trips (approximately $9.1 million).

Table 3.4.2.15. Summary of king mackerel target trips (2007-2011 average) and associated economic activity (2012 dollars), Gulf states. Output and value added impacts are not additive.

	Alabama	**West Florida**	**Louisiana**	**Mississippi**	**Texas**
	Shore Mode				
Target Trips	37,876	171,848	0	0	unknown
Output Impact	$2,954,870	$12,418,993	$0	$0	
Value Added Impact	$1,589,549	$7,215,028	$0	$0	
Jobs	34	124	0	0	
	Private/Rental Mode				
Target Trips	41,782	187,979	347	1,341	unknown
Output Impact	$2,592,292	$9,100,990	$30,176	$40,782	
Value Added Impact	$1,419,221	$5,411,790	$14,841	$19,545	
Jobs	26	85	0	0	
	Charter Mode				
Target Trips	4,628	25,300	426	139	unknown
Output Impact	$2,569,513	$8,471,685	$216,259	$46,055	
Value Added Impact	$1,414,431	$5,022,837	$122,791	$25,951	
Jobs	32	82	2	0	
	All Modes				
Target Trips	84,286	385,127	773	1,480	unknown
Output Impact	$8,116,675	$29,991,669	$246,435	$86,836	
Value Added Impact	$4,423,200	$17,649,655	$137,633	$45,497	
Jobs	92	290	2	1	

Source: effort data from the NMFS MRFSS/MRIP, economic activity results calculated by NMFS SERO using the model developed for NMFS (2009a).

Table 3.4.2.16. Summary of king mackerel target trips (2007-2011 average) and associated economic activity (2012 dollars), South Atlantic states. Output and value added impacts are not additive.

	North Carolina	South Carolina	Georgia	East Florida
	Shore Mode			
Target Trips	37,113	47,408	0	17,947
Output Impact	$9,912,562	$5,147,891	$0	$546,734
Value Added Impact	$5,519,852	$2,866,467	$0	$317,409
Jobs	112	59	0	5
	Private/Rental Mode			
Target Trips	127,556	33,068	11,070	328,019
Output Impact	$7,424,590	$1,551,501	$184,435	$13,227,424
Value Added Impact	$4,186,496	$905,280	$111,875	$7,904,088
Jobs	75	17	2	130
	Charter Mode			
Target Trips	1,540	5,476	318	19,418
Output Impact	$639,289	$1,969,232	$21,318	$8,115,065
Value Added Impact	$358,770	$1,112,535	$12,442	$4,777,567
Jobs	8	24	0	78
	All Modes			
Target Trips	166,209	85,952	11,388	365,384
Output Impact	$17,976,441	$8,668,624	$205,752	$21,889,223
Value Added Impact	$10,065,119	$4,884,283	$124,317	$12,999,064
Jobs	195	99	2	214

Source: effort data from the NMFS MRFSS/MRIP, economic activity results calculated by NMFS SERO using the model developed for NMFS (2009a).

Table 3.4.2.17. Summary of Spanish mackerel target trips (2007-2011 average) and associated economic activity (2012 dollars), Gulf states. Output and value added impacts are not additive.

	Alabama	West Florida	Louisiana	Mississippi	Texas
	Shore Mode				
Target Trips	37,870	495,146	380	151	unknown
Output Impact	$2,954,402	$35,782,871	$28,628	$2,168	
Value Added Impact	$1,589,297	$20,788,675	$14,451	$1,081	
Jobs	34	356	0	0	
	Private/Rental Mode				
Target Trips	27,594	251,992	0	237	unknown
Output Impact	$1,712,022	$12,200,175	$0	$7,207	
Value Added Impact	$937,293	$7,254,682	$0	$3,454	
Jobs	17	114	0	0	
	Charter Mode				
Target Trips	2,153	14,793	0	165	unknown
Output Impact	$1,195,368	$4,953,425	$0	$54,669	
Value Added Impact	$658,010	$2,936,871	$0	$30,806	
Jobs	15	48	0	1	
	All Modes				
Target Trips	67,617	761,931	380	553	unknown
Output Impact	$5,861,791	$52,936,471	$28,628	$64,044	
Value Added Impact	$3,184,600	$30,980,228	$14,451	$35,341	
Jobs	66	518	0	1	

Source: effort data from the NMFS MRFSS/MRIP, economic activity results calculated by NMFS SERO using the model developed for NMFS (2009a).

Table 3.4.2.18. Summary of Spanish mackerel target trips (2007-2011 average) and associated economic activity (2012 dollars), South Atlantic states. Output and value added impacts are not additive.

	North Carolina	South Carolina	Georgia	East Florida
	Shore Mode			
Target Trips	66,917	43,394	1,623	118,706
Output Impact	$17,872,953	$4,712,022	$27,878	$3,616,236
Value Added Impact	$9,952,630	$2,623,766	$16,717	$2,099,424
Jobs	202	54	0	36
	Private/Rental Mode			
Target Trips	187,165	17,139	2,113	66,616
Output Impact	$10,894,222	$804,136	$35,204	$2,686,302
Value Added Impact	$6,142,915	$469,203	$21,354	$1,605,208
Jobs	110	9	0	26
	Charter Mode			
Target Trips	4,404	3,000	89	595
Output Impact	$1,828,200	$1,078,834	$5,966	$248,659
Value Added Impact	$1,025,990	$609,497	$3,482	$146,393
Jobs	22	13	0	2
	All Modes			
Target Trips	258,486	63,533	3,825	185,917
Output Impact	$30,595,375	$6,594,993	$69,049	$6,551,197
Value Added Impact	$17,121,534	$3,702,465	$41,553	$3,851,024
Jobs	334	76	1	65

Source: effort data from the NMFS MRFSS/MRIP, economic activity results calculated by NMFS SERO using the model developed for NMFS (2009a).

As previously noted, the values provided in Tables 3.4.2.15-18 only reflect effort derived from the MRFSS/MRIP. Because the headboat sector in the Southeast Region is not covered by the MRFSS/MRIP, the results in Tables 3.4.2.15-18 do not include estimates of the economic activity associated with headboat anglers. While estimates of headboat effort are available (see Table 3.4.2.13), species target information is not collected in the Headboat Survey, which prevents the generation of estimates of the number of headboat target trips for individual species. Further, because the model developed for NMFS (2009a) was based on expenditure data collected through the MRFSS/MRIP, expenditure data from headboat anglers was not available and appropriate economic expenditure coefficients have not been estimated. As a result, estimates of the economic activity associated with the headboat sector comparable to those of the other recreational sector modes cannot be provided.

3.5 Description of the Social Environment

Demographic profiles of coastal communities can be found in Amendment 18 to the FMP (GMFMC and SAFMC 2011). The referenced description focuses on available geographic and demographic data to identify communities having a strong relationship with king mackerel and Spanish mackerel fishing using 2008 ALS data. A strong relationship is defined as having significant landings and revenue for these species. Thus, positive or negative impacts from regulatory change are expected to occur in places with greater landings. This section has been updated using 2011 ALS data, the most recent year available.

The descriptions of Gulf and South Atlantic communities in this document include information about the top communities based upon a "regional quotient" (RQ) of commercial landings and value for coastal migratory pelagic species. The RQ is the proportion of landings and value out of the total landings and value of that species for that region, and is a relative measure. The Keys communities are included in both Gulf and South Atlantic communities to allow comparison within each region. Although almost all communities in the South Atlantic and Gulf regions have commercial landings of multiple species in addition to CMP species, these top communities are referred to in this document as "CMP Communities." These areas are those that would be most likely to experience the effects of proposed actions that could change the CMP fishery and impact the participants and associated businesses and communities within the region. The identified CMP communities in this section are referenced in Social Effects sections in Section 4 in order to provide information on how the actions and alternatives could impact specific communities.

More detailed information about communities with the highest RQs are found in Amendment 18 (GMFMC and SAFMC 2011). If a community is identified as a CMP community based on the RQ, this does not necessarily mean that the community would experience significant impacts due to changes in the CMP fishery if a different species or number of species were also important to the local community and economy.

In addition to examining the RQs to understand how South Atlantic and Gulf communities are engaged and reliant on fishing, and specifically on CMP species, indices were created using secondary data from permit and landings information for the commercial sector and permit information for the recreational sector (Jepson and Colburn 2013; Jacob et al. 2013). Fishing engagement is primarily the absolute numbers of permits, landings, and value. For commercial fishing, the analysis used the number of vessels designated commercial by homeport and owner address, value of landings and total number of commercial permits for each community. For recreational engagement we used the number of recreational permits, vessels designated as recreational by homeport and owners address. Fishing reliance has the same variables as engagement divided by population to give an indication of the per capita influence of this activity.

Using a principal component and single solution factor analysis each community receives a factor score for each index to compare to other communities. Taking the communities with the highest RQs, factor scores of both engagement and reliance for both commercial and recreational fishing were plotted. Two thresholds of one and ½ standard deviation above the mean are

plotted onto the graphs to help determine a threshold for significance. The factor scores are standardized therefore a score above 1 is also above one standard deviation. A score above ½ standard deviation is considered engaged or reliant, with anything above 1 standard deviation to be very engaged or reliant.

The reliance index uses factor scores that are normalized. The factor score is similar to a z-score in that the mean is always zero and positive scores are above the mean and negative scores are below the mean. Comparisons between scores are relative but one should bear in mind that like a z-sore the factor score puts the community on a spot in the distribution. Objectively they have a score related to the percent of communities with those similar attributes. For example, a score of 2.0 means the community is two standard deviations above the mean and is among the 2.27% most vulnerable places in the study (normal distribution curve). Reliance score comparisons between communities are relative. However, if the community scores greater than two standard deviations above the mean, this indicated that the community is dependent on the species. By examining the component variables on the reliance index and how they are weighted by factor score, this provides a measurement of commercial reliance. The reliance index provides a way to gauge change over time with these communities but also provides a comparison of one community with another.

3.5.1 Gulf of Mexico Coastal Pelagic Fishing Communities

King Mackerel

Commercial Communities

In Figure 3.5.1.1, Destin, Florida, lands about one-third of all king mackerel for Gulf fishing communities and those landings represent about 40% of the value. Several Florida Keys communities (Key West, Islamorada, and Marathon) are included in the top communities, but the Keys communities make up a significant portion of the landings and value of commercial king mackerel. In addition, three other Florida communities make up the top fifteen, four Louisiana communities, one Texas community, two in Alabama and one community in Mississippi.

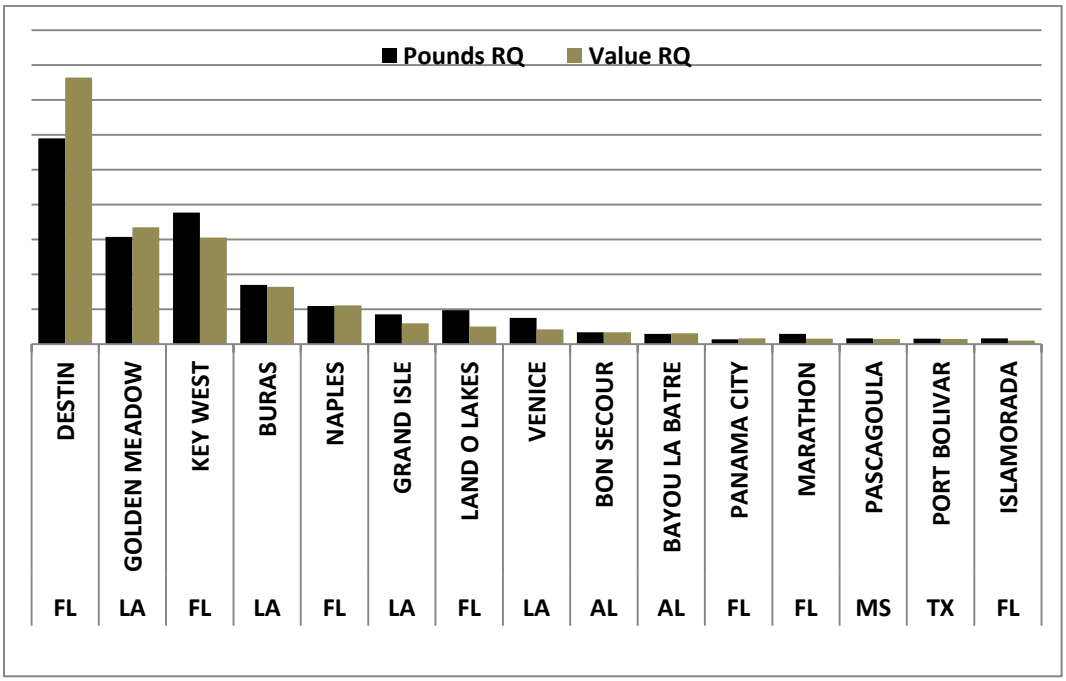

Figure 3.5.1.1. Top fifteen Gulf communities ranked by pounds and value regional quotient (RQ) of king mackerel. The actual RQ values (y-axis) are omitted from the figure to maintain confidentiality.
Source: SERO Community ALS 2011

Reliance on and Engagement with Commercial and Recreational Fishing

The details of how these indices are generated are explained in the introduction to the Social Environment section. For king mackerel (Figure 3.5.1.2), the primary communities that demonstrate high levels of commercial fishing engagement and reliance include Bayou La Batre, Alabama; Key West, Florida; Marathon, Florida; Panama City, Florida; Boothville-Venice, Louisiana, and Grand Isle, Louisiana. Communities with substantial recreational engagement and reliance include Destin, Florida; Islamorada, Florida; Key West, Florida; Marathon, Florida; Naples, Florida; and Panama City, Florida.

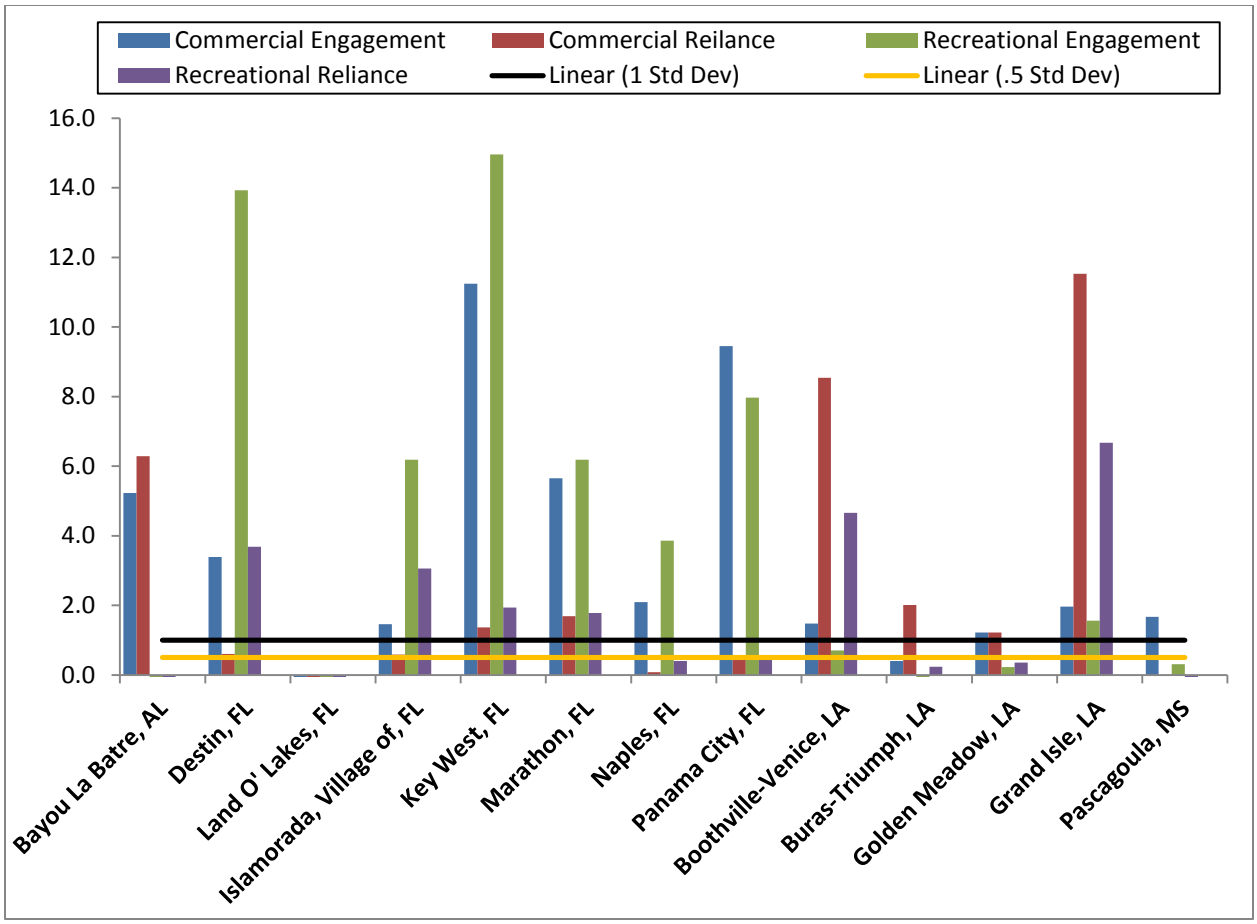

Figure 3.5.1.2. Commercial and recreational reliance and engagement for Gulf communities with the top regional quotients for king mackerel.
Source: SERO Social Indicator Database 2013

<u>Spanish Mackerel</u>

Commercial Communities

In Figure 3.5.1.3, Destin, Florida, lands one quarter of all Spanish mackerel for Gulf fishing communities and those landings represent over 25% of the value. The second ranked community of Bayou La Batre, Alabama includes about 20% of the landings and about 15% of the value of Spanish mackerel. Ten other Florida communities make up the top fifteen (including two Florida Keys communities), three additional Alabama communities, and one Louisiana community. No Texas or Mississippi communities are included in the top 15 for Spanish mackerel.

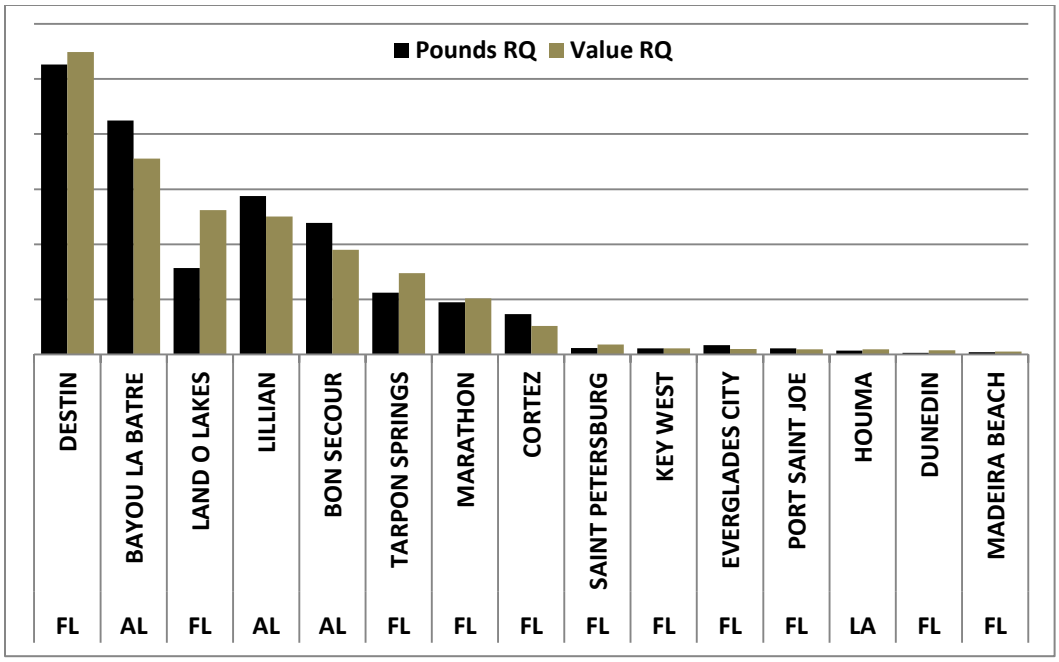

Figure 3.5.1.3. Top fifteen Gulf communities ranked by pounds and value of regional quotient (RQ) of Spanish mackerel. The actual RQ values (y-axis) are omitted from the figure to maintain confidentiality.
Source: SERO Community ALS 2011

Reliance on and Engagement with Commercial and Recreational Fishing
For significant communities in the Spanish mackerel fishery, Figure 3.5.1.4 shows commercial and recreational engagement and reliance on fishing. The primary commercial communities that could be affected by change in the Spanish mackerel fishery include Bayou La Batre, Alabama and Houma, Louisiana. Florida communities include Destin, Everglades, Key West, Marathon, St. Petersburg, and Tarpon Springs. The primary recreational communities in the Spanish mackerel fishery are all in Florida and include Destin, Key West, Marathon, Port St. Joe, St. Petersburg, and Tarpon Springs.

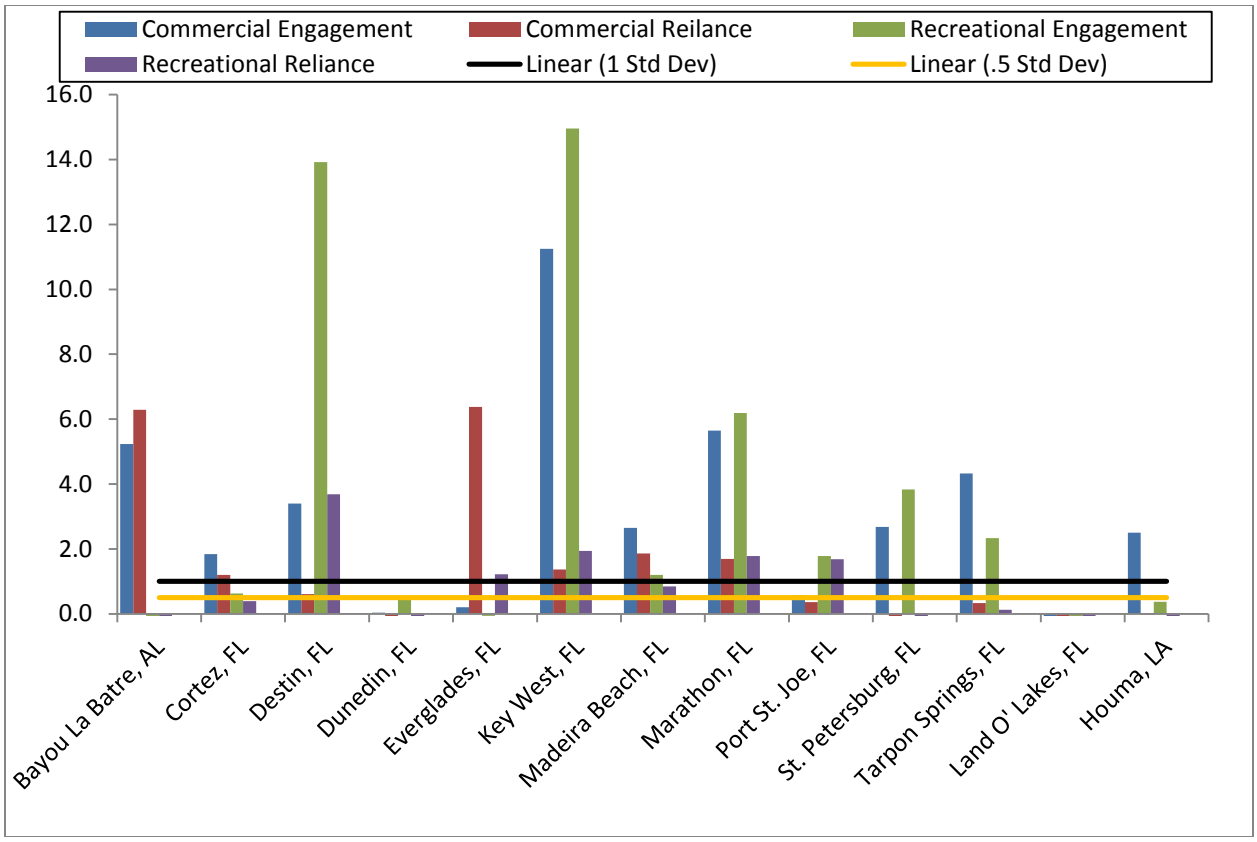

Figure 3.5.1.4. Commercial and recreational reliance and engagement for Gulf communities with the top regional quotients for Spanish mackerel.
Source: SERO Social Indicator Database 2013

3.5.2 South Atlantic Coastal Pelagic Fishing Communities

King Mackerel

Commercial Communities

In Figure 3.5.2.1, Cocoa, Florida, lands about 25% of all king mackerel for South Atlantic fishing communities and those landings represent almost over 25% of the value. Only four North Carolina communities make up the top fifteen, and no South Carolina or Georgia communities are included in this graph.

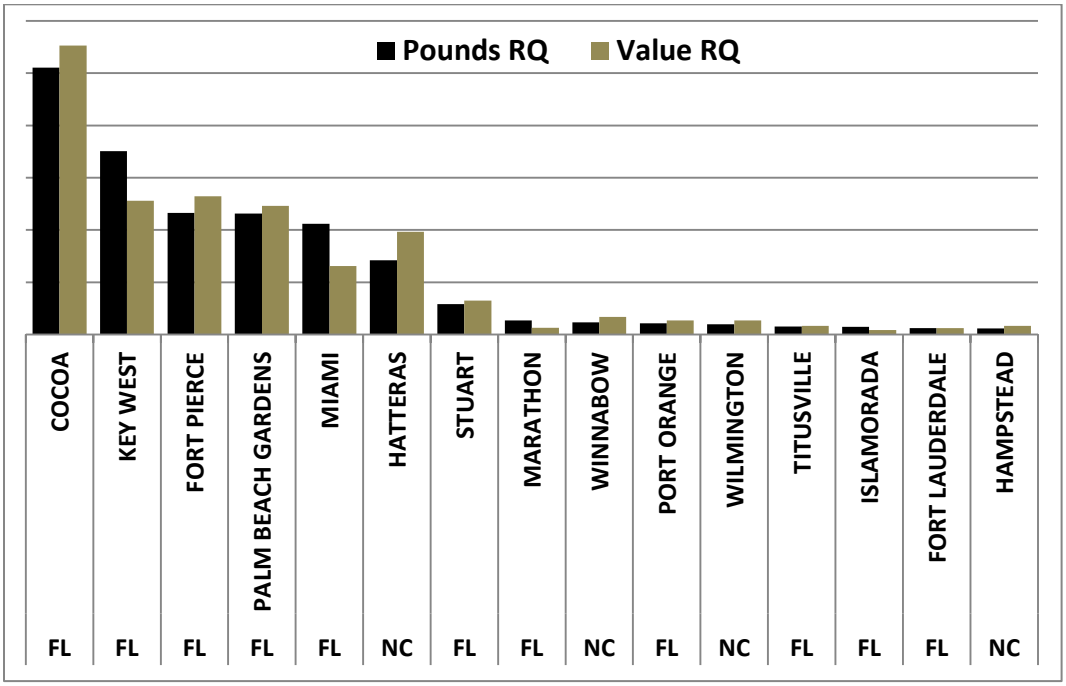

Figure 3.5.2.1. Top fifteen South Atlantic communities ranked by pounds and value regional quotient (RQ) of king mackerel. The actual RQ values (y-axis) are omitted from the figure to maintain confidentiality.
Source: ALS 2011

Reliance on and Engagement with Commercial and Recreational Fishing

For king mackerel (Figure 3.5.2.2), the primary communities that demonstrate high levels of commercial fishing engagement and reliance are include Fort Pierce, Florida; Key West, Florida; Marathon, Florida; Miami Florida; and Wilmington, North Carolina. Communities with substantial recreational engagement and reliance include the Florida communities of Fort Lauderdale, Islamorada, Key West, Marathon, and Miami.

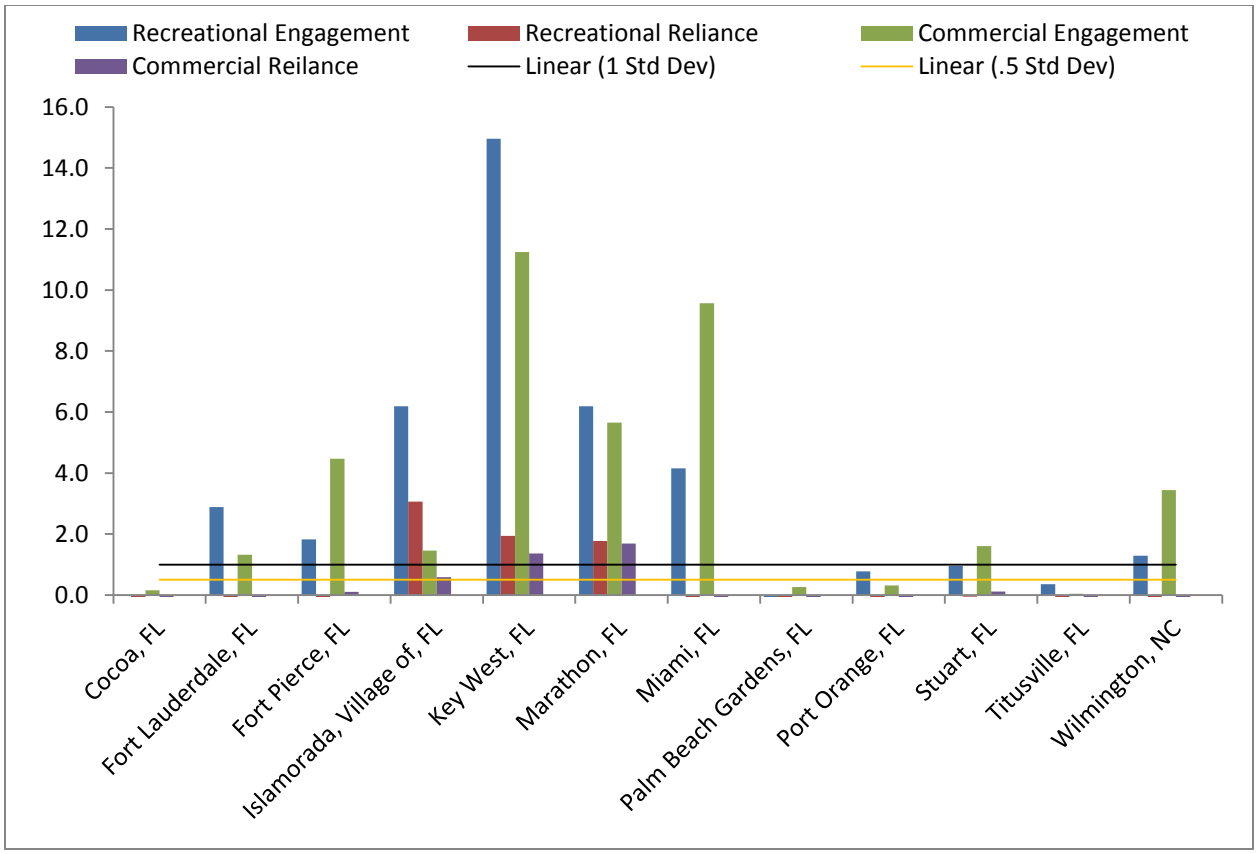

Figure 3.5.2.2. Commercial and recreational reliance and engagement for South Atlantic communities with the top regional quotients for king mackerel.
Source: SERO Social Indicator Database 2013

<u>Spanish Mackerel</u>

Commercial Communities

For Spanish mackerel in the South Atlantic (Figure 3.5.2.3), Fort Pierce, Florida, has almost 32% of the landings and over 25% of the value. Cocoa, Florida, is second with about 17% of landings and 17% of value. Although Hatteras, North Carolina ranked third for value, the community had lower landings than Palm Beach Gardens, Florida. No South Carolina or Georgia communities are included in the top fifteen for Spanish mackerel.

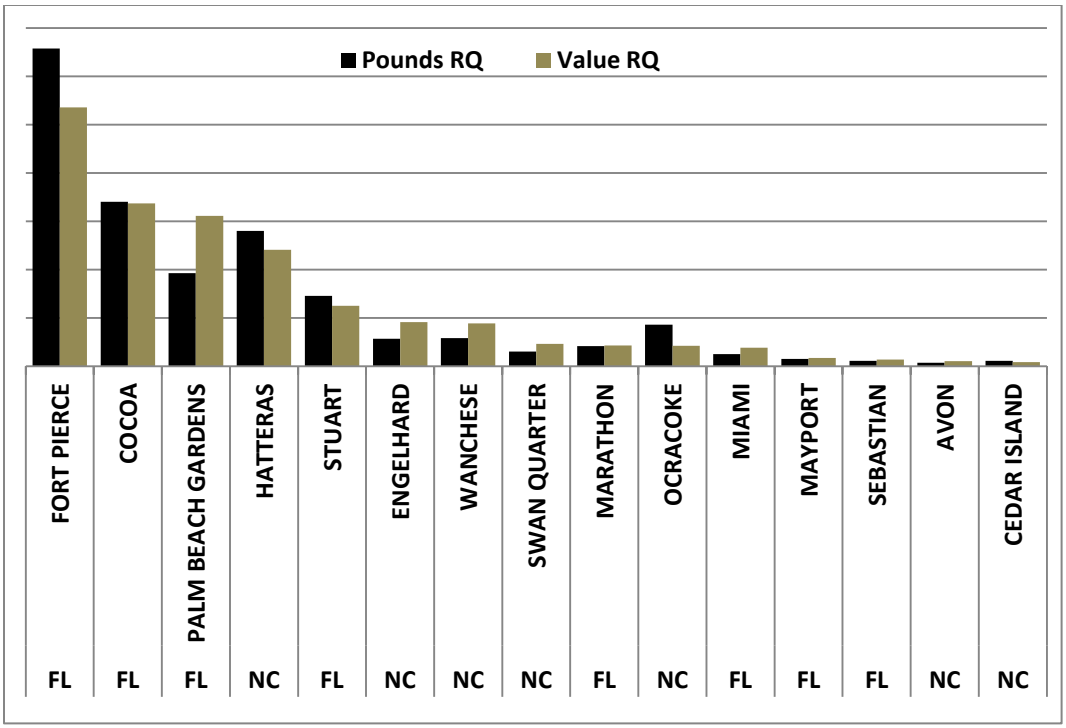

Figure 3.5.2.3. Top fifteen South Atlantic communities ranked by pounds and value of regional quotient (RQ) of Spanish mackerel. The actual RQ values (y-axis) are omitted from the figure to maintain confidentiality.
Source: ALS 2011

Reliance on and Engagement with Commercial and Recreational Fishing
For significant communities in the Spanish mackerel fishery, Figure 3.5.2.4 shows commercial and recreational engagement and reliance on fishing. The primary commercial communities in the Spanish mackerel fishery include Fort Pierce, Florida; Marathon, Florida; Miami, Florida; Sebastian, Florida; Stuart, Florida; and Wanchese, North Carolina. The primary recreational communities in the Spanish mackerel fishery are Fort Pierce, Florida; Marathon, Florida; Miami, Florida; Sebastian, Florida; and Wanchese, North Carolina.

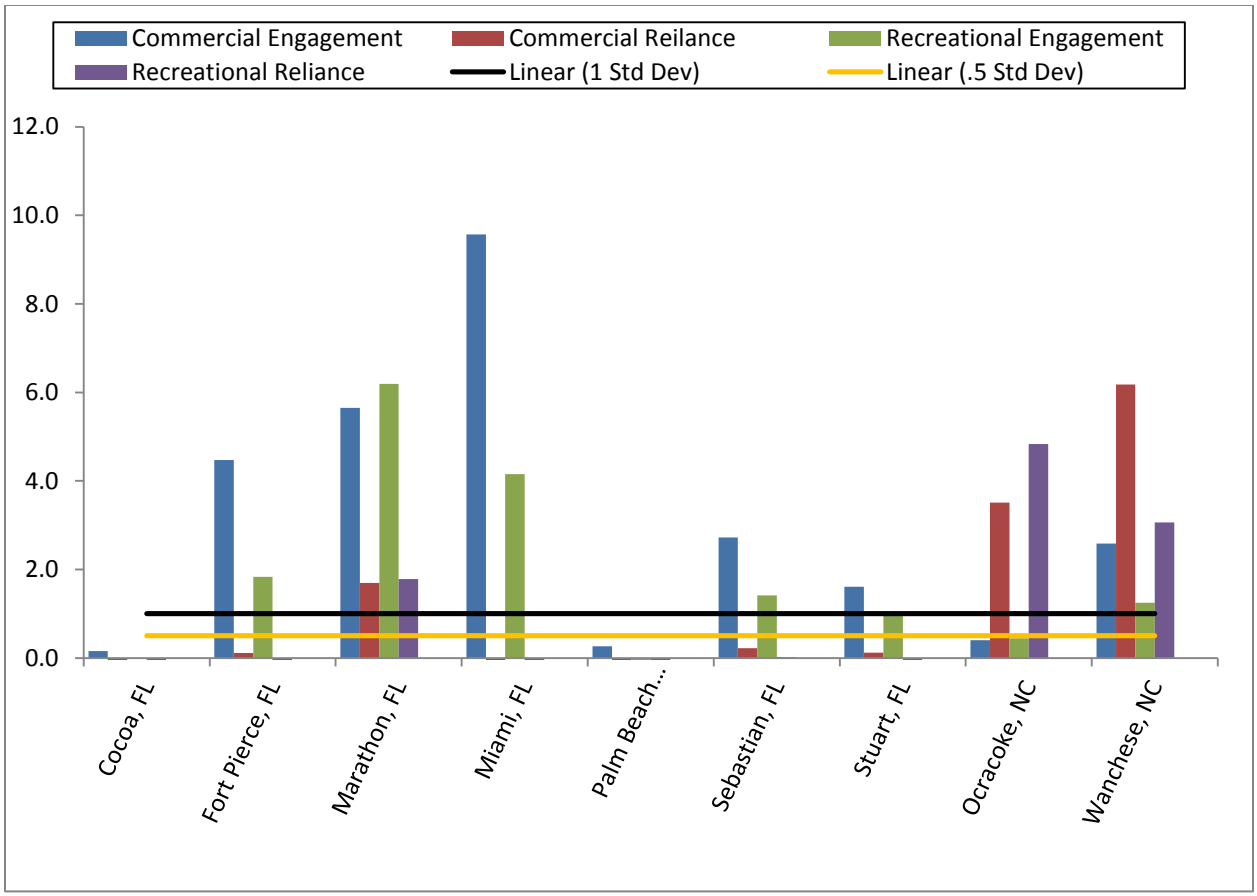

Figure 3.5.2.4. Commercial and recreational reliance and engagement for South Atlantic communities with the top regional quotients for Spanish mackerel.
Source: SERO Social Indicator Database 2013

3.5.3 Mid-Atlantic Coastal Pelagic Fishing Communities

The South Atlantic Council manages Atlantic migratory groups of king mackerel, Spanish mackerel, and cobia through the Mid-Atlantic region as well as in the South Atlantic region. Overall, landings of these species in the Mid-Atlantic region are very low, and management actions by the South Atlantic Council likely have minimal impacts on Mid-Atlantic communities.

King Mackerel

Commercial Communities

For king mackerel in the Mid-Atlantic (Figure 3.5.3.1), the relatively highest level of landings at the regional level occur in Accomac, Virginia. Other Mid-Atlantic communities with commercial king mackerel landings include Hampton, Virginia; Barnegat Light, New Jersey; Amagansett, New York; Moriches, New York; and Montauk, New York. No communities in Pennsylvania, Delaware, or Maryland are included in the top Mid-Atlantic communities for king mackerel.

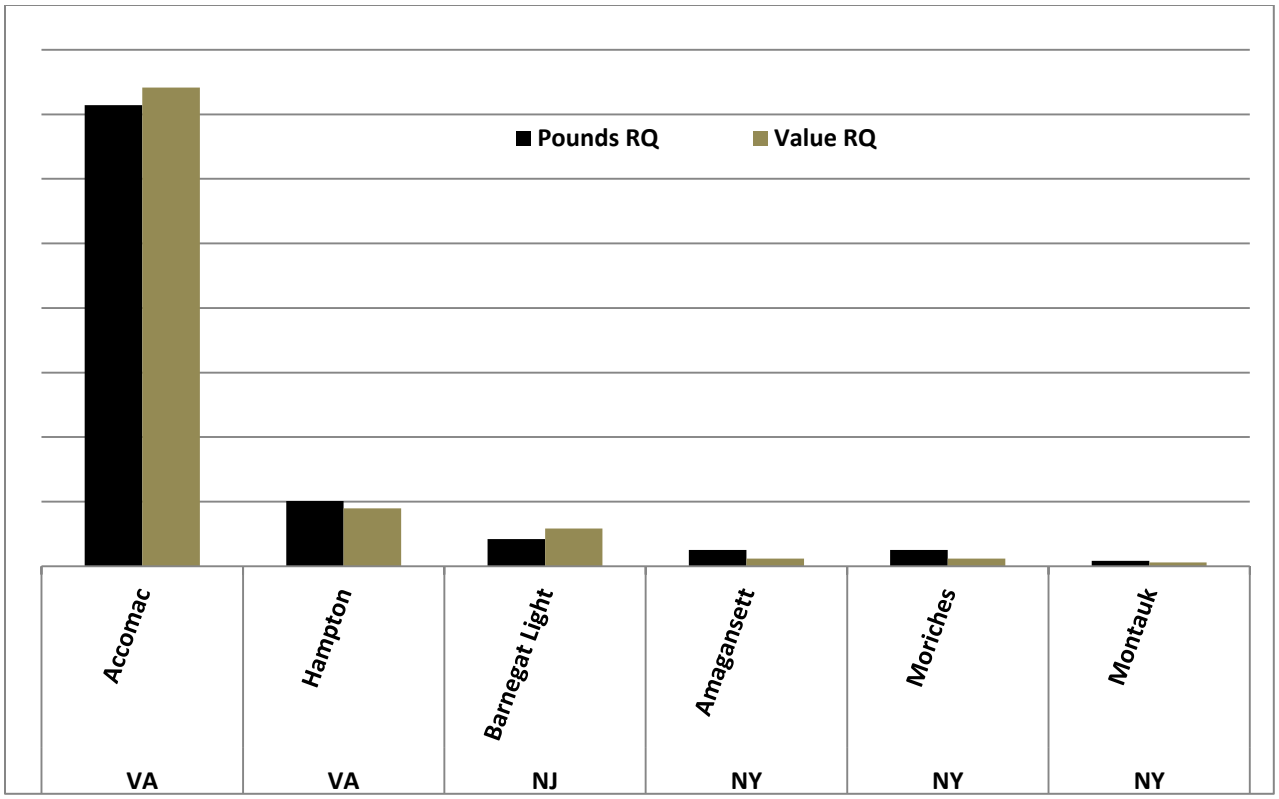

Figure 3.5.3.1. Top Mid-Atlantic communities ranked by pounds and value regional quotient (RQ) of king mackerel.
Source: NEFSC 2011

Reliance on and Engagement with Commercial and Recreational Fishing
For king mackerel (Figure 3.5.3.2), the primary Mid-Atlantic communities that demonstrate relatively high levels of commercial fishing engagement and reliance are include Montauk, New York; and Barnegat Light, New Jersey. Communities with substantial recreational engagement and reliance include Montauk, New York; Hampton, Virginia; and Barnegat Light, New Jersey.

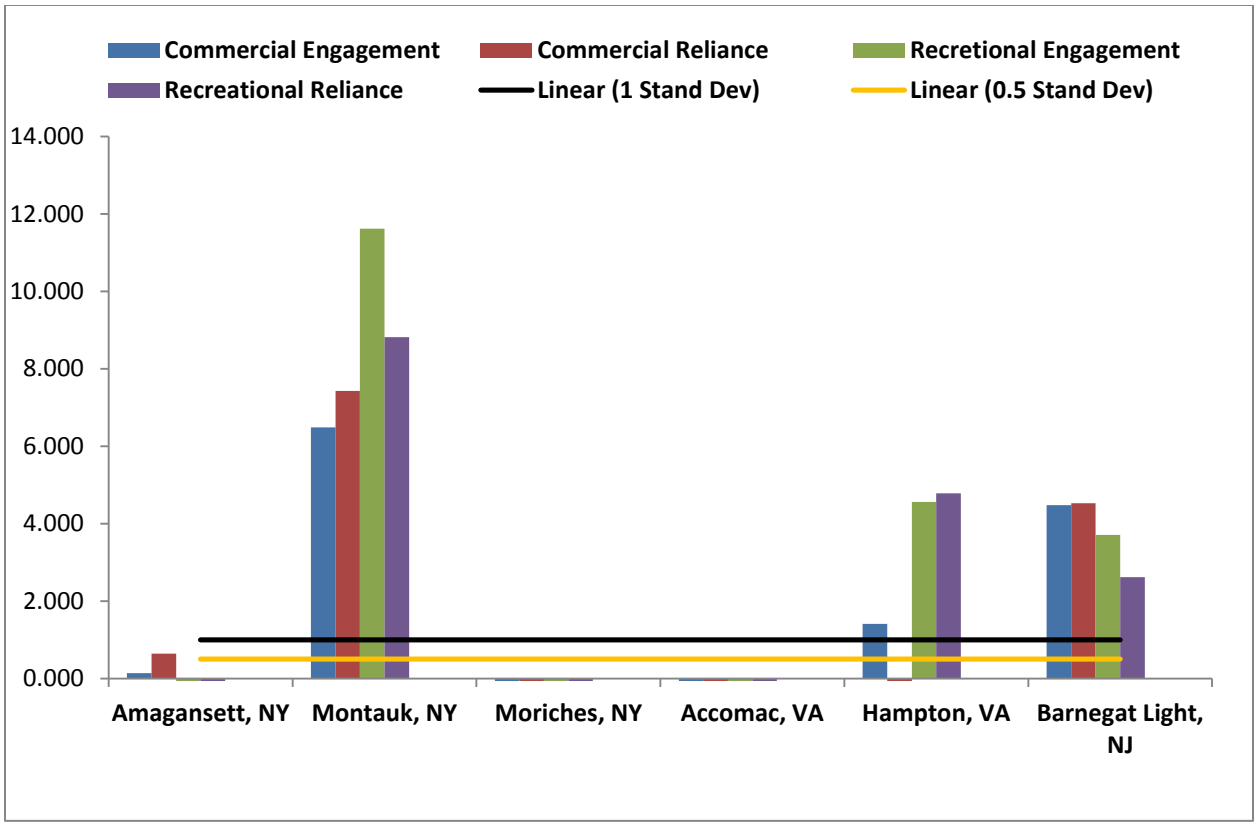

Figure 3.5.3.2. Commercial and recreational reliance and engagement for Mid-Atlantic communities with the top regional quotients for king mackerel.
Source: SERO/NEFSC Social Indicator Database 2013

<u>Spanish Mackerel</u>

Commercial Communities

For Spanish mackerel in the Atlantic (Figure 3.5.3.3), the primary community with the relatively highest level of landings of at the regional level is Virginia Beach, Virginia. The Virginia counties of Gloucester, Northampton, and Northcumberland also include communities with higher levels of landings in the Mid-Atlantic region. Some communities in Maryland reported landings of Spanish mackerel (minimal), but no communities in New York, New Jersey, Pennsylvania, or Delaware are included in the top communities for Spanish mackerel.

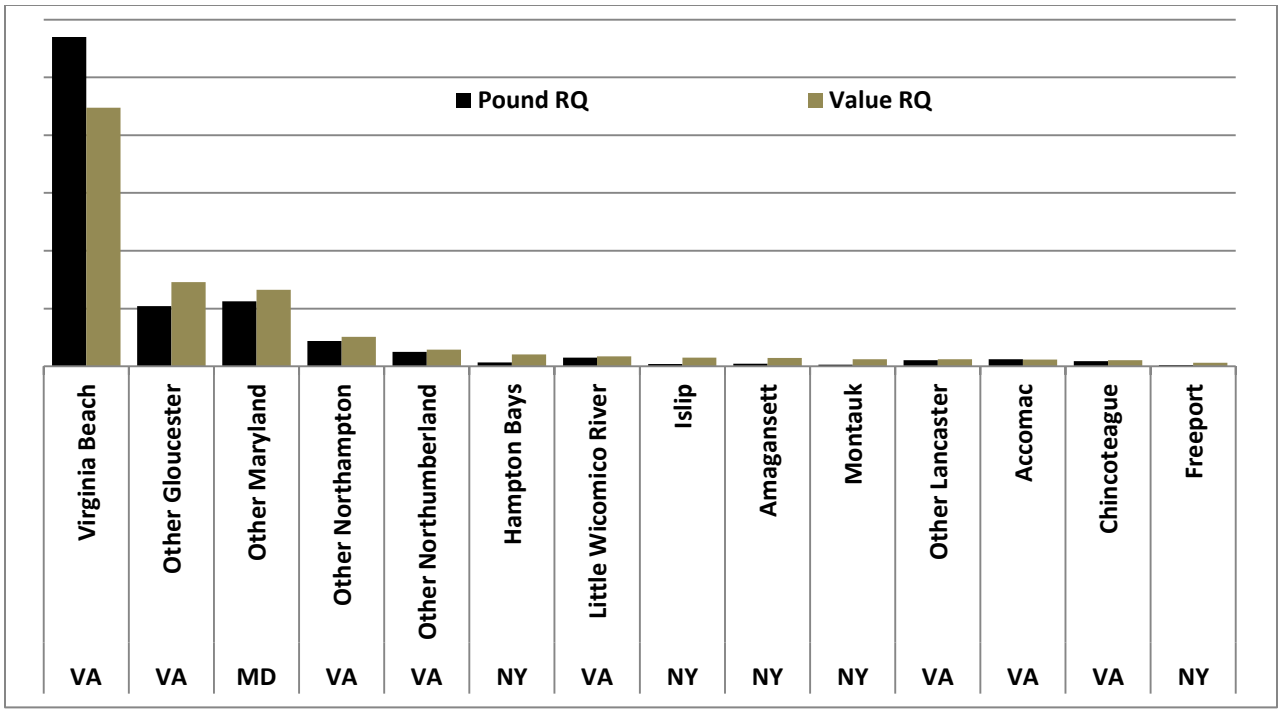

Figure 3.5.3.3. Top Mid-Atlantic communities ranked by pounds and value regional quotient (RQ) of Spanish mackerel.
Source: NEFSC 2011

Reliance on and Engagement with Commercial and Recreational Fishing
For king mackerel (Figure 3.5.3.4), the primary communities that demonstrate relatively high levels of commercial fishing engagement and reliance are Montauk, New York, and Hampton Bays, New York. Communities with relatively substantial recreational engagement and reliance include Montauk, New York; Virginia Beach, Virginia; Chincoteague, Virginia; and Freeport, New York.

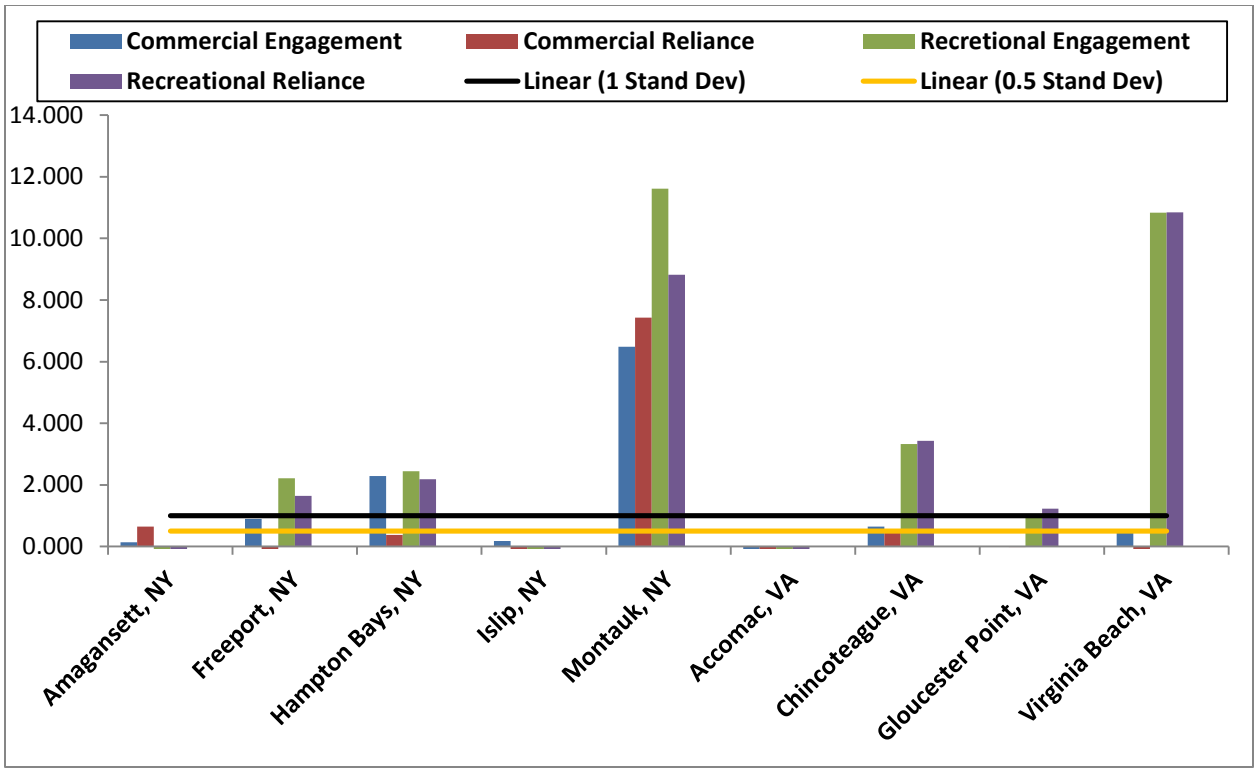

Figure 3.5.3.4. Commercial and recreational reliance and engagement for Mid-Atlantic communities with the top regional quotients for Spanish mackerel.
Source: SERO/NEFSC Social Indicator Database 2013

3.5.4 Environmental Justice Considerations

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

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

In order to identify the potential for EJ concern, the rates of minority populations (non-white, including Hispanic) and the percentage of the population that was below the poverty line were examined. The threshold for comparison that was used was 1.2 times the state average for minority population rate and percentage of the population below the poverty line. If the value for the community or county was greater than or equal to 1.2 times the state average, then the community or county was considered an area of potential EJ concern. Census data for the year

2010 were used. Estimates of the state minority and poverty rates, associated thresholds, and community rates are provided in Table 3.5.4.1 and 3.5.4.2; note that only communities that exceed the minority threshold and/or the poverty threshold are included in the table**.**

Table 3.5.4.1. Environmental justice thresholds (2010 U.S. Census data) for counties in the Gulf region. Only coastal counties (west coast for Florida) with minority and/or poverty rates that exceed the state threshold are listed.

State	County/Parish	Minority Rate	Minority Threshold*	Poverty Rate	Poverty Threshold*
Florida		**47.4**	**56.88**	**13.18**	**15.81**
	Dixie	8.7	38.7	19.6	-3.79
	Franklin	19.2	28.2	23.8	-7.99
	Gulf	27	20.4	17.5	-1.69
	Jefferson	38.5	8.9	20.4	-4.59
	Levy	17.9	29.5	19.1	-3.29
	Taylor	26.2	21.2	22.9	-7.09
Alabama		**31.5**	**37.8**	**16.79**	**20.15**
	Mobile	39.5	-1.7	19.1	1.05
Mississippi		**41.9**	**50.28**	**15.82**	**18.98**
Louisiana		**39.1**	**46.92**	**15.07**	**18.08**
	Orleans	70.8	-25	23.4	-1.29
Texas		**39.1**	**46.92**	**15.07**	**18.08**
	Cameron	87.4	-24.7	35.7	-15.57
	Harris	63.5	-0.8	16.7	3.43
	Kenedy	71.7	-9	52.4	-32.27
	Kleberg	75	-12.3	26.1	-5.97
	Matagorda	51.9	10.8	21.9	-1.77
	Nueces	65.5	-2.8	19.7	0.43
	Willacy	89	-26.3	46.9	-26.77

*The county minority and poverty thresholds are calculated by comparing the county minority rate and poverty estimate to 1.2 times the state minority and poverty rates. A negative value for a county indicates that the threshold has been exceeded. No counties in Mississippi exceed the state minority or poverty thresholds.

Table 3.5.4.2. Environmental justice thresholds (2010 U.S. Census data) for counties in the South Atlantic region. Only coastal counties (east coast for Florida) with minority and/or poverty rates that exceed the state threshold are listed.

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

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

Another type of analysis uses a suite of indices created to examine the social vulnerability of coastal communities and is depicted in Figures 3.5.4.1 and 3.5.4.1. The three indices are poverty, population composition, and personal disruptions. The variables included in each of these indices have been identified through the literature as being important components that contribute to a community's vulnerability. Indicators such as increased poverty rates for different groups; more single female-headed households; more households with children under the age of 5; and disruptions like higher separation rates, higher crime rates, and unemployment all are signs of populations experiencing vulnerabilities. The data used to create these indices are from the 2005-2009 American Community Survey estimates at the U.S. Census Bureau. The thresholds of 1 and ½ standard deviation are the same for these standardized indices. Again, for those communities that exceed the threshold for all indices it would be expected that they would exhibit vulnerabilities to sudden changes or social disruption that might accrue from regulatory change.

Similar to the reliance index discussed in Section 3.5, the vulnerability indices also use normalized factor scores. Comparison of vulnerability scores is relative, but the score is related to the percent of communities with similar attributes. The social vulnerability indices provide a way to gauge change over time with these communities but also provides a comparison of one community with another.

With regard to social vulnerabilities, the following South Atlantic and Gulf communities exceed the threshold of 0.5 standard deviation for at least one of the social vulnerability indices (Figure 3.5.4.1): Bayou La Batre, Alabama; Cocoa, Fort Pierce, Miami and Stuart in Florida; Golden Meadow and Grand Isle in Louisiana; and Wanchese, North Carolina. The communities of Bayou La Batre and the Florida communities of Cocoa, Fort Pierce and Miami all exceed the thresholds on all three social vulnerability indices. These communities are expressing substantial vulnerabilities and may be susceptible to further effects from any regulatory change depending upon the direction and extent of that change.

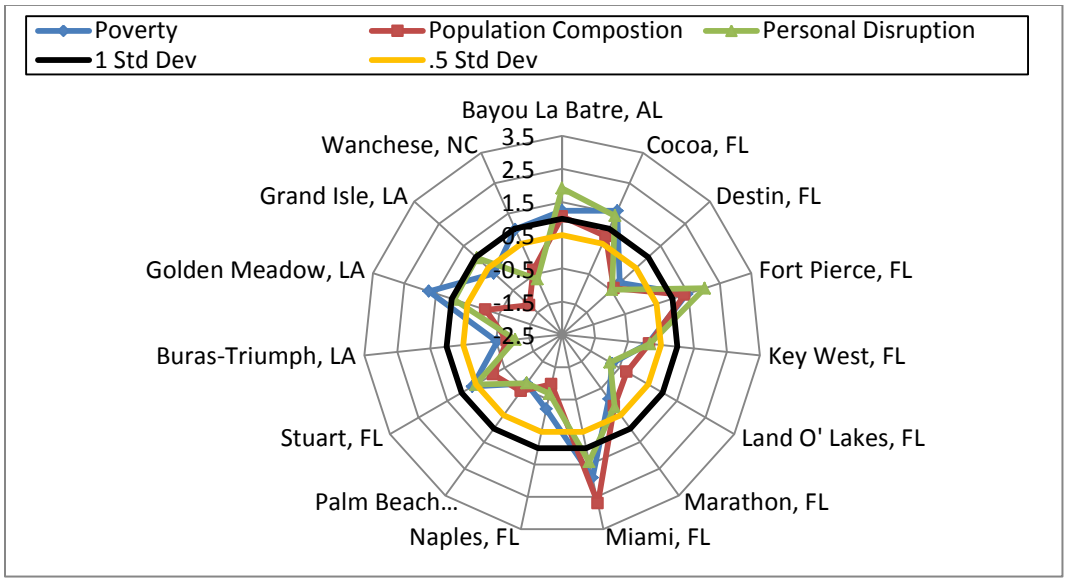

Figure 3.5.4.1. Social vulnerability indices for fifteen communities with the top regional quotients for coastal pelagics.
Source: SERO Social Indicator Database 2013

With regard to social vulnerabilities for the Mid-Atlantic Region, the following communities exceed the threshold of 1/2 standard deviation for at least one of the social vulnerability indices (Figure 3.5.4.2): Norfolk, Virginia; Hampton, Virginia; Chincoteague, Virginia; and Freeport, New York. The Virginia communities of Norfolk and Hampton exceed at least two thresholds on all three social vulnerability indices, but no communities exceed thresholds of all three indices. These communities are expressing substantial vulnerabilities and may be susceptible to further effects from any regulatory change depending upon the direction and extent of that change.

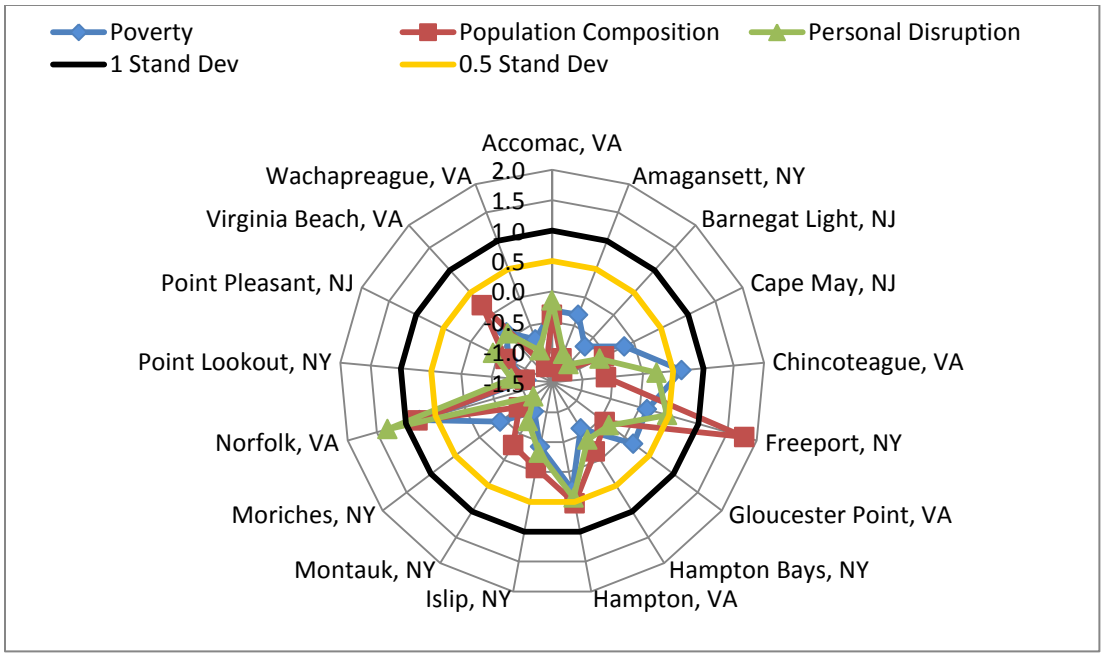

Figure 3.5.4.2. Social vulnerability indices for fifteen communities with the top regional quotients for coastal pelagics.
Source: SERO Social Indicator Database 2013

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

King mackerel and Spanish mackerel are part of an important commercial fishery throughout the South Atlantic and Gulf regions, and specifically in Florida, and the fish are also targeted by recreational fishermen. The actions in this proposed amendment are expected to incur social and economic benefits to users and communities by implementing management measures that would contribute to conservation of the coastal pelagic stocks and to maintaining the commercial and recreational sectors of the fishery. Although there will be some short-term impacts due to some of the proposed management measures, the overall long-term benefits are expected to contribute to the social and economic health of South Atlantic and Gulf coastal communities. Impacts (positive and negative) are expected to be minimal for fishermen and communities in the Mid-Atlantic region.

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

potentially affected individuals to participate in the development process of this amendment and have their concerns factored into the decision process. Public input from individuals who participate in the fishery has been considered and incorporated into management decisions throughout development of the amendment. A public hearing was also held in the Mid-Atlantic region prior to final approval by the Councils.

3.6 Description of the Administrative Environment

3.6.1 Federal Fishery Management

Federal fishery management is conducted under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801 et seq.), originally enacted in 1976 as the Fishery Conservation and Management Act. The Magnuson-Stevens Act claims sovereign rights and exclusive fishery management authority over most fishery resources within the 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 EEZ.

Responsibility for federal fishery management decision-making is divided between the 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 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 Council is responsible for fishery resources in federal waters of the Gulf of Mexico. These waters extend to 200 nautical miles offshore from the nine-mile seaward boundary of the states of Florida and Texas, and the three-mile seaward boundary of the states of Alabama, Mississippi, and Louisiana. The Gulf Council consists of 17 voting members, 11 of whom are appointed by the members appointed by the Secretary, the NMFS Regional Administrator, and one each from each of five Gulf states marine resource agencies. Non-voting members include representatives of the U.S. Fish and Wildlife Service, U.S. Coast Guard (USCG), and Gulf States Marine Fisheries Commission (GSMFC).

The South Atlantic Council is responsible for conservation and management of fishery resources in federal waters of the U.S. South Atlantic. These waters extend from 3 to 200 miles offshore from the seaward boundary of the states of North Carolina, South Carolina, Georgia, and east Florida to Key West. The South Atlantic Council has 13 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. Non-voting members include representatives of the U.S. Fish and Wildlife Service, USCG, and Atlantic States Marine Fisheries Commission (ASMFC).

The Mid-Atlantic Fishery Management Council (Mid-Atlantic Council) has two voting seats on the South Atlantic Council's Mackerel Committee but does not vote during Council sessions. The Mid-Atlantic Council is responsible for fishery resources in federal waters off New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and North Carolina.

The Councils use their respective Scientific and Statistical Committees to review data and science used in assessments and fishery management plans/amendments. Regulations contained within FMPs are enforced through actions of the NMFS' Office for Law Enforcement, the USCG, and various state authorities.

The public is involved in the fishery management process through participation at public meetings, on advisory panels and through council meetings that, with few exceptions for discussing personnel matters, are open to the public. The regulatory process is in accordance with the Administrative Procedures Act, in the form of "notice and comment" rulemaking, which provides extensive opportunity for public scrutiny and comment, and requires consideration of and response to those comments.

3.6.2 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 have the authority to manage their respective state fisheries including enforcement of fishing regulations. Each of the eight states exercises legislative and regulatory authority over their states' natural resources through discrete administrative units. Although each agency listed below 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.

The states are also involved through the GSMFC and the ASMFC in management of marine fisheries. These commissions were created to coordinate state regulations and develop management plans for interstate fisheries.

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 commissions to develop and implement cooperative State-Federal fisheries regulations.

More information about these agencies can be found from the following web pages:
Texas Parks & Wildlife Department - http://www.tpwd.state.tx.us
Louisiana Department of Wildlife and Fisheries http://www.wlf.state.la.us/
Mississippi Department of Marine Resources http://www.dmr.state.ms.us/
Alabama Department of Conservation and Natural Resources http://www.dcnr.state.al.us/
Florida Fish and Wildlife Conservation Commission http://www.myfwc.com
Georgia Department of Natural Resources, Coastal Resources Division http://crd.dnr.state.ga.us/
South Carolina Department of Natural Resources http://www.dnr.sc.gov/
North Carolina Department of Environmental and Natural Resources
http://portal.ncdenr.org/web/guest/

CHAPTER 4. ENVIRONMENTAL CONSEQUENCES

4.1 Action 1: Sale of King and Spanish Mackerel

Alternative 1: No Action - No federal permit requirement to sell king and Spanish mackerel. Sale of king and Spanish mackerel harvested under the bag limit in or from the exclusive economic zone (EEZ) of the Gulf of Mexico (Gulf) or Atlantic is allowed for persons that possess the necessary state permits. However, if a commercial closure has been implemented, the sale or purchase of king or Spanish mackerel of the closed species, migratory group, subzone, or gear type, is prohibited, including any king or Spanish mackerel taken under the bag limits.

Alternative 2: Prohibit sale of king mackerel caught under the bag limit in or from the EEZ of the Gulf of Mexico or Atlantic, with the exception of for-hire trips in which the vessel also holds a federal king mackerel commercial permit. Prohibit sale of Spanish mackerel caught under the bag limit in or from the EEZ of the Gulf of Mexico or Atlantic, with the exception of for-hire trips in which the vessel also holds a federal Spanish mackerel commercial permit. All sales of king and Spanish mackerel during a commercial closure are prohibited.

Option a. The South Atlantic Council's jurisdiction
Preferred Option b. The Gulf Council's jurisdiction

Alternative 3: Prohibit sale of king and Spanish mackerel caught under the bag limit. For a person to sell king or Spanish mackerel in or from the EEZ of the Gulf of Mexico or Atlantic, those fish must have been harvested on a commercial trip aboard a vessel with a commercial vessel permit/endorsement. A king mackerel permit is required to sell king mackerel and a Spanish mackerel permit is required to sell Spanish mackerel.

Preferred Option a. The South Atlantic Council's jurisdiction
Option b. The Gulf Council's jurisdiction

Preferred Alternative 4: In addition to Alternative 1, 2, or 3, king or Spanish mackerel harvested or possessed under the bag limit during a fishing tournament may be donated to a dealer who will sell those fish and donate the proceeds to a charity, but only if the tournament organizers have a permit from a state to conduct that tournament, and the transfer and reporting requirements listed below are followed.

Preferred Option a. The South Atlantic Council's jurisdiction
Preferred Option b. The Gulf Council's jurisdiction

Transfer and reporting requirements: A federally licensed wholesale dealer must be present to accept the donated fish directly from the anglers. The wholesale dealer sells the fish and must donate the monetary value (sale price or cash equivalent of value received for the landings) from the sale of tournament-caught fish to a charitable organization as determined by the state. The monetary value received from the sale of tournament-caught fish may not be used to pay for tournament expenses. The wholesale dealer instructs the tournament what records participating anglers must provide (according to their trip ticket or other reporting requirements) and how fish must be handled and iced according to HACCP standards. The fish are reported through normal reporting procedures by the wholesale dealer and must be identified as tournament catch.

4.1.1 Direct and Indirect Effects on the Physical/Biological Environments

King and Spanish mackerel caught under the bag limit are typically caught at the ocean surface with hook-and-line gear which typically do not come in contact with bottom habitat. Hook-and-line gear still have the potential to snag and entangle bottom structures and cause tear-offs or abrasions (Barnette 2001). If gear is lost or improperly disposed of, it can entangle marine life. Entangled gear often becomes fouled with algal growth. If fouled gear becomes entangled on corals, the algae may eventually overgrow and kill any corals present. Though these negative effects are possible, it is not likely that any alternatives presented in Action 1 will have a measurable effect on the physical environment.

Removal of fish from the population through fishing can reduce overall population size if fishing effort is not maintained at sustainable levels. Impacts of these alternatives on the biological environment would depend on the resulting reduction or increase in fishing effort from changes in fishing behavior as a result of the management action defined in each alternative.

Sale of bag limit caught king and Spanish mackerel may be resulting in "double counting", or fish being counted against both the commercial hook-and-line and recreational allocations of the annual catch limit (ACL), particularly with regard to catches from for-hire vessels. The majority of commercial sales by charter vessels occur in the Florida Keys where approximately 81 charter vessels in Monroe County alone hold both charter and commercial king mackerel permits. Double counting may be inflating the actual landings, contributing to ACL overruns, and decreasing the amount of fish available to commercial fishermen under their quota. If double counting is occurring, and is resulting in subzones being closed prematurely, then the current physical and biological impacts to the environment may be less than presently thought due to an overestimation of effort. If double counting is not occurring, then physical and biological impacts to the environment would remain status quo.

Alternative 1 would not result in any change in previously stated effects to the physical and biological or ecological environment; however, the potential for double counting still exists.

Alternative 2 would prohibit the sale of bag limit caught king and Spanish mackerel, with the exception of those for-hire vessels possessing the appropriate federal king and/or Spanish mackerel commercial permit. **Option a** would constrain these effects to the South Atlantic Fishery Management Council's (South Atlantic Council) jurisdiction and **Preferred Option b** would constrain these effects to the Gulf of Mexico Fishery Management Council's (Gulf Council) jurisdiction. The potential for double counting (and its associated effects) of fish may still exist under this alternative. If a recreational angler fishing aboard a for-hire vessel lands king and/or Spanish mackerel which are subsequently sold through the for-hire operator's appropriate federal permit(s), and that recreational angler is later queried by the Marine Recreational Information Program (MRIP) and reports having harvested those fish recreationally, then that recreational angler's landings could be counted against both the recreational and commercial ACLs. If ACLs are artificially met faster due to double counting, there is potential for a positive biological impact to the stock since fish that otherwise would have been landed would presumably be left in the water.

Alternative 3 would prohibit the sale of all bag limit caught king and Spanish mackerel. **Alternative 3, Preferred Option a** would make this alternative applicable only to those individuals fishing for mackerel in or from the Exclusive Economic Zone (EEZ) of the South Atlantic and **Option b** would be applicable only to fishing in the Gulf of Mexico (Gulf) EEZ. Some reduction in recreational catch may occur if a portion of resource participants elect not to harvest mackerel if they are not allowed to sell them. In such cases, there may be some, however minimal, positive benefits to stock size.

Alternative 4 would prohibit the sale of bag limit caught king or Spanish mackerel as specified in **Alternative 3**, with the exception of state-permitted tournaments. **Preferred Alternative 4, Preferred Options a** and **b** would make this alternative applicable to those individuals fishing for mackerel in or from the EEZ of the Atlantic or the Gulf of Mexico. This would rectify any issues with double counting of tournament-caught mackerel in the EEZ of the Atlantic or the Gulf of Mexico because dealers would be required to identify tournament-caught fish. Recreational landings may increase as states create and implement tournament permits, which would allow for charitable contributions of fish.

For all alternatives, the described impacts on the physical and biological environments would be the same for either **Option a,** or **Option b**. The impacts would be greatest if both options were chosen.

4.1.2 Direct and Indirect Effects on the Economic Environment

Federal data sources for the economic analyses are incomplete in that federal commercial logbooks do not capture landings of fish that come from state waters by vessels without federal commercial permits. To understand the economic impacts of the proposed actions and alternatives it is necessary to have a complete a view of the total landings. The state trip ticket programs were contacted in an effort to create a more complete dataset. This required the states to merge their trip ticket data with federal permit data. The states began work on this analysis in the summer of 2012. They were asked to provide information for the years of 2007 through 2011. However, over the five-year period in this analysis, there were fewer than 100 pounds (lbs) total of Spanish mackerel landed in South Carolina. Consequently, South Carolina is not included in the Spanish mackerel analyses. North Carolina, South Carolina (king mackerel only), Georgia, and Florida (separated by Council jurisdiction) provided landings. No data were obtained from Texas, Mississippi, or Alabama. Data received from Louisiana were not at a fine enough resolution to be included in this analysis. Data from Georgia were confidential and were included with the data from East Florida so they could be reported here. Landings from the west coast of Florida in 2010 and possibly 2011 were potentially impacted by the Deepwater Horizon MC 252 oil spill.

Alternative 1 would have no additional economic effects on the king or Spanish mackerel commercial sectors. **Alternative 2** would prohibit bag limit sales except for those vessels that have both a coastal migratory pelagics (CMP) for-hire and king and/or Spanish mackerel commercial permit. Commercial vessels that are not dually permitted to participate in the CMP for-hire sector and the commercial sector would no longer be allowed to sell a bag limit of fish. **Alternative 3** seeks to eliminate all bag limit sales for king and Spanish mackerel.

The difference between **Alternative 2** and **Alternative 3** is that a dually permitted vessel operating as a for-hire vessel could sell bag-limit quantities of king mackerel or Spanish mackerel under **Alternative 2**. No bag limit sales would be allowed under **Alternative 3.** However, it is not possible to determine from state trip tickets whether a vessel that had both a federal king mackerel or Spanish mackerel permit and a CMP for-hire permit was operating as a commercial or for-hire vessel at the time of the landings.

Table 4.1.2.1 shows the economic effects of **Alternative 2, Preferred Option b** and **Alternative 3, Option b** for West Florida for king mackerel. On average from 2007 through 2011, 77% of the pounds and value of king mackerel landed in West Florida were by vessels that had a king mackerel permit. If a king mackerel permit been required to sell them, whether caught by commercial or recreational fishermen or in federal or state waters, then all the vessels combined that did not have a federal king mackerel permit would have lost an average of $406,392 dollars annually in West Florida.

Table 4.1.2.2 shows the economic effects of **Alternative 2, Option a,** and **Alternative 3, Preferred Option a** for East Florida and Georgia for king mackerel. On average from 2007 through 2011, 91% of the pounds and value of king mackerel landed in East Florida and Georgia were by vessels that had a federal king mackerel permit. If a federal king mackerel permit been required to sell any king mackerel, whether caught by commercial or recreational fishermen or in federal or state waters, then all the vessels combined that did not have a federal king mackerel permit would have lost an average of $507,005 dollars annually in East Florida and Georgia.

Table 4.1.2.3 shows the economic effects of **Alternative 2, Option a** and **Alternative 3, Preferred Option a** for South Carolina for king mackerel. In South Carolina, an average of 76% of the pounds and value of king mackerel in the years 2007 through 2011 were landed by vessels that had a federal king mackerel permit. If a king mackerel permit been required to sell any them, whether caught by commercial or recreational fishermen or in federal or state waters, the all the vessels combined that did not have a federal king mackerel permit would have lost an average of $7,270 dollars annually in South Carolina.

Table 4.1.2.4 shows the economic effects of **Alternative 2, Option a,** and **Alternative 3, Preferred Option a** for North Carolina for king mackerel. In North Carolina, an average of 89% of the pounds and value of king mackerel in the years 2007 through 2011 were landed by vessels that had a federal king mackerel permit. If a king mackerel permit been required to sell any king mackerel, whether caught by commercial or recreational fishermen or in federal or state waters, then all the vessels combined that did not have a federal king mackerel permit would have lost an average of $150,177 dollars annually in North Carolina.

Table 4.1.2.1. Pounds, nominal value, trips, and vessels and percent of each where the vessel held a federal king mackerel permit and landed king mackerel for the years 2007 through 2011 for West Florida (Gulf Council).

	2007	2008	2009	2010	2011	Average
lbs of KM	941,431	1,199,101	1,519,321	1,434,544	1,416,187	1,302,117
lbs KM w/KM Permit	717,851	921,342	1,320,033	1,124,865	909,157	998,650
% lbs KM w/KM Permit	76%	77%	87%	78%	64%	77%
Value of KM	$1,371,089	$1,551,078	$1,883,392	$1,774,033	$1,983,171	$1,712,553
Val KM w/KM Permit	$ 968,205	$1,097,578	$1,707,465	$1,457,651	$1,299,907	$1,306,161
% Val KM w/KM Permit	71%	71%	91%	82%	66%	76%
Trips with KM	1,724	1,915	2,404	1,653	1,722	1,884
Trips KM w/KM Permit	1,153	1,345	1,963	1,421	1,261	1,429
% Trips KM w/KM Permit	67%	70%	82%	86%	73%	76%
Vessels w/ KM	394	421	483	386	381	413
Ves KM w/KM Permit	280	325	375	321	293	319
% Ves KM w/KM Permit	71%	77%	78%	83%	77%	77%

Source: Data were obtained from the Florida trip ticket program in fall of 2012. Nearly all data from Georgia were confidential; therefore they were merged with data from the part of Florida in the South Atlantic.

Table 4.1.2.2. Pounds, nominal value, trips, and vessels and percent of each where the vessel held a federal king mackerel permit and landed king mackerel for the years 2007 through 2011 for East Florida (South Atlantic Council) and Georgia.

	2007	2008	2009	2010	2011	Average
lbs of KM	3,014,512	3,548,319	4,410,000	4,017,539	2,780,337	3,554,141
lbs KM w/KM Permit	2,720,830	3,211,284	3,988,276	4,016,665	2,374,275	3,262,266
% lbs KM w/KM Permit	90%	91%	90%	100%	85%	91%
Value of KM	$5,199,543	$6,321,018	$6,885,109	$7,037,234	$5,711,069	$ 6,230,795
Val KM w/KM Permit	$4,645,532	$5,680,507	$6,402,140	$7,036,255	$4,854,517	$ 5,723,790
% Val KM w/KM Permit	89%	90%	93%	100%	85%	91%
Trips with KM	13,225	15,060	17,291	14,774	12,539	14,578
Trips KM w/KM Permit	11,002	12,948	15,657	14,611	10,357	12,915
% Trips KM w/KM Permit	83%	86%	91%	99%	83%	88%
Vessels w/ KM	1,076	1,176	1,266	1,224	1,070	1,162
Ves KM w/KM Permit	725	851	925	1,016	806	865
% Ves KM w/KM Permit	67%	72%	73%	83%	75%	74%

Source: Data were obtained from each state's trip ticket program in fall of 2012. Nearly all data from Georgia were confidential; therefore they were merged with data from the part of Florida in the South Atlantic.

Table 4.1.2.3. Pounds, nominal value, trips, and vessels and percent of each where the vessel held a federal king mackerel permit and landed king mackerel for the years 2007 through 2011 for South Carolina.

	2007	2008	2009	2010	2011	Average
lbs of KM	39,900	16,718	15,983	13,244	7,354	18,640
lbs KM w/KM Permit	35,393	14,088	11,993	8,358	4,947	14,956
% lbs KM w/KM Permit	89%	84%	75%	63%	67%	76%
Value of KM	$65,271	$27,810	$24,496	$23,913	$17,661	$31,830
Val KM w/KM Permit	$56,373	$22,832	$18,310	$13,989	$11,297	$24,560
% Val KM w/KM Permit	86%	82%	75%	58%	64%	73%
Trips with KM	335	235	213	154	127	213
Trips KM w/KM Permit	215	130	125	98	81	130
% Trips KM w/KM Permit	64%	55%	59%	64%	64%	61%
Vessels w/ KM	53	43	42	31	42	42
Ves KM w/KM Permit	31	26	23	22	20	24
% Ves KM w/KM Permit	58%	60%	55%	71%	48%	58%

Source: Data were obtained from the South Carolina trip ticket program in fall of 2012

Table 4.1.2.4. Pounds, nominal value, trips, and vessels and percent of each where the vessel held a federal king mackerel permit and landed king mackerel for the years 2007 through 2011 for North Carolina.

	2007	2008	2009	2010	2011	Average
lbs of KM	1,018,583	1,005,990	754,879	310,604	400,597	698,131
lbs KM w/KM Permit	870,771	888,298	674,226	269,999	377,363	616,131
% lbs KM w/KM Permit	85%	88%	89%	87%	94%	89%
Value of KM	$1,901,559	$1,587,404	$1,459,094	$611,858	$1,044,034	$ 1,320,790
Val KM w/KM Permit	$1,628,035	$1,402,793	$1,304,558	$533,281	$984,400	$ 1,170,613
% Val KM w/KM Permit	86%	88%	89%	87%	94%	89%
Trips with KM	4,510	3,381	3,249	1,599	1,401	2,828
Trips KM w/KM Permit	3,109	2,562	2,469	1,171	1,156	2,093
% Trips KM w/KM Permit	69%	76%	76%	73%	83%	75%
Vessels w/ KM	690	550	583	347	289	492
Ves KM w/KM Permit	307	285	303	190	188	255
% Ves KM w/KM Permit	44%	52%	52%	55%	65%	54%

Source: Data were obtained from the North Carolina trip ticket program in fall of 2012

Table 4.1.2.5 shows the economic effects of **Alternative 2, Option a** and **Preferred Option b**, and **Alternative 3, Preferred Option b** for West Florida for Spanish mackerel. On average from 2007 through 2011, 86% of the pounds and 85% of the value of Spanish mackerel landed in West Florida were by vessels that had a Spanish mackerel permit. Had a Spanish mackerel permit been required to sell any Spanish mackerel, including bag limits, all the vessels combined that did not have a federal Spanish mackerel permit would have lost an average of $42,121 annually in West Florida. Some Spanish mackerel landed in West Florida come from state waters, and as many as 230 (on average from 2007 through 2011) vessels landing Spanish mackerel in West Florida do not have any federal permits. As the federal Spanish mackerel permit is open access, one could be purchased for $25 each year (assuming no other federal permits including a CMP for-hire permit), at a total average annual cost of $5,750. Therefore, if all the vessels did purchase a Spanish mackerel permit in future years, $36,371 (86%) of the $42,121 landed by previously unpermitted West Florida vessels could be recovered.

Table 4.1.2.6 shows the economic effects of **Alternative 2, Option a** and **Alternative 3, Preferred Option a** for East Florida and Georgia for Spanish mackerel. On average from 2007 through 2011, 68% of the pounds and 70% of the value of Spanish mackerel landed in East Florida and Georgia were by vessels that had a Spanish mackerel permit. Had a Spanish

mackerel permit been required to sell any Spanish mackerel, including bag limits, the all the vessels combined that did not have a federal Spanish mackerel permit would have lost an average of $693,304 annually in East Florida and Georgia. Virtually all of the vessels in East Florida and Georgia had at least one federal permit. Of the 436 vessels that did not have a Spanish mackerel permit, they could purchase one for $12.50 each year, at a total average annual cost of $5,450. Therefore, if all the vessels did purchase a Spanish mackerel permit in future years, $687,854 (99%) of the $693,304 landed by previously unpermitted East Florida and Georgia vessels could be recovered.

Table 4.1.2.7 shows the economic effects of **Alternative 2, Option a,** and **Alternative 3, Preferred Option a** for Spanish mackerel landed in North Carolina. In North Carolina, an average of 45% of the pounds and 43% of the value of Spanish mackerel in the years 2007 through 2011 were landed by vessels that had a federal Spanish mackerel permit. Had a Spanish mackerel permit been required to sell any Spanish mackerel, including bag limits, then all the vessels combined that did not have a federal Spanish mackerel permit would have lost an average of $511,159 annually in North Carolina. Much of the Spanish mackerel landed in North Carolina come from state waters, and as many as 398 (on average from 2007 through 2011) vessels landing Spanish mackerel in North Carolina do not have any federal permits. As the federal Spanish mackerel permit is open access, one could be purchased for $25 each year (assuming no other federal permits including a CMP for-hire permit), at a total average annual cost of $9,950. Therefore, if all the vessels did purchase a Spanish mackerel permit in future years, $501,209 (98%) of the $511,159 landed by previously unpermitted North Carolina vessels could be recovered.

Table 4.1.2.5. Pounds, nominal value, trips, and vessels and percent of each where the vessel held a federal Spanish mackerel permit and landed Spanish mackerel for the years 2007 through 2011 for West Florida (Gulf Council).

	2007	2008	2009	2010	2011	Average
lbs of SM	355,931	394,120	1,586,098	508,862	469,363	662,875
lbs SM w/SM Permit	266,069	394,120	1,586,098	445,080	317,353	601,744
% lbs SM w/SM Permit	75%	100%	100%	87%	68%	86%
Value of SM	$202,976	$225,781	$729,379	$322,260	$340,647	$364,209
Val SM w/SM Permit	$136,910	$225,781	$729,379	$267,819	$250,552	$322,088
% Val SM w/SM Permit	67%	100%	100%	83%	74%	85%
Trips with SM	845	1,053	1,404	1,325	1,025	1,130
Trips SM w/SM Permit	230	364	583	552	516	449
% Trips SM w/SM Permit	27%	35%	42%	42%	50%	39%
Vessels w/ SM	319	367	438	385	356	373
Ves SM w/SM Permit	97	116	166	156	178	143
% Ves SM w/SM Permit	30%	32%	38%	41%	50%	38%

Source: Data were obtained from the Florida trip ticket program in fall of 2012.

Table 4.1.2.6. Pounds, nominal value, trips, and vessels and percent of each where the vessel held a federal Spanish mackerel permit and landed Spanish mackerel for the years 2007 through 2011 for East Florida (South Atlantic Council) and Georgia.

	2007	2008	2009	2010	2011	Average
lbs of SM	3,277,876	2,278,828	2,648,289	3,572,723	3,464,604	3,048,464
lbs SM w/SM Permit	2,245,777	1,521,919	1,891,821	2,519,409	2,101,026	2,055,990
% lbs SM w/SM Permit	69%	67%	71%	71%	61%	68%
Value of SM	$2,342,276	$1,847,725	$2,017,392	$2,434,263	$2,716,085	$2,271,548
Val SM w/SM Permit	$1,621,517	$1,286,039	$1,499,443	$1,752,878	$1,731,344	$1,578,244
% Val SM w/SM Permit	69%	70%	74%	72%	64%	70%
Trips with SM	6,825	6,167	7,556	7,610	7,901	7,212
Trips SM w/SM Permit	4,104	3,700	4,748	5,051	4,615	4,444
% Trips SM w/SM Permit	60%	60%	63%	66%	58%	62%
Vessels w/ SM	862	896	1,017	1,089	1,064	986
Ves SM w/SM Permit	431	477	577	659	604	550
% Ves SM w/SM Permit	50%	53%	57%	61%	57%	55%

Source: Data were obtained from each state's trip ticket program in fall of 2012. Nearly all data from Georgia were confidential; therefore they were merged with data from the part of Florida in the South Atlantic.

Table 4.1.2.7. Pounds, nominal value, trips, and vessels and percent of each where the vessel held a federal Spanish mackerel permit and landed Spanish mackerel for the years 2007 through 2011 for North Carolina.

	2007	2008	2009	2010	2011	Average
lbs of SM	487,813	415,317	961,706	911,809	871,204	729,570
lbs SM w/SM Permit	276,223	210,639	378,423	329,189	369,921	312,879
% lbs SM w/SM Permit	57%	51%	39%	36%	42%	45%
Value of SM	$730,998	$545,165	$929,654	$1,026,506	$1,188,141	$884,093
Val SM w/SM Permit	$276,223	$287,176	$401,419	$386,288	$513,564	$372,934
% Val SM w/SM Permit	38%	53%	43%	38%	43%	43%
Trips with SM	2,752	2,427	4,020	3,601	3,608	3,282
Trips SM w/SM Permit	928	721	917	895	1,014	895
% Trips SM w/SM Permit	34%	30%	23%	25%	28%	28%
Vessels w/ SM	461	467	632	450	383	479
Ves SM w/SM Permit	89	83	96	73	63	81
% Ves SM w/SM Permit	19%	18%	15%	16%	16%	17%

Source: Data were obtained from the North Carolina trip ticket program in fall of 2012.

Prohibiting bag limit sales of king and Spanish mackerel, as proposed under **Alternative 2, Option a** and **Preferred Option b**, and **Alternative 3, Preferred Option a** and **Option b**, would have a greater economic effect on king mackerel fishermen who do not have a federal king mackerel permit as this permit is limited access. The average annual nominal ex-vessel sales of king mackerel in 2007 through 2011 by vessels in Florida, Georgia, and North Carolina that did not have a king mackerel permit was $1,073,574. The average annual reduction of nominal ex-vessel value from sales of Spanish mackerel in 2007 through 2011 by vessels in Florida, Georgia, and North Carolina that did not have a Spanish mackerel permit, but could have purchased one, is estimated to be $21,150.

Of the states that provided data, only North Carolina was able to provide data that could explicitly state the value of tournament-caught fish. The downward trend in tournament sold king mackerel decreased went from $65,000 in 2007 to $13,000 in 2011. Without knowing the amount of king mackerel sales from tournaments in South Carolina, Georgia, or Florida, it is estimated that **Preferred Alternative 4** would provide less direct negative economic effects than would **Alternatives 2** or **3**.

Alternative 1 would have no additional economic effect as it is the status quo. Presumably, **Alternative 2** and **Alternative 3** would have similar negative economic effects averaging approximately $682,582 annually based on landings from 2007 through 2011 for the South Atlantic (total effects compiled from Tables 4.1.2.2, 4.1.2.3, 4.1.2.4, 4.1.2.6 and 4.1.2.7) and negative economic effects averaging $448,413 for the West Florida portion of the Gulf.

Preferred Alternative 4 would mitigate the direct negative economic effects somewhat by allowing for tournament sales; however, it would not allow commercial fishermen without a federal CMP permit to sell any CMP harvested from federal waters.

4.1.3 Direct and Indirect Effects on the Social Environment

In general, the debate over allowing vessels without federal commercial king mackerel or Spanish mackerel permits to sell king mackerel or Spanish mackerel caught under the recreational bag limit has many important facets. Other than the potential for compromised accounting due to double counting and the issue of equity (concern that all components of the fishery are treated fairly), the issue of 'bag limit sales'[2] largely is one of managing the allocation of harvest – how to distribute fishery mortality as opposed to how much mortality is appropriate – and, thus, essentially reduces to an issue of conflict between the commercial and recreational sectors. In fact, double counting, to the extent that it may result in reduced total harvest, may be beneficial to the resource and benefit environmental goals, since total mortality should be decreased and more of the resource made available to rebuild and/or serve other environmental functions. However, allowable harvest levels encompass accepted biological stewardship goals and a management environment that does not support full utilization of allowable harvest results in forgone economic and social benefits to associated fishermen, communities, and businesses/industries. Otherwise, from a biological/ecological perspective, mortality is mortality regardless of the source.

Crew of for-hire recreational vessels may depend on income from sale of fish that are caught on charter or headboat trips, and in some cases fish houses or dealers may depend on supply that comes from the local for-hire fleet. Across the regions, the overall impact on the fleet due to reduced income is expected to be minimal (see Section 4.1.2 for detailed analysis of the economic impacts), but there could be localized impacts in communities with for-hire fleets that participate in bag limit sales, such as in the Florida Keys and some areas of North Carolina.

Tourism has declined in many areas in the South Atlantic and Gulf regions due to the current economic issues around the country and rising fuel prices. In recent years, crew may have become more dependent on bag limit sales to supplement income as for-hire trips decline. When prohibition of bag limit sales for other species have been considered, points raised by recreational interests include a dead fish is a dead fish, so as long as the fish is properly documented, it should not matter whether they are sold or not; certain for-hire vessel classes also must satisfy strict safety requirements and associated expenses, justifying equal access to the opportunity to sell fish; and both the cost of fishing and competition demands are such that fish sales are required to keep charter fees sufficiently low while maintaining adequate crew.

Points raised by the commercial fleet in the argument over bag limit sales include commercial allocations are intended for the benefit of commercial harvesters that depend on the harvest and sales of fish for their livelihood; it is inappropriate for for-hire vessels to profit from the allocations for both sectors, which occurs when a vessel gets paid for the charter and receives income from the sale of fish harvested on the charter; vessels that do not have to adhere to the

[2] Situations under which 'bag limit sales' would fall is described in Section 2.1.

same safety requirements and associated expenses as commercial vessels, as is the case for recreational vessels, should not be allowed to sell fish; and recreational angling is for the purpose of pleasure and it is inappropriate to subsidize this activity through bag limit-sales.

In addition to sales by for-hire crew or part-time fishermen, changes to permit requirements could affect tournament sales of king mackerel. Tournament sales may produce some broad social benefits, particularly if proceeds go towards a local charity, organization, or research to benefit the marine resource. Tournaments are an important part of the recreational sector and can contribute to the local economy through increased tourism and recreational participants, specifically in North Carolina and Florida.

Alternative 1 would have little impact on the recreational sector and would likely be beneficial to for-hire crew who may count on profits from sales as part of their income. Additionally, the dealers, fish houses, or restaurants who purchase the fish may also be reliant on the supply and would continue to be able to access the product. The accounting of bag limit sales towards the commercial quota may have a negative impact on the commercial fishermen if bag limit sales are excessive and cause the commercial quota to be exceeded. Lastly, **Alternative 1** would allow any existing conflict between sectors to continue.

Alternative 2 would provide some flexibility for the for-hire vessels to sell king mackerel and Spanish mackerel, but would require additional capital to obtain commercial king mackerel and Spanish mackerel permits. Additionally, king mackerel permits are limited access, which does not guarantee that a for-hire vessel could purchase a king mackerel permit and may result in equity concerns among the for-hire fleet. Under **Alternative 2**, **Option a**, the expected effects would only impact fishermen, fish houses and associated businesses in the South Atlantic. Under **Alternative 2**, **Preferred Option b**, the expected effects would only impact fishermen, fish houses and associated businesses in the Gulf. However, inconsistency in regulations for each region can have some negative impacts on fishermen, particularly for fishermen in south Florida and the Florida Keys by reducing compliance and increasing complications for enforcement.

Because bag limit sales for king mackerel and Spanish mackerel would continue under **Alternative 1,** and for for-vessels with commercial king mackerel or Spanish mackerel permits, under **Alternative 2**, these alternatives would be the most beneficial to the for-hire crew in areas that the practice is common and part of the income for individuals working on these vessels. **Alternative 1** would allow the most flexibility because **Alternative 2** would still require the federal king mackerel commercial permit for vessels wishing to sell king mackerel, which is under a limited entry program and may be difficult for some fishermen to obtain. These impacts would be the same for **Option a,** and **Preferred Option b** under **Alternative 2**.

Alternative 3 would likely have a negative impact on charter and headboat crew who depend on bag limit sales to supplement their income and other part-time fishermen who sell king mackerel and Spanish mackerel, but may generate some benefits for the commercial fleet by contributing only landings by commercial vessels to the commercial ACL, and reducing competition. Unless an exemption for sale of tournament-caught fish is established under **Preferred Alternative 4, Alternative 3** would also impact organizers and participants in tournaments, and would likely

result in the most significant social impacts with little social benefits. If king mackerel tournaments continue, tournament fish may be discarded or otherwise disposed if not personally consumed and any local organizations that depend on the sale of tournament fish would lose that source of funds.

Under **Alternative 3**, **Preferred Option a**, the expected effects would only impact fishermen, fish houses and associated businesses in the South Atlantic. Under **Alternative 3**, **Option b**, the expected effects would only impact fishermen, fish houses and associated businesses in the Gulf. However, inconsistency in regulations for each region can have some negative impacts on fishermen, particularly for fishermen in south Florida and the Florida Keys by reducing compliance and increasing complications for enforcement.

Because **Preferred Alternative 4** would set up a provision to allow sale of tournament-caught fish, this alternative would have less impact on tournament organizers and participants, and organizations that receive donations from tournament sales would continue to have access to those funds. **Alternative 4**, **Preferred Option a** in combination with **Alternative 3**, **Preferred Option a** would set up a system in which all bag limit sales are prohibited except for tournament sales, which could negatively impact for-hire crew in the South Atlantic who depend sale of fish caught on for-hire trips to supplement their income. **Alternative 4**, **Preferred Option b** in combination with **Alternative 2**, **Preferred Option b** would set up a system in which the only permitted bag limit sales in the Gulf region are from for-hire trips on dually permitted vessels and tournament sales in states with permitting systems. This would benefit for-hire crew in the Gulf region but would result in conflicting rules for Florida, particularly fishermen in the Florida Keys.

4.1.4 Direct and Indirect Effects on the Administrative Environment

Alternative 1 would result in no change in the current administrative environment, and would continue the potential for double-counting of landings against the recreational and commercial quotas which results in an administrative inefficiency. **Alternative 2, Option a** and **Preferred Option b** may result in increased administrative burden, as some for-hire fishermen may begin purchasing the appropriate federal king and/or Spanish mackerel permits from existing permit holders in order to legally sell the respective landed mackerel species. **Alternative 3, Preferred Option a and Option b** would reduce the administrative burden by eliminating any issues with "double-counting" of landings against the recreational and commercial quotas by prohibiting the sale of any bag limit caught mackerel. **Preferred Alternative 4** would reduce the administrative burden by eliminating any issues with "double-counting" of landings against the recreational and commercial quotas by prohibiting the sale of bag limit caught fish, but the tournament sale exception may increase the administrative burden on states issuing permits for mackerel tournaments. **Preferred Options a,** and **b** under **Preferred Alternative 4** would apply this measure in both South Atlantic and Gulf Council jurisdictional waters.

4.2 Action 2: Elimination of Inactive Commercial King Mackerel Permits

Preferred Alternative 1: No Action – Do not eliminate any commercial king mackerel permits.

Alternative 2: Renew commercial king mackerel permits if average landings meet the qualifications of an active permit (defined below). Permits that do not qualify will be invalid, non-renewable, and non-transferable:

> **Option a**: The permit has an annual average of at least 500 lbs of king mackerel from 2002-2011.
> **Option b**: The permit has an annual average of at least 1,000 lbs of king mackerel from 2002-2011.
> **Option c**: The permit has at least 500 lbs of king mackerel in at least one year from 2002-2011.
> **Option d**: The permit has at least 1,000 lbs of king mackerel in at least one year from 2002-2011.

Alternative 3: Allow transfer of inactive commercial king mackerel permits only to immediate family members and allow transfer to another vessel owned by the same entity. Permits will be considered inactive if average landings did not meet the qualifications (defined below):

> **Option a**: The permit has an annual average of at least 500 lbs of king mackerel from 2002-2011.
> **Option b**: The permit has an annual average of at least 1,000 lbs of king mackerel from 2002-2011.
> **Option c**: The permit has at least 500 lbs of king mackerel in at least one year from 2002-2011.
> **Option d**: The permit has at least 1,000 lbs of king mackerel in at least one year from 2002-2011.

Alternative 4: Allow two-for-one permit reduction in the king mackerel commercial fishery similar to the system for Snapper Grouper Unlimited Permits.

4.2.1 Direct and Indirect Effects on the Physical/Biological Environments

The impacts on the physical environment from CMP fishing are detailed in Section 4.1.1. **Preferred Alternative 1** would not be expected to change the level of these impacts, unless fishermen that currently hold permits without using them start fishing.

Alternatives 2-4 would not directly affect the physical or biological environments. The indirect impacts would depend on the amount of effort attributable to the fishermen whose permits would be eliminated or restricted. If a low threshold is chosen (for example, **Alternative 2** or **3**, **Option c**), the fishermen affected likely have had minimal impact on the physical and biological environments and so benefits would be minimal. The highest level of beneficial impacts would be expected with **Alternative 2, Option b,** which would eliminate or restrict the fewest permits. As the number of permits eliminated increases, effort could decrease, and indirect benefits to the

physical environment could increase. However, other participants may increase effort, negating those benefits.

4.2.2 Direct and Indirect Effects on the Economic Environment

A king mackerel permit is valid for one year. Once expired, it must be renewed or transferred within 12 months after expiration. Presently, a permit can be renewed or transferred regardless of its landings history. Only a vessel with a valid permit can harvest quantities of king mackerel above the bag limit in federal waters.

A valid permit has use value to the permit holder, which is represented by the flow of present value dockside revenues that derive from sales of king mackerel that are harvested in the EEZ by the permit holder. Once the permit expires, its use value is zero; however, that value can be restored when the permit is renewed by the permit holder. A valid or expired permit also has an exchange value, which is represented by the value that the permit holder could receive from transferring the permit. When a permit is terminated, both its use value and exchange value become zero.

Preferred Alternative 1 is the no action alternative and would have no beneficial or adverse economic impacts beyond the baseline.

Alternative 2, Options a – d would establish a commercial landings history requirement that would reduce the number of permits that could be renewed or transferred, which would reduce the number of valid permits. **Option b** would be expected to result in the largest number of terminated permits, which would cause the largest reductions in landings of and dockside revenues from king mackerel. It is followed in turn by **Option a, Option d** and **Option c**. The relative losses of landings of and dockside revenues from king mackerel, however, are expected to be substantially less than the relative losses of the number of valid and renewable/transferrable permits. For example, while **Alternative 2, Option b**, would reduce the number of permits by approximately 52%, the average annual losses of king mackerel landings (lbs gutted weight) and revenues (2011 dollars) from the terminated permits represent less than 5% of average annual king mackerel landings and revenues of all permit holders (Table 4.2.3.1), based on 2001 through 2011 annual landings.

Table 4.2.3.1. Numbers and percentages of permits terminated and average annual losses of commercial landings (lbs gutted weight) and revenues (2011 dollars) because of **Preferred Alternative 1** and **Alternative 2**, based on 2001 through 2011 annual landings.

Alternative		Number of Permits		Percent Permits Terminated	Terminated Permits		Terminated Permits	
		Terminated	Valid & Renewable/ Transferrable		Ave. Annual KM Lbs	Percent of KM Lbs	Ave. Annual KM Revenue	Percent of KM Revenue
1		0	1,499	0.00%	0	0.00%	$0	0.00%
2	Option a	562	937	37.49%	76,708	1.60%	$147,721	1.66%
	Option b	766	733	51.10%	226,341	4.72%	$425,344	4.79%
	Option c	283	1,216	18.88%	7,937	0.17%	$14,901	0.17%
	Option d	392	1,107	26.15%	24,975	0.52%	$47,542	0.54%

Source: SERO Permits and SEFSC logbook data.

Alternative 2, Option b would result in the largest losses of potential receipts from transfers of permits, followed in turn by **Option a**, **Option d**, and **Option c**. A query of transferred king mackerel permits from January 1, 2008, through June 30, 2013, was conducted and reported receipts were found to range from $0 to $10,000 per transferred permit, with a median of $3,625.

Average annual landings of and revenues from king mackerel per vessel vary substantially. The average vessel with a permit lands 3,200 lbs of king mackerel per year, while the average vessel with a permit that would be eliminated by **Alternative 2, Option c** lands only 28 lbs per year (Table 4.3.2.2), based on 2001 through 2011 landings. The average vessel with a permit has king mackerel revenues that represent approximately 21% of annual revenues from all species (**Preferred Alternative 1**), while the 283 vessels with a permit that would be eliminated by **Alternative 2, Option c** have king mackerel revenues that represent less than a quarter of a percent of revenues from all species.

Table 4.2.3.2. Average annual king mackerel and all species landings (lbs gutted weight) and revenues (2011 dollars) and percent of landings and revenues per permit, 2001 through 2011.

Alternative		Terminated Permits						
		Number	Ave. Annual KM Lbs per Permit	Ave. Annual All Lbs per Permit	Percent of All Lbs are KM	Ave. Annual KM Revenue per Permit	Ave. Annual All Species Revenue per Permit	Percent of All Revenue from KM
2	Option a	562	136	9,169	1.49%	$263	$24,575	1.07%
	Option b	766	295	9,256	3.19%	$555	$24,095	2.30%
	Option c	283	28	8,690	0.32%	$53	$23,472	0.22%
	Option d	392	64	9,584	0.66%	$121	$25,516	0.48%
		All Permits						
1		1,499	3,200	13,145	20.56%	$5,922	$28,801	20.56%

Source: SERO Permits and SEFSC logbook data.

Alternative 2 is a one-time occurrence, so permit holders, who have sufficient landings to have their permits renewed, would not have an incentive to increase landings in the future because there would be no minimum-landings renewal requirement in the future. However, if **Alternative 2** is not preferred, its present consideration could motivate some permit holders, especially those who would be eliminated by any of the options, to increase their king mackerel landings in order to avoid possible future termination of their permits if a similar renewal requirement were implemented in the future. If that occurs, landings of king mackerel could increase under **Preferred Alternative 1** (because permit holders would increase landings to avoid having their permits terminated because of a future renewal requirement).

Alternative 2 would reduce the supply of transferrable permits. Assuming demand does not change, **Option b** would result in the largest increase in the cost of acquiring a transferrable permit, followed in turn by **Options a, d**, and **c**.

Alternative 3 Options a – d could reduce the above numbers and percentages of terminated permits and reductions in king mackerel landings and associated revenues. However, the above tables (Table 4.2.3.1) would represent the maximum losses if all inactive permits are not transferred. **Option b** would result in the largest number of terminated permits and largest reductions in landings of and dockside revenues from king mackerel, followed in turn by **Option a, Option d** and **Option c**. If all inactive permits are transferred, there would be no losses of landings or revenues and no difference in the impacts of **Alternative 3 Options a – d**.

Alternative 4 would set up a two-for-one permit reduction system similar to the one used for Snapper-Grouper Unlimited (harvest) Permits. In such a system, a vessel owner intending to obtain a king mackerel permit from a permit holder who is not in the vessel owner's immediate family must obtain and exchange two such permits for one permit to be issued. **Alternative 4** would have an adverse impact on those who seek to enter the commercial king mackerel fishery

by increasing the entry cost; an individual would have to purchase two rather than one permit. **Alternative 4** would have a beneficial impact on current permit holders by indirectly increasing the price (exchange value) that they receive by transferring/selling a permit. **Alternative 4** would not initially affect the supply of permits being offered for transfer because it would not terminate any permits, but **Alternative 4** would increase demand, which would increase the cost of acquiring a transferrable permit. As each permit is retired, however, the potential supply of transferrable permits would decrease, which could result in a smaller numbers of permits being offered for transfer and higher asking prices for transferrable permits.

4.2.3 Direct and Indirect Effects on the Social Environment

Elimination or restriction of inactive king mackerel commercial permits would be expected to result in some significant negative impacts on fishermen, fish houses, and future participants. Some public commenters have noted that the king mackerel stock can support the latent effort in the fishery while other individuals feel that increased effort from inactive permit holders could negatively impact the stock.

In the South Atlantic region, it is common for commercial fishermen to hold multiple permits and participate in multiple fisheries during the year. This 'permit portfolio' is important in that a diverse portfolio (multiple permits) could help to reduce risk and uncertainty for South Atlantic fishing businesses (Sanchirico et al. 2005), and improve resilience and ability to adapt to changing conditions of the fish stocks, regulations, or market (Larkin et al. 2003). If a fisherman has maintained a king mackerel permit without participating in the fishery, he or she has foregone the benefit of selling the permit. Advertisements and anecdotal evidence suggests that king mackerel permits are valued at $3,500-$6,000 each. Maintaining the king mackerel permit with little or no participation in the fishery allows permit holders to keep the option of fishing for king mackerel. Public input supports that some fishermen wish to keep the permit in case there is a change in access to another fishery or a change in the market.

Preferred Alternative 1 would not make any changes to the permit system for king mackerel and would have no impacts on fishermen with inactive permits, but could have negative impacts on fishermen who actively participate in the king mackerel fishery by not removing potential effort (and competition). This could be significant if in the future data indicate that there is decreased stock biomass or some other limitation to resource access to currently active fishermen. Although at this time no information suggests that the stock could not support fishing pressure from all vessels with valid king mackerel permits, there has been some concern from fishermen that increased localized effort may be impacting the stock, and could increase if inactive permits become active.

In the following analysis, **Options a-d** under **Alternatives 2** and **3** are considered in tandem because the qualifying periods and pounds requirements in **Options a-d** under **Alternatives 2** and **3** would designate a permit as 'inactive' or 'active'. Depending on how this designation occurs (through one of the options), the outcome for the inactive permit would be determined through selection of **Alternative 2** or **Alternative 3**. In terms of state- and community-level impacts, the results of the analysis are presented together.

Alternative 2 would have the most significant impact on fishermen with permits designated as inactive because these permits would be eliminated. In addition to any monetary loss for inactive permit holders, concerns with removal of valid permits may raise equity concerns for permit holders. Additionally, elimination of a permit would remove that alternative from a fisherman's permit portfolio. Allowing inactive permits to be kept but not transferred under **Alternative 3** would have less impact on inactive permit holders, although they would not have the opportunity to benefit from selling the permit when exiting the fishery. **Options a-d** under **Alternatives 2** and **3** would determine the impact at the state and community level for elimination or restriction of permits. In general, the more permits designated as 'inactive', the greater the impact on permit holders. Table 4.2.4.1 shows the number of expected permits that would qualify as active and not be eliminated or restricted. Overall, O**ption b** under **Alternatives 2** and **3** would eliminate or restrict the most permits, particularly impacting North Carolina and Florida. **Option c** under **Alternatives 2** and **3** would leave the most permits active.

Table 4.2.4.1. Estimated number of permits qualifying in each state or region under Options a-d from Alternatives 2 and 3.

State[1]	# of Current Permits	# of Permits w/ landings 2011	**Number of Permits Expected to Qualify as Active:**			
			Option a Avg ≥500 lb	**Option b** Avg ≥1,000 lb	**Option c** At least 1 yr ≥500 lb	**Option d** At least 1 yr ≥1,000 lb
NC	241	130	153	114	207	186
SC/GA	35	14	8	4	23	16
FL- East	601	430	471	394	553	520
FL- Keys	200	112	129	96	157	145
FL- West	257	91	103	65	173	146
AL	28	13	12	11	21	17
MS	11	3	3	3	6	4
LA	52	20	33	27	39	39
TX	37	10	15	10	24	21
Other	33	8	10	9	13	13
TOTAL	**1,495**	**831**	**937**	**733**	**1,216**	**1,107**

[1] Based on homeport of vessel associated with the permit. Source: SEFSC logbooks and SERO Permits database.

North Carolina

Public comment from fishermen in North Carolina suggest that many fishermen with permits expected to be designated as 'inactive' have maintained the permits in order to keep the fishing option open, if needed. The primary communities that could be affected by **Alternatives 2** and **3** include Southport (Brunswick County), Atlantic Beach and Morehead City (Carteret County), Hatteras and Wanchese (Dare County), Carolina Beach and Wilmington (New Hanover County), and Hampstead (Pender County) (Table 4.2.4.2).

Table 4.2.4.2. Number of permits expected to qualify as active in North Carolina under each option.

County[1]	# of Current Permits	# of Permits w/ landings 2011	**Number of Permits Expected to Qualify as Active:**			
			Option a Avg ≥500 lb	**Option b** Avg ≥1,000 lb	**Option c** At least 1 yr ≥500 lb	**Option d** At least 1 yr ≥1,000 lb
Brunswick	60	35	35	23	55	47
Carteret	33	15	12	5	27	22
Dare	84	45	65	58	70	68
New Hanover	37	24	29	19	32	30
Beaufort/Hyde/ Onslow/Pender/ Wake[2]	27	11	12	9	23	19
TOTAL	**241**	**130**	**153**	**114**	**207**	**186**

[1]Based on homeport of vessel associated with the permit. [2] Counties combined to maintain confidentiality.

South Carolina and Georgia

To maintain confidentiality, data cannot be displayed at the community level for South Carolina and Georgia. The primary communities that could be affected under **Alternatives 2** and **3** are Little River (Horry County South Carolina), Georgetown (Georgetown County South Carolina), and Townsend (McIntosh Georgia).

Florida- East Coast

The primary communities that could be affected on the Florida East Coast include Port Canaveral (Brevard County), Fort Lauderdale and Pompano Beach (Broward County), and Jacksonville in Duval County. Additionally, fishermen in Sebastian (Indian River County), Port Salerno and Stuart (Martin County), Miami, and Fort Pierce (St Lucie County) could be impacted under **Alternatives 2** and **3**. Jupiter, Palm Beach and West Palm Beach in Palm Beach County may have some resident fishermen who are impacted if permits are eliminated or restricted. Table 4.2.4.3 shows the expected impact at the county level for the Florida East Coast.

Table 4.2.4.3. Number of permits expected to qualify as active in Florida – east coast under each option.

County[1]	# of Current Permits	# of Permits w/ landings 2011	Number of Permits Expected to Qualify as Active:			
			Option a Avg ≥500 lb	**Option b** Avg ≥1,000 lb	**Option c** At least 1 yr ≥500 lb	**Option d** At least 1 yr ≥1,000 lb
Brevard	79	65	70	62	76	74
Broward	44	27	25	16	37	32
Duval/ Nassau[2]	30	15	17	13	23	22
Indian River	57	51	53	47	56	56
Martin	63	29	54	45	58	57
Miami-Dade	73	42	46	34	62	54
Palm Beach	167	131	136	119	157	150
St. Johns	8	6	4	3	7	5
St Lucie	63	56	56	48	62	58
Volusia	17	8	10	7	15	12
TOTAL	**601**	**430**	**471**	**394**	**553**	**520**

[1]Based on homeport of vessel associated with the permit.
[2] Counties combined to maintain confidentiality.

Florida Keys

The primary community in the Florida Keys that would likely be impacted is Key West, although fishermen in Marathon, Big Pine Key and Islamorada may also be negatively affected by the actions proposed under **Alternative 2** or **3.** Table 4.2.4.4 shows the expected impact at the county level for the Florida Keys.

Table 4.2.4.4. Number of permits expected to qualify as active in Florida Keys under each option.

			Number of Permits Expected to Qualify as Active:			
County	# of Current Permits	# of Permits w/ landings 2011	**Option a** Avg ≥500 lb	**Option b** Avg ≥1,000 lb	**Option c** At least 1 yr ≥500 lb	**Option d** At least 1 yr ≥1,000 lb
Monroe County			129	96	157	145

Florida- West Coast

The primary communities on the Florida West Coast that would likely be impacted by the actions proposed under **Alternative 2** or **3** include Panama City (Bay County), Destin (Okaloosa County), Pensacola (Escambia County), and Naples (Collier County). Table 4.2.4.5 shows the expected impact at the county level for the Florida West Coast.

Table 4.2.4.5. Number of permits expected to qualify as active in Florida – west coast under each option.

County[1]	# of Current Permits	# of Permits w/ landings 2011	Number of Permits Expected to Qualify as Active:			
			Option a Avg ≥500 lb	**Option b** Avg ≥1,000 lb	**Option c** At least 1 yr ≥500 lb	**Option d** At least 1 yr ≥1,000 lb
Bay	72	33	37	22	57	47
Collier	16	8	12	10	14	13
Okaloosa	51	18	25	16	44	39
Pinellas/ Hillsborough/Manatee/ Sarasota/Charlotte/Lee[2]	62	11	10	4	23	18
Levy/Citrus/ Hernando/Pasco[2]	11	5	5	5	6	6
Wakulla/Taylor/Dixie[2]	10	4	4	3	4	4
Escambia/ Santa Rosa/Walton/ Gulf/Franklin[2]	39	12	9	4	24	18
TOTAL	**256**	**91**	**102**	**64**	**172**	**145**

[1]Based on homeport of vessel associated with the permit.
[2] Counties combined to maintain confidentiality.

Alabama

Fishermen in communities in two counties in Alabama could be impacted by the proposed actions. In Baldwin County, effects could occur for Bon Secour, Gulf Shores and Orange Beach. In Mobile County, the communities of Bayou le Batre, Dauphin Island and Mobile could be affected by changes in the permits system for king mackerel. Table 4.2.4.6 shows the expected impact at the county level.

Table 4.2.4.6. Number of permits expected to qualify as active in Alabama under each option.

County[1]	# of Current Permits	# of Permits w/ landings 2011	Number of Permits Expected to Qualify as Active:			
			Option a Avg ≥500 lb	**Option b** Avg ≥1,000 lb	**Option c** At least 1 yr ≥500 lb	**Option d** At least 1 yr ≥1,000 lb
Baldwin	10	5	3	3	8	6
Mobile	18	8	9	8	13	11
TOTAL	**256**	**91**	**12**	**11**	**21**	**17**

[1]Based on homeport of vessel associated with the permit.

Mississippi

Table 4.2.4.7 shows the expected impact for only one county in Mississippi. The communities of Gautier and Pascagoula could be affected by changes in the king mackerel permits.

Table 4.2.4.7. Number of permits expected to qualify as active in Mississippi under each option.

County[1]	# of Current Permits	# of Permits w/ landings 2011	Number of Permits Expected to Qualify as Active:			
			Option a Avg ≥500 lb	**Option b** Avg ≥1,000 lb	**Option c** At least 1 yr ≥500 lb	**Option d** At least 1 yr ≥1,000 lb
Jackson	11	3	3	3	6	4

[1]Based on homeport of vessel associated with the permit.

Louisiana

In Louisiana, the primary communities that could be impacted by elimination or restriction of king mackerel permits include Grand Isle (Jefferson Parish), Galliano (Lafourche Parish), New Orleans (Orleans Parish), and Venice (Plaquemines Parish). Table 4.2.4.8 shows the expected number of king mackerel permits that would qualify as active at the parish level.

Table 4.2.4.8. Number of permits expected to qualify as active in Louisiana under each option.

Parish[1]	# of Current Permits	# of Permits w/ landings 2011	Number of Permits Expected to Qualify as Active:			
			Option a Avg ≥500 lb	**Option b** Avg ≥1,000 lb	**Option c** At least 1 yr ≥500 lb	**Option d** At least 1 yr ≥1,000 lb
Jefferson	16	4	9	7	11	11
Lafourche	16	8	12	10	13	13
Plaquemines	8	4	4	4	5	5
Calcasieu/Cameron/ East Baton Rouge/ Orleans/Terrebonne[2]	14	4	7	6	9	9
TOTAL	**54**	**20**	**32**	**27**	**38**	**38**

[1]Based on homeport of vessel associated with the permit.
[2] Parishes combined to maintain confidentiality.

Texas

The primary Texas communities that could be affected include Corpus Christi in Nueces County and Galveston in Galveston County. Table 4.2.4.9 shows the county-level impact for the proposed actions.

Table 4.2.4.9. Number of permits expected to qualify as active in Texas under each option.

County[1]	# of Current Permits	# of Permits w/ landings 2011	Number of Permits Expected to Qualify as Active:			
			Option a Avg ≥500 lb	**Option b** Avg ≥1,000 lb	**Option c** At least 1 yr ≥500 lb	**Option d** At least 1 yr ≥1,000 lb
Brazoria/Calhoun/ Matagorda/Galveston/ Chambers/Harris[2]	23	10	9	6	13	11
Nueces	14	0	6	4	11	10
TOTAL	**37**	**10**	**15**	**10**	**24**	**21**

[1]Based on homeport of vessel associated with the permit.
[2] Counties combined to maintain confidentiality.

The passive reduction that would be implemented under **Alternative 4** would be expected to have less of a short-term impact on king mackerel permit holders, including both positive and negative impacts from a reduction in permits. Setting up a two-for-one requirement would have no immediate effect on current permit holders but could affect the future market for king mackerel permits when the permit holder wants to sell the permit, because potential buyers would have to find two permits. In particular, anecdotal evidence suggests the current price of a king mackerel permit to be $3,500-$6,000. Because new entrants would need to buy two permits, the current price for a single permit could drop to make up for this additional requirement for entry. Some permit holders may perceive unfairness due to a lower return on investment if the current permit price is impacted by a two-for-one requirement under **Alternative 4.**

The two-for-one requirement used for the snapper grouper unlimited permit program suggests some ways in which a similar program would work for king mackerel permits. The program has worked to reduce the number of snapper grouper permits over time, allowing current and future participants to work in a fishery with potentially fewer competitors. However, snapper grouper permits that are part of a corporation fall outside of the two-for-one requirement because any permits that are under a corporation would be transferred as assets if the corporation is sold. Therefore, the two-for-one requirement for snapper grouper only affects fishermen who do not have permits under a corporation. These non-corporate businesses (current and future) are likely smaller fishing operations, and the two-for-one program required or will require additional capital to enter the snapper grouper fishery. For some potential new entrants, this additional requirement to the king mackerel fishery under **Alternative 4** may be more expensive than the potential new participant can or will pay for a permit.

4.2.4 Direct and Indirect Effects on the Administrative Environment

Eliminating permits as with **Alternative 2** would slightly decrease the administrative burden relative to **Preferred Alternative 1** because fewer permit renewals would need to be processed each year. **Alternative 3** would have the greatest impact on the administrative environment because a new category of permits would need to be created for those that are deemed inactive

and had transfer restrictions. **Alternative 4** would also have an impact on the administrative environment in that the two-for-one trades would involve additional paperwork beyond the normal permit renewal process. None of the alternatives should have any impact on the level of enforcement. For each alternative, the option with the most permits removed or restricted would be **Option b**, followed by **Option a**, **Option d**, and **Option c**. For **Alternative 2**, more eliminated permits would result in a lower administrative burden, but for **Alternative 3**, more restricted permits would result in a greater administrative burden.

4.3 Action 3: Modify or Eliminate Income Requirements for Gulf and South Atlantic Commercial Coastal Migratory Pelagic Permits

Alternative 1: No Action – Maintain existing income requirements for Gulf and South Atlantic commercial king and Spanish mackerel permits. To obtain or renew a commercial vessel permit for king or Spanish mackerel, at least 25% of the applicant's earned income, or at least $10,000, must have been derived from commercial fishing or from charter fishing during one of the three calendar years preceding the application.

Preferred Alternative 2: Eliminate income requirements for commercial king and Spanish mackerel permits.

Alternative 3: Modify the current income requirements to allow the Gulf or South Atlantic Council to recommend suspension of the renewal requirements by passage of a motion specifying: (a) the event or condition triggering the suspension; (b) the duration of the suspension; and (c) the criteria establishing who is eligible for the suspension. The affected Council would then request that the Regional Administrator suspend income requirements according to the terms outlined in the motion.

Alternative 4: To obtain or renew a commercial permit for king or Spanish mackerel, at least a percentage (defined below) of the applicant's earned income must have been derived from commercial fishing or from for-hire fishing during one of the three calendar years preceding the application.

Option a: 75%
Option b: 50%

4.3.1 Direct and Indirect Effects on the Physical/Biological Environments

Indirect impacts of these alternatives on the physical and biological environment would depend on the resulting reduction or increase in the level of fishing effort in the commercial sector of the CMP fishery or the number of for-hire trips needed to meet the applicant's earned income requirement. The impacts on the physical environment from CMP fishing are detailed in Section 4.1.1.

Alternative 1 would maintain the current level of income required to obtain or renew a king or Spanish mackerel commercial permit, and therefore, would maintain the same level of permit retention. Options for **Alternative 4** would increase the required income level and could potentially prevent some fishermen from obtaining or renewing a permit that had previously been able to qualify under the current level. Conversely, fishermen could increase their effort above current levels to reach the income qualifying levels. Thus, effort could either increase or decrease with **Alternative 4** relative to **Alternative 1**, depending on fishermen's behavior and the impacts to the physical and biological environments would change accordingly. **Option a** would have greater impacts than **Option b**.

Preferred Alternative 2 is expected to create minimal, if any, indirect effects on the physical and biological environments. By not requiring fishing effort for the renewal of permits, fishermen would not be encouraged to increase effort to renew their permit. More individuals could potentially qualify to obtain a permit (new or transferred); however, the low level of the current requirement means it is unlikely many individuals who want a permit are not able to qualify currently. Additionally, many loopholes exist that reduce the effectiveness of an income requirement. Therefore, the expectation is that elimination of the requirement would not change effort relative to the status quo.

Alternative 3 would be implemented in the rare event or condition a man-made or natural catastrophe occurred, similar to the events that took place after the Deepwater Horizon MC252 oil spill. In the event the Gulf and South Atlantic Councils (Councils) selected **Alternative 3** as preferred, no additional effects on the physical or biological environments are expected to occur compared to **Alternative 1**.

4.3.2 Direct and Indirect Effects on the Economic Environment

Alternative 1 would not modify income qualification requirements currently in effect for the renewal of commercial king and Spanish mackerel permits. Therefore, economic effects are not expected to result from **Alternative 1**.

Preferred Alternative 2 would eliminate existing income qualification requirements from the commercial king and Spanish mackerel permit application and/or renewal process. Applicants would get their commercial permits renewed provided that the applications were submitted within the prescribed application period. **Preferred Alternative 2** is expected to streamline and ease the commercial king and Spanish mackerel permit application process. **Preferred Alternative 2** is not expected to affect the harvest or other customary uses of king mackerel resources because the elimination of income requirements cannot lead to an increase in the number of commercial king mackerel permits due to the existing moratorium on the issuance of new permits. Therefore, the implementation of **Preferred Alternative 2** is not expected to result in direct economic benefits for participants in the commercial king mackerel fishery. However, the elimination of income requirements could possibly result in an increase in the number of commercial Spanish mackerel permits because these permits are under an open access regime. The number of Gulf and South Atlantic Spanish mackerel permits and the annual rates of increases between 2008 and 2012 are provided in Table 4.3.3.1. During the last five years, the number of permits increased by 4.3% annually, on average. It is assumed that the number of Spanish mackerel permits would continue to increase at comparable rates because there is no evidence to date indicating that any permit applications were denied due to applicants' failure to meet the income requirements. The elimination of income requirements is therefore not expected to affect the harvest of Spanish mackerel.

Table 4.3.3.1. Number of Spanish mackerel permits and annual percentage changes in the Southeast.

Year	Number of Permits	Percentage Change
2008	1,767	n/a
2009	1,863	5.4%
2010	1,977	6.1%
2011	2,080	5.2%
2012	2,147	3.2%
Average	1,967	4.3%

Source: NMFS – SERO Permit Office

The elimination of income qualification requirements is expected to result in indirect economic benefits by affording Spanish and king mackerel permit applicants more flexibility in determining the income generating activities they might pursue. **Preferred Alternative 2** would allow commercial permit applicants to elect to increase their participation in activities not related to commercial fishing or limit their involvement in commercial fishing without fearing the loss of their permit.

Alternative 3 would, at the Councils' discretion, temporarily suspend income qualification requirements in response to natural disasters, man-made catastrophes, or economic conditions that could limit commercial fishermen's ability to earn income from fishing. **Alternative 3** is not expected to affect the harvest or other customary uses of CMP resources and thus is not anticipated to be associated with economic effects. However, **Alternative 3** is expected to benefit permit applicants who would have lost their permit due to a failure to meet income qualification requirements resulting from a temporary inability to derive income from commercial fishing.

Alternative 4, Option a would require that a commercial mackerel permit applicant's income earned from commercial or for-hire fishing account for at least 75% of his total earned income. **Alternative 4, Option b** would set a lower percentage of 50%. Both percentages considered under **Alternative 4** would be more restrictive than the status quo, which requires a percentage of earned income from commercial and for-hire fishing of 25%. Therefore, some applicants who would have met income requirements under the no action alternative would be precluded from applying for or renewing their permits should **Alternative 4** be implemented, resulting in direct adverse economic effects. These expected adverse economic effects are expected to be mitigated by economic benefits derived by fishermen who are able to acquire commercial mackerel permits under the more restrictive requirements due to additional fishing opportunities that could result from the expected decrease in the number of permit holders under **Alternative 4**. Similar to the status quo alternative, earned income requirements are expected to continue to be relatively easy to circumvent and thus, **Alternative 4** is expected to result in limited economic effects.

4.3.3 Direct and Indirect Effects on the Social Environment

Commercial fishermen are not a homogenous group and may be impacted by this action differently depending on whether a permit is in the name of an individual or a business entity set up for the purpose of commercial fishing. For example, a permit under the name of an individual who is both owner and operator of his vessel may find it difficult to renew his permit should he need to engage in a non-fishing occupation. The need to participate in alternate income activities, such as occurred among commercial fishermen who engaged in clean-up efforts following the Deepwater Horizon MC252 oil spill, is part of the rationale for this action. On the other hand, a permit put in the name of a business entity created for a commercial fishing enterprise would only have income derived from commercial fishing. The personal income of the individual(s) associated with such a business entity could be derived entirely from non-fishing activities. This example shows one way in which the income qualification requirement may be easily circumvented.

It is difficult to predict potential social impacts because permit holders may adjust their behavior in response to a change in renewal requirements in unanticipated ways. Whether changes in behavior would result in positive or negative impacts to the individual or broader group of permit holders and fishery participants is also difficult to predict. It should be noted that no other fishery except spiny lobster has an income requirement for commercial permit renewal.

Alternative 1 is not expected to result in additional impacts. However, the intent of this action is to address the fact that under the current requirements some fishermen may have difficulty renewing their permits. Should a permit holder not been able to engage primarily in fishing the previous two years, owing to health or other factors, the individual may not be able to legally renew his permit. This is not likely to be a problem for permits held in the name of a business entity, rather than an individual.

Eliminating the income requirement (**Preferred Alternative 2**) is not expected to affect permits kept under commercial fishing business entities. Positive social impacts may be expected from **Preferred Alternative 2** for those engaged in commercial fishing who need to diversify their livelihood strategies due to economic needs, for example. Removing the income requirement could provide commercial fishermen with a measure of flexibility to earn income from other means, yet still retain their permit. On the other hand, there is potential for impacts to arise from the elimination of the income requirement should demand for the permits increase. For the limited access king mackerel permits which may be transferred, entrants to the fishery could face higher costs should the value of the permit increase or become scarcer due to demand. For the open access Spanish mackerel permits, removing the income requirement would allow anyone to purchase the commercial fishing permit. However, permits are not the only requirement for commercial fishing, so given other economic investments required to begin fishing, this may not be a concern.

It should be noted that a few permits are held by permit owners whose vessel operator serves as the income qualifier for the permit. In these cases, the permit owner may not transfer the permit independent of the qualifying vessel operator. It is possible that a modification to the renewal requirement could impact this group of vessel operators because under **Preferred Alternative 2**,

the operator-based restrictions on permit renewal would be removed. However, the permit owner may currently transfer the permit if he qualifies the permit in some other way, such as with a business entity or another qualifying operator. Thus, this action is not expected to affect the arrangements between permit owners and their vessel operators.

Alternative 3 would provide the Councils with a framework for modifying the income requirement for commercial king and Spanish mackerel permits. It is designed to give the Councils flexibility in considering events which may impact commercial fishing activity and allow an appropriate modification to the renewal requirement on a temporary basis. Positive impacts would be expected from **Alternative 3** by facilitating permit renewal in the event of an environmental event that affects commercial fishing effort. Social benefits would be expected to result from this alternative; however, benefits would depend on the Councils' employment of the framework provided by this alternative in the event of an episode that affects respective fishermen.

Increasing the earned income requirement (**Alternative 4**) is expected to result in impacts as a proportion of permit holders would likely be ineligible to renew or obtain the permits. The number of permit holders who would be ineligible to renew their permit, and thus incur negative impacts, would be greater under **Option a** than **Option b**, as a greater proportion of the applicant's earned income is required to come from fishing. Permits held in the name of fishing-dedicated business entities are not expected to be impacted. As noted in the discussion above, the intent of this action is to address the fact that under the current requirements some fishermen may have difficulty renewing their permits. **Alternative 4**, then, would be expected to make it more difficult for those fishermen to renew their permits.

4.3.4 Direct and Indirect Effects on the Administrative Environment

Modifying the income requirement for permit renewal would affect the administrative environment as the permits office of the Southeast Regional Office would need to adjust the application process. **Alternative 1** would maintain the current management regime and therefore not incur additional impacts. **Alternative 4, Options a** and **b,** would only change the qualifying level and therefore would not change the impacts relative to **Alternative 1**. In either case, National Marine Fisheries Service Permits Office would need to ensure the income qualifying affidavit is signed, but no other verification is carried out.

Minimal positive impacts are likely to accrue with the removal of the income requirement (**Preferred Alternative 2**), reducing the administrative burden, as permit renewal is simplified and the permits office is not required to process the income qualifying affidavit.

Alternative 3 would have no impact on the permits office, but would require the Councils to meet, address, and agree on the terms of a renewal requirement suspension. The impacts should be similar or positive compared to **Alternative 1**, under which no suspension is currently allowed. If the Councils could not agree and pass a motion, the existing permit renewal requirement would remain in place.

4.4 Cumulative Effects Analysis

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

Past Actions

On April 20, 2010, an explosion occurred on the Deepwater Horizon MC252 oil rig, resulting in the release of an estimated 4.9 million barrels of oil into the Gulf. In addition, 1.84 million gallons of Corexit 9500A dispersant were applied as part of the effort to constrain the spill. The cumulative effects from the oil spill and response may not be known for years. The oil spill affected more than one-third of the Gulf area from western Louisiana east to the Panhandle of Florida and south to the Campeche Bank in Mexico. The impacts of the Deepwater Horizon MC252 oil spill on the physical environment are expected to be significant and may be long-term. Oil was dispersed on the surface, and because of the heavy use of dispersants, oil was also documented as being suspended within the water column, some even deeper than the location of the broken well head. Floating and suspended oil washed onto shore in several areas of the Gulf as well as non-floating tar balls. Whereas suspended and floating oil degrades over time, tar balls are more persistent in the environment and can be transported hundreds of miles. In a study conducted during the summer of 2011, University of South Florida researchers found more unhealthy fish in the area of the 2010 oil spill compared to other areas. Although some scientists have suggested that these incidences of sick fish may be related to the spill, others have pointed out that there is no baseline from which to judge the prevalence of sick fish, and no connection has been determined. Studies are continuing to check whether the sick fish suffer from immune system and fertility problems (Tampa Bay Times 2012).

The highest concern is that the oil spill may have impacted spawning success of species that spawn in the summer months, either by reducing spawning activity or by reducing survival of the eggs and larvae. The oil spill occurred during spawning months for both king and Spanish mackerel; however, both species have a protracted spawning period that extends beyond the months of the oil spill. Further, mackerels are migratory and move into specific areas to spawn. King mackerel, for example, move from the southern portion of their range to more northern areas for the spawning season. In the Gulf, that movement is from Mexico and south Florida to the northern Gulf (Godcharles and Murphy 1986). However, environmental factors, such as temperature can change the timing and extent of their migratory patterns (Williams and Taylor 1980). The possibility exists that mackerels would be able to detect environmental cues when moving toward the area of the oil spill that would prevent them from entering the area. These fish might then remain outside the area where oil was in high concentrations, but still spawn.

Effects on the physical environment, such as low oxygen, could lead to impacts on the ability of larvae and post-larvae to survive, even if they never encountered oil. In addition, oil exposure could create sub-lethal effects on the eggs, larva, and early life stages. The stressors could potentially be additive, and each stressor may increase susceptibility to the harmful effects of the other. If eggs and larvae were affected, impacts on harvestable-size coastal migratory pelagic fish may begin to be seen when the 2010 year class becomes large enough to enter the fishery and be retained. King mackerel mature at 2-3 years (GMFMC and SAFMC 1985; MSAP 1996) and Spanish mackerel mature at 1-2 years (Powell 1975); therefore a year class failure in 2010 may be felt by the fishery as early as 2011 or 2012.

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

Participation in and the economic performance of the coastal migratory pelagic fisheries addressed in this document have been affected by a combination of regulatory, biological, social, and external economic factors. Regulatory measures have obviously affected the quantity and composition of harvests of species addressed in this document, through the various size limits, seasonal restrictions, trip or bag limits, and quotas. In addition to a complex boundary and quota system the coastal migratory pelagic fishery also exists under regulations on bag limits, size limits, trip limits, and gear restrictions.

The commercial king mackerel permit, king mackerel gillnet permit, and the Gulf Charter/Headboat CMP permit are all under limited entry permit systems. New participation in the king mackerel commercial fishery and the for-hire CMP sector in the Gulf requires access to additional capital and an available permit to purchase, which may limit opportunities for new entrants. Additionally, almost all fishermen or businesses with one of the limited entry permits also hold at least one (and usually multiple) additional commercial or for-hire permit to maintain the opportunity to participate in other fisheries. Commercial fishermen, for-hire vessel owners and crew, and private recreational anglers commonly participate in multiple fisheries throughout the year. Even within the CMP fishery, effort can shift from one species to another due to environmental, economic, or regulatory changes. Overall, changes in management of one species in the CMP fishery can impact effort and harvest of another species (in the CMP fishery or in another fishery) because of multi-fishery participation that is characteristic in the region.

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

sectors. In general, the regulatory environment for all fisheries has become progressively more complex and burdensome, increasing the pressure on economic losses, business failure, occupational changes, and associated adverse pressures on associated families, communities, and businesses. Some reverse of this trend is possible and expected through management. However, certain pressures would remain, such as total effort and total harvest considerations, increasing input costs, import induced price pressure, and competition for coastal access.

Present Actions

Currently a formal consultation is underway for the Coastal Migratory Pelagics (CMP) fishery, triggered by the listing in 2012 of the Carolina and South Atlantic distinct population segments (DPSs) of Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) as endangered under the ESA. Staff from National Marine Fisheries Service Protected Resources Division will provide the Committee with an update on the consultation and record input from Committee members for consideration during the consultation. Additional requirements may result from the consultation. Additionally, in December 2012, NMFS issued a proposal to list 82 coral species as threatened or endangered, including seven species found in the South Atlantic region, including a proposal to relist two *Acropora* species (elkhorn and staghorn coral) as endangered. The final determination will be published in November 2013. The ongoing formal consultation for the CMP fishery could include assessment of impacts on these species if they are listed as endangered.

Recent increases in fishing effort and resultant management actions, particularly in the South Atlantic, have restricted access to other species that provide income for mackerel fishermen. In 2012, fishing for 14 species or species groups in the South Atlantic was prohibited before the end of the year due to ACLs being met. Many commercial mackerel fishermen only fish for mackerel part time. With reduced income from other fishing, some fishermen that have not been very active in the CMP fishery may shift effort to fish for mackerel. Removing inactive permits or requiring a higher income to retain a permit may prevent fishermen from participating in the fishery. Although lowered effort could be beneficial to the mackerel stocks, the ACLs already restrict effort. Further, the loss of income from mackerel fishing could create additional economic hardship for fishermen facing restrictions in other fisheries.

The overall decline in the U.S. economy has created a burden for many commercial fishermen and for-hire operators. Any actions that restrict income to either of these sectors will add to that financial burden. Thus prohibiting bag-limit sales, removing permits, and requiring an income level to renew a permit would all increase the negative economic impacts of fishery regulations. Conversely, these actions could reduce effort in the fishery and be beneficial to the king mackerel and Spanish mackerel stocks.

Reasonably Foreseeable Future Actions

Amendment 20B contains actions that would ease restrictions by eliminating trip limit reductions and allowing transit through closed areas. A South Atlantic framework action addresses bycatch in Spanish mackerel nets and seeks to modify regulations. The Generic Dealer Amendment (GMFMC/SAFMC 2013) is pending approval, and will require for the first time a federal dealer permit (and associated reporting requirements) for individuals buying CMP species. The Joint South Atlantic/Gulf of Mexico Generic Charter/Headboat Reporting in the South Atlantic

Amendment (citation) is also pending approval and will implement additional reporting requirements for vessels with the Gulf CMP For-hire Federal Permit and the South Atlantic CMP For-hire Federal Permit.

Annual catch limits, accountability measures, and management measures were developed in Amendment 18 to the CMP FMP (GMFMC/SAFMC 2011). Stock assessments for Spanish mackerel and cobia were completed in 2013. Changes in the ACLs to reflect new information, specifically for the Atlantic migratory group Spanish mackerel fishery, could impact the CMP fishery in the near future. Additionally, the stock assessment for king mackerel takes place in 2013, and the results could increase or decrease the available fish for harvest.

Although several other regulatory changes have been proposed for the CMP fishery, the cumulative effects are likely not significant because of the nature of the CMP fishery, which is very different than many other fisheries. For example, in the Gulf Reef Fish and South Atlantic Snapper Grouper fisheries, all species are landed under one permit and in the same area, and each fisherman might be expected to be affected to some extent by all new regulations imposed on reef fish fishermen. However, under the CMP FMP, one single universe of fishermen cannot be assumed. Separate commercial permits are issued to king mackerel and Spanish mackerel fishermen, and no permits are required for cobia fishermen. In addition, king mackerel commercial permits are limited access and can only be purchased from existing permit holders. Some overlap of these groups most certainly occurs; however, different gear types are primarily used to fish for king mackerel and Spanish mackerel, and many fishermen do not switch between gear types. Further, each species is managed under two different sets of regulations, one for each migratory group. A large portion of commercial king mackerel fishermen fish in both the Gulf and South Atlantic, but it would not be expected, for example, that a cobia fisherman in the South Atlantic would also fish for Spanish mackerel in the Gulf. Recreational fishermen are also unlikely to move between the Gulf and South Atlantic, except perhaps in the Florida Keys.

The Environmental Protection Agency's climate change webpage (http://www.epa.gov/climatechange/) provides basic background information on measured or anticipated effects from global climate change. A compilation of scientific information on climate change can be found in the United Nations Intergovernmental Panel on Climate Change's Fourth Assessment Report (Solomon et al. 2007). Those findings are incorporated here by reference and are summarized. Global climate change can affect marine ecosystems through ocean warming by increased thermal stratification, reduced upwelling, sea level rise, and through increases in wave height and frequency, loss of sea ice, and increased risk of diseases in marine biota. Decreases in surface ocean pH due to absorption of anthropogenic carbon dioxide emissions may impact a wide range of organisms and ecosystems. These influences could affect biological factors such as migration, range, larval and juvenile survival, prey availability, and susceptibility to predators. At this time, the level of impacts cannot be quantified, nor is the time frame known in which these impacts would occur. These climate changes could have significant effects on southeastern fisheries; however, the extent of these effects is not known at this time (IPCC 2007).

In the southeast, general impacts of climate change have been predicted through modeling, with few studies on specific effects to species. Warming sea temperature trends in the southeast have

been documented, and animals must migrate to cooler waters, if possible, if water temperatures exceed survivable ranges (Needham et al. 2012). Mackerels and cobia are migratory species, and may shift their distribution over time to account for the changing temperature regime. However, no studies have shown such a change yet. Higher water temperatures may also allow invasive species to establish communities in areas they may not have been able to survive previously. An area of low oxygen, known as the dead zone, forms in the northern Gulf each summer, and has been increasing in recent years. Climate change may contribute to this increase by increasing rainfall that in turn increases nutrient input from rivers. This increased nutrient load causes algal blooms that, when decomposing, reduce oxygen in the water (Needham et al. 2012; Kennedy et al. 2002). Other potential impacts of climate change in the southeast include increases in hurricanes, decreases in salinity, altered circulation patterns, and sea level rise. The combination of warmer water and expansion of salt marshes inland with sea-level rise may increase productivity of estuarine-dependent species in the short term. However, in the long term, this increased productivity may be temporary because of loss of fishery habitats due to wetland loss (Kennedy et al. 2002). Actions from this amendment are not expected to significantly contribute to climate change through the increase or decrease in the carbon footprint from fishing.

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

The cumulative biological, social, and economic effects of past, present, and future amendments may be described as limiting fishing opportunities in the short-term, with some exceptions of actions that alleviate some negative social and economic impacts. The intent of this amendment is to improve prospects for sustained participation in the respective fisheries over time and the proposed actions in this amendment are expected to result in some important long-term benefits to the commercial and for-hire fishing fleets, fishing communities and associated businesses, and private recreational anglers. The proposed changes in management for king mackerel and Spanish mackerel are not related to other actions with individually insignificant but cumulatively significant impacts.

Monitoring

The effects of the proposed action are, and will continue to be, monitored through collection of landings data by NMFS, stock assessments and stock assessment updates, life history studies, economic and social analyses, and other scientific observations. Landings data for the recreational sector in the Gulf are collected through MRIP, NOAA's Headboat Survey, and the Texas Marine Recreational Fishing Survey. Commercial data are collected through trip ticket programs, port samplers, and logbook programs. Currently, a SEDAR assessment of king mackerel is scheduled to begin in late 2013. In response to the Deepwater Horizon MC252 incident, increased frequency of surveys of the recreational sector's catch and effort, along with additional fishery-independent information regarding the status of the stock, were conducted. This will allow future determinations regarding the impacts of the Deepwater Horizon MC252 incident on various fishery stocks. At this time such determinations are not possible.

The proposed action relates to the harvest of an indigenous species in the Gulf and Atlantic, and the activity being altered does not itself introduce non-indigenous species, and is not reasonably expected to facilitate the spread of such species through depressing the populations of native species. Additionally, it does not propose any activity, such as increased ballast water discharge from foreign vessels, which is associated with the introduction or spread on non-indigenous species.

CHAPTER 5. REGULATORY IMPACT REVIEW

5.1 Introduction

The National Marine Fisheries Service (NMFS) requires a Regulatory Impact Review (RIR) for all regulatory actions that are of public interest. The RIR does three things: 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 12866 (E.O. 12866) and whether the approved regulations will have a "significant economic impact on a substantial number of small business entities" in compliance with the Regulatory Flexibility Act of 1980.

5.2 Problems and Objectives

The purpose and need, issues, problems, and objectives of this action are presented in Chapter 1, and are incorporated herein by reference.

5.3 Methodology and Framework for Analysis

This RIR assesses management measures from the standpoint of determining the resulting changes in costs and benefits to society. To the extent practicable, the net effects of the proposed measures for an existing fishery should be stated in terms of producer and consumer surplus, changes in profits, and employment in the direct and support industries. Where figures are available, they are incorporated into the analysis of the economic impacts of the different actions and alternatives.

5.4 Description of the Fishery

A description of the Gulf of Mexico (Gulf) and Atlantic coastal migratory pelagics fishery is contained in Chapter 3 and is incorporated herein by reference.

5.5 Effects on Management Measures

A larger scale discussion of the economic effects of the actions are presented in Chapter 4 and are incorporated herein by reference.

Action 1, Preferred Alternative 2, Option b, Preferred Alternative 3, Option a, and **Preferred Alternative 4, Options a** and **b** prohibit recreational sale of king and Spanish mackerel unless the fish are caught as part of a tournament and sold by a dealer who donates the proceeds to charity on behalf of the tournament, or king and Spanish mackerel caught on a for-hire vessel in the Gulf aboard a vessel that also has the appropriate federal commercial permit to sell king or Spanish mackerel. For the Gulf, data are only available for the west coast of Florida. The data available could not determine what percent of the unlicensed sales of king and Spanish mackerel were based on tournament-caught fish or from for-hire vessels that could obtain the proper permits that would allow them to sell king or Spanish mackerel under the terms of the preferred alternatives. Given the data limitations, the worst case scenario for negative economic effects from Florida through the South Atlantic region is that on average approximately $2,317,368 (in 2011 dollars) could be foregone annually (based on data gathered from Tables 4.1.2.1 - Tables 4.1.2.7).

Action 2, Preferred Alternative 1 would not eliminate commercial king mackerel permits. As this action is the status quo, there are no expected economic effects.

Action 3, Preferred Alternative 2 removes income requirements from obtaining a commercial king or Spanish mackerel permit. This action is not expected to have negative economic effects, since relieving the burden of the income requirement may increase access to the fishery.

5.6 Public and Private Costs of Regulations

The preparation, implementation, enforcement, and monitoring of this or any Federal action involves the expenditure of public and private resources, which can be expressed as costs associated with the regulations. Costs associated with this emergency action include, but are not limited to Council costs of document preparation, meeting, and other costs; National Marine Fisheries Service administration costs of document preparation, meetings and review, and annual law enforcement costs. A preliminary estimate is up to $150,000 before annual law enforcement costs.

5.7 Determination of Significant Regulatory Action

Pursuant to E.O. 12866, a regulation is considered a “significant regulatory action” if it is expected 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, this regulatory action would not meet any of the aforementioned criteria. Therefore, this regulatory action is determined to not be economically significant for the purposes of E.O. 12866.

CHAPTER 6. REGULATORY FLEXIBILITY ACT ANALYSIS

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

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

6.2 Statement of need for, objectives of, and legal basis for the proposed rule

The purpose and need, issues, problems, and objectives of the action are presented in Chapter 1 and are incorporated herein by reference.

6.3 Identification of federal rules which may duplicate, overlap or conflict with the proposed rule

No federal rules have been identified that may duplicate, overlap, or conflict with the proposed rule.

6.4 Description and estimate of the number of small entities to which the proposed rule will apply

6.4.1 Action 1

Preferred Alternative 2, Option b and **Preferred Alternative 3, Option a** would directly apply to any small business that sells king and/or Spanish mackerel harvested in the Gulf of Mexico (Gulf) and/or Atlantic exclusive economic zone (EEZ) using a vessel without the respective commercial vessel permit(s). These quantities cannot exceed the recreational bag limit. Small businesses that *commercially* harvest and sell bag-limit quantities of these species operate in the finfish fishing industry (NAICS 114111), and those that *recreationally* harvest and sell bag-limit quantities are for-hire fishing operations in the scenic and sightseeing water transportation industry (NAICS 487210). According to Small Business Association (SBA) size standards, a business in the finfish fishing industry is small if its annual receipts are less than $19 million and small in the scenic and sightseeing water transportation industry if its annual receipts are less than $7 million.

Preferred Alternative 2, Option b and **Preferred Alternative 3, Option a** would also indirectly apply to the small businesses that purchase the above bag-limit quantities of king and Spanish mackerel. These small businesses operate in the fish and seafood merchant wholesales industry (NAICS 424460), which has an SBA size standard of 100 employees.

It is unknown how many small businesses operate only in the finfish fishing industry and sell king and/or Spanish mackerel harvested by non-permitted vessels in federal waters of the Gulf and Atlantic. As of September 30, 2013, there were 1,460 for-hire vessels with a South Atlantic Charter/Headboat Coastal Migratory Pelagic (CMP) Permit and 1,356 for-hire vessels (1,320 for a charter/headboat and 36 for a historical captain charter/headboat) with a valid or renewable/transferrable Gulf Charter/Headboat Pelagics Permit. Approximately 91% of the for-hire vessels with a Gulf CMP Permit (including those with a historical captain permit) and approximately 79% of the for-hire vessels with a South Atlantic CMP Permit did not have a valid Commercial Vessel King Mackerel Permit, which is a limited access permit. Consequently, it is estimated that **Preferred Alternative 2, Option b** and **Preferred Alternative 3, Option a** would apply to up to 1,234 for-hire fishing vessels and 1,234 for-hire fishing operations in the Gulf and up to 1,153 for-hire fishing vessels and 1,153 for-hire fishing operations in the Atlantic.

Preferred Alternative 3, Option a would also apply to all small businesses in the for-hire fishing industry that sell bag-limit quantities of king and Spanish mackerel in the South Atlantic Council's jurisdiction that were harvested in the Gulf and Atlantic EEZ by vessels with the

Commercial Vessel Permits. All of the 1,460 for-hire vessels with a South Atlantic Charter/Headboat CMP Permit and significantly less than the 1,356 for-hire vessels with a Gulf Charter/Headboat CMP Permit could be affected.

Presently, a federal dealer license is not required to purchase king and Spanish mackerel harvested and landed by vessels operating in the exclusive economic zone (EEZ); however, the Generic Dealer Amendment (GMFMC/SAFMC 2013) would change that. Nonetheless, it is presently unknown how many wholesale dealers purchase king and Spanish mackerel harvested by vessels in the EEZ without the Commercial Vessel Permits. However, according to the 2011 County Business Patterns summary data, there were 573 establishments in the industry in the Gulf and South Atlantic states and 449 in the Mid-Atlantic states (Table 6.1). Therefore, it is estimated that up to 1,022 establishments in the seafood wholesale industry could be indirectly affected by **Preferred Alternative 2, Option b** and **Preferred Alternative 3, Option a**. The establishments in the Mid-Atlantic states, however, are less likely to be indirectly affected than those in the Gulf and South Atlantic states because commercial landings largely occur in the Gulf and South Atlantic states.

Table 6.1. Establishments in the fish and seafood merchant wholesale industry in the Gulf, South Atlantic and Mid-Atlantic states.

State	Establishments
Alabama	25
Florida	250
Georgia	28
Louisiana	94
Mississippi	18
North Carolina	64
South Carolina	12
Texas	82
Total Gulf and South Atlantic	*573*
Delaware	7
Maryland	57
New York	291
Pennsylvania	32
Virginia	62
Total Mid-Atlantic	*449*
Total All	1,022

Source: US Census Bureau, 2011 County Business Patterns.

Preferred Alternative 4, Option a and **b** would indirectly apply to small businesses in the seafood wholesales industry that purchase king and Spanish mackerel caught in the EEZ during a

fishing tournament. Although these alternatives would apply to up to 1,022 seafood wholesale dealer establishments, the actual number would likely be substantially less.

6.4.2 Action 2

Preferred Alternative 1 would apply to all of the small businesses that own/operate any of the 1,658 vessels that currently have a Commercial Vessel King Mackerel Permit.

6.4.3 Action 3

Preferred Alternative 2 would apply to any small business that presently possesses or seeks to possess one of the 1,658 King Mackerel Permits and any that presently possesses one of the 1,285 Spanish Mackerel Permits or seeks to acquire a new one.

6.5 Descriptions and estimates of the economic impacts of the projected reporting, record-keeping and other compliance requirements of the proposed rule.

6.5.1 Action 1

Preferred Alternative 2, Option b and **Preferred Alternative 3, Option a** would prohibit the sale of king and Spanish mackerel harvested in federal waters of the Gulf and Atlantic by fishing vessels without a Commercial Vessel King and Spanish Mackerel Permit, respectively. **Preferred Alternative 3, Option a** would also prohibit in the South Atlantic Fishery Management Council's jurisdiction the sale of king and Spanish mackerel harvested in the Gulf and Atlantic EEZ by vessels on a for-hire fishing trip, whether the vessels have the above permits or not.

It is estimated that **Preferred Alternative 2, Option b** and **Preferred Alternative 3, Option a** could cause a small business without a Commercial Vessel King Mackerel Permit to lose, on average, up to 60 or 90 lbs ww and up to $99 or $149 per trip, while one without a Commercial Vessel Spanish Mackerel Permit could lose, on average, 113 lbs ww and $124 per trip (Table 6.2). **Preferred Alternative 3, Option a** would also cause a small business with the above permits to incur those same losses during a for-hire trip.

Table 6.2. Estimates of cost of **Preferred Alternative 2, Option b** and **Preferred Alternative 3, Option a** on small businesses without Commercial Vessel King and/or Spanish Mackerel Permit or from a for-hire trip.

Species	Migratory Group	EEZ Zone or Location	Daily Bag Limit (per person)	Ave Lbs[1]	Ave. Revenue[2]
King Mackerel	Atlantic	Mid Atlantic	3 fish	90	$149
		South Atlantic, except off FL	3 fish	90	$149
		Off Florida	2 fish	60	$99
	Gulf	All, except off Florida	2 fish	60	$99
		Off Florida	2 fish	60	$99
Spanish Mackerel	Atlantic	All	15 fish	113	$124
	Gulf	All	15 fish	113	$124

1: Average weight (ww) of king mackerel estimated at 10 lbs, average weight of Spanish mackerel estimated at 2.5 lbs (ww) and average number of persons per vessel is three.
2: Average ex-vessel price of king mackerel in 2013 dollars is estimated at $1.65 per lb ww, and average ex-vessel price of Spanish mackerel at $1.10 per lbw ww, which are estimated from NMFS ALS non-confidential data from 2011 through 2012.

Any small business in the finfish industry that operates in both Councils' jurisdictions or in the for-hire industry in the Gulf Council's jurisdiction could avoid the above loss of Spanish mackerel revenues per trip by acquiring a Commercial Vessel Spanish Mackerel Permit at the total annual cost of $25 (fee) plus any other application expense(s). Consequently, the adverse economic impact on those small businesses would be no more than approximately $25 per year. A small business in the for-hire industry in the South Atlantic Council's jurisdiction would be unable to avoid the losses of Spanish mackerel revenues by acquiring a Spanish Mackerel Permit.

A small business in the finfish industry that operates in both jurisdictions or in the for-hire fishing industry in the Gulf Council's jurisdiction can avoid the above losses of king mackerel revenues per trip by acquiring a Commercial Vessel King Mackerel Permit; however, these are limited access permits. A query of transferred king mackerel permits from January 1, 2008 through June 2013 was conducted and reported costs of acquiring a permit were found to range from $0 to $10,000 per transferred permit, with a median of $3,625 and average of $2,860. Transfers that involved both a permit and vessel were not included in those estimates. If a small business would lose in revenues more than the cost of acquiring a permit, it is expected it would acquire the permit. However, a small business in the finfish or for-hire fishing industry without a permit may have little to no incentive to acquire a permit if the permit is to target a species that it only incidentally harvests and sells.

Seafood wholesales dealers would indirectly lose the net revenue from the resale of the king and Spanish mackerel that they purchase from businesses that presently sell king and Spanish mackerel harvested without the respective Commercial Vessel Permits or in the South Atlantic Council's jurisdiction after a for-hire trip.

Under **Preferred Alternative 4, Options a** and **b**, a federally licensed dealer would have to donate all proceeds from the sale of the tournament-caught and donated fish or their monetary equivalent to a charity designated by the tournament organizers. Any unlicensed dealer would lose revenues from sales of tournament-caught king and Spanish mackerel; however, there would be no unlicensed dealers when the Generic Dealer Permit Amendment is implemented.

6.5.2 Action 2

Preferred Alternative 1 is the status quo alternative and would have no adverse or beneficial economic impact on small businesses.

6.5.3 Action 3

Preferred Alternative 2 would generate a beneficial economic impact because it would eliminate the time and other costs currently incurred by small businesses to demonstrate that they meet the current income requirements for Commercial Vessel King and Spanish Mackerel Permits. At present, to renew or obtain a new permit, at least 25% of the applicant's earned income, or at least $10,000, must have been derived from commercial fishing or from charter fishing during one of the three calendar years preceding the application.

6.6 Substantial number of small entities criterion

Up to approximately 91% of the for-hire vessels with a Gulf CMP Permit (including those with a historical captain permit) and up to approximately 79% of the for-hire vessels with a South Atlantic CMP Permit could be adversely affected by **Preferred Alternative 2, Option b** and **Preferred Alternative 3, Option a** of Action 1 because they do not have a Commercial Vessel King Mackerel Permit. It is expected that smaller percentages of for-hire vessels with the CMP Permits do not have a Commercial Vessel Spanish Mackerel Permit.

Preferred Alternative 2 of Action 3 would affect 100% of the small businesses that currently hold a Commercial Vessel King Mackerel and/or Spanish Mackerel Permit.

Up to all of the 1,022 establishments in the seafood wholesale industry in the Gulf and South Atlantic States could be indirectly affected by **Preferred Alternative 2, Option b** and **Preferred Alternative 3, Option a** of Action 1.

6.7 Significant economic impact criterion

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

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

Profitability: Does the proposed rule significantly reduce profit for a substantial number of small entities?

Small businesses that commercially harvest king and/or Spanish mackerel in federal waters of the Gulf and Atlantic can be divided into two classes: first, those with valid (non-expired) Commercial Vessel King and Spanish Mackerel Permits and second, those without. Small businesses with the valid permits can harvest and sell quantities of the species from the EEZ that substantially exceed the recreational bag limit, while those without the valid permits are restricted to harvesting no more than that bag limit. The bag limit for king mackerel is two fish per person per day in the Gulf EEZ and EEZ off Florida and three per person per day in federal waters of the Mid-Atlantic and South Atlantic, except off Florida. In the Gulf and Atlantic EEZ, the daily bag limit for Spanish mackerel is 15 fish per person. Hence, any vessel owned or operated by a small business that commercially harvests king mackerel and Spanish mackerel without the valid federal commercial permits in the Gulf or Atlantic EEZ cannot land and sell more than three king mackerel per person per day and no more than 15 Spanish mackerel per person per day.

Comparisons of the recreational bag limits and commercial trip limits for king and Spanish mackerel in the Gulf and Atlantic EEZ are shown in Table 6.3. Using the same assumptions found in Table 6.1, a vessel without Commercial Vessel Permits is restricted to landing substantially less than those with those permits. This suggests substantial differences in the two categories of commercial fishing businesses that harvest king and Spanish mackerel in federal waters: those businesses with vessels that have the valid federal commercial permits have substantially larger annual receipts from harvest of these species than those without. Businesses with the valid federal permits commercially target the species in federal waters, while those without likely harvest king and Spanish mackerel as either incidental catch when targeting other species, such as shrimp, or are engaged in for-hire (recreational) fishing.

Table 6.3. Comparison of recreational bag limits and commercial trip limits.

Species	Migratory Group	EEZ Zone or Location	Daily Bag Limit (lbs ww)[1]	Trip Limit (lbs ww)
King Mackerel	Atlantic	Mid Atlantic	90	3,500
		South Atlantic, except off FL	90	3,500
		Off Florida	60	3,500
	Gulf	All, except off Florida	60	3,000
		Off Florida	60	50 - 25,000[2]
Spanish Mackerel	Atlantic	All	113	50 – Unlimited[3]
	Gulf	All	113 fish per person	Unlimited
1. Same assumptions used as found in Table 6.1				
2. Trip limits vary by subzone and gear used; those who use gillnets have the 25,000-lb limit.				
3. Trip limit begins at 3,500 lbs, increases of unlimited than falls to 1,500 and can fall to 50 depending on location.				

As shown in Table 6.3, small businesses without the permits harvest substantially less king and Spanish mackerel in federal waters. **Preferred Alternative 2, Option b** and **Preferred Alternative 3, Option a** of Action 1 could potentially eliminate up to 100% of these small business's landings and receipts from king and Spanish mackerel caught in federal waters, while there would be no adverse impact on businesses with the permits.

Preferred Alternative 2, Option b of Action 1 would not affect small businesses in the for-hire industry that own/operate vessels with Commercial Vessel King and Spanish Mackerel Permits, but would adversely affect those in the industry without the permits. Although their potential landings of and sales from king Spanish mackerel are the same, the small businesses without the permits could lose up to 100% of their receipts from sales of these species, while those with the permits would lose nothing.

6.7 Description of significant alternatives

All of the non-status quo alternatives for Actions 1 and 2 would impose adverse economic impacts on small businesses. **Alternative 2, Option b** of Action 1 would have a smaller adverse economic impact on small businesses in the for-hire industry in the South Atlantic States than **Preferred Alternative 3, Option b**, but was rejected. **Alternative3, Option a** of Action 1 was considered, but rejected, and would have a larger adverse economic impact on small businesses in the for-hire industry in the Gulf states than **Preferred Alternative 2, Option a**.

Alternative 2 of Action 2 was considered, but rejected, and would have had a larger adverse economic impact on small businesses that currently hold a Commercial Vessel King Mackerel Permit.

Alternative 1 of Action 3 was considered, but rejected, and would have had a larger adverse economic impact on small businesses because it would have maintained the current income requirements of the Commercial Vessel King and Spanish Mackerel Permits.

CHAPTER 7. LIST OF PREPARERS

PREPARERS

Name	Expertise	Responsibility
Ryan Rindone, GMFMC	Fishery Biologist	Co-Team Lead – amendment development, biological impacts
Kari MacLauchlin, SAFMC	Fishery Social Scientist	Co-Team Lead – amendment development, social environment, social impacts, social and economic cumulative impacts
Susan Gerhart, NMFS	Fishery Biologist	Co-Team Lead – amendment development, introduction, biological and cumulative impacts
Assane Diagne, GMFMC	Economist	Economic impacts, regulatory impact review
Brian Cheuvront, SAFMC	Economist	Economic impacts
Ava Lasseter, GMFMC	Anthropologist	Social impacts
Denise Johnson, NMFS/SF	Economist	Economic environment and impacts, Regulatory Flexibility Act analysis
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Nikhil Mehta, NMFS/SF	Fishery Biologist	Bycatch practicability analysis
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Name	Discipline/Expertise	Role in EA Preparation
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Jennifer Lee, NMFS SERO	Protected Resources Specialist	Protected Resources review
Nancie Cummings, NMFS/SEFSC	Biologist	Biological review
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GMFMC = Gulf of Mexico Fishery Management Council, SAFMC = South Atlantic Fishery Management Council, NMFS = National Marine Fisheries Service, SF = Sustainable Fisheries Division, PR = Protected Resources Division, HC = Habitat Conservation, GC = General Counsel

CHAPTER 8. LIST OF AGENCIES AND ORGANIZATIONS CONSULTED

National Marine Fisheries Service
- Southeast Fisheries Science Center
- Southeast Regional Office
- Office for Law Enforcement

NOAA General Counsel

Environmental Protection Agency
United States Coast Guard
Texas Parks and Wildlife Department
Alabama Department of Conservation and Natural Resources/Marine Resources Division
Louisiana Department of Wildlife and Fisheries
Mississippi Department of Marine Resources
Florida Fish and Wildlife Conservation Commission
Georgia Department of Natural Resources/Coastal Resources Division
South Carolina Department of Natural Resources/Marine Resources Division
North Carolina Division of Marine Fisheries

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APPENDIX A. ALTERNATIVES CONSIDERED BUT REJECTED

Action 2. Sale of Cobia

Gulf Preferred Alternative 1: No Action - No federal permit requirement to sell cobia. Sale of cobia harvested under the possession limit is allowed for persons that possess the necessary state permits. However, if a closure has been implemented, the sale or purchase of cobia of the migratory group, subzone, or gear type, is prohibited, including any cobia taken under the possession limit.

Alternative 2: Create a new commercial cobia permit. For a person to sell cobia in or from the EEZ, those fish must have been harvested under a commercial quota aboard a vessel with a commercial cobia vessel permit.

Option a. The South Atlantic Council's jurisdiction
Option b. The Gulf Council's jurisdiction

Alternative 3: For a person to sell cobia in or from the EEZ of the Atlantic, those fish must have been harvested under a commercial quota aboard a vessel with a commercial vessel king mackerel or Spanish mackerel permit.

South Atlantic Preferred Alternative 4: For a person to sell cobia in or from the EEZ of the Atlantic or Gulf of Mexico, those fish must have been harvested under a commercial quota aboard a vessel with at least one of the following commercial vessel permits: king mackerel, Spanish mackerel, Gulf reef fish, South Atlantic snapper/grouper, or South Atlantic dolphin/wahoo.

Action 3. Tournament Sales of King Mackerel

Alternative 1: No Action - No federal permit requirement to sell or donate king mackerel caught during a tournament. Sale or donation of king mackerel harvested during a tournament is allowed for tournament organizers in accordance with state laws and regulations in the state in which the tournament is held. However, if a commercial closure has been implemented, the sale or purchase of king mackerel of the migratory group, subzone, or gear type is prohibited, including any king mackerel harvested during a tournament.

SA Preferred Alternative 2: Establish a federal king mackerel tournament permit to be obtained by tournament organizers in order to sell or donate tournament-caught king mackerel. Sale is prohibited during a commercial closure, and all fish sold or donated shall be counted against the recreational allocation of the ACL.

Gulf Preferred Alternative 3: Prohibit the sale of tournament-caught king mackerel.

Alternative 4: Create a set aside from the recreational king mackerel ACL for tournament sales. Tournament organizers would be required to report all king mackerel harvested during the tournament.

Alternative 5: Create a set aside from the recreational king mackerel ACL for tournament sales. Tournament organizers would be required to report all king mackerel harvested during the tournament, and any sale provision of these fish should be left up to the state.

Alternative 6: If a state tournament permit is comparable to the federal tournament permit, the state permit could serve in lieu of the federal permit.

Action 4. Elimination of Latent Endorsements in the Gulf Group King Mackerel Gillnet Sector

Alternative 1: No Action – do not eliminate any gillnet endorsements

Alternative 2: Renew gillnet endorsements for commercial king mackerel permits if average landings met the threshold (defined below) during:

Option a. All years with data available (2001-2011)
- Suboption i. Average of all years
- Suboption ii. Average of the best 10 years of the 11 years
- Suboption iii. At least one of the 11 years
- Suboption iv. At least two of the 11 years
- Suboption v. At least three of the 11 years

Option b. All years before the control date (2001-2009)
- Suboption i. Average of all years
- Suboption ii. Average of the best eight of nine years
- Suboption iii. At least one of the nine years
- Suboption iv. At least two of the nine years
- Suboption v. At least three of the nine years

Option c. The threshold for average reported landings would be:
- Suboption i. 5,000 lbs
- Suboption ii. 10,000 lbs
- Suboption iii. 15, 000 lbs
- Suboption iv. 20,000 lbs.

Alternative 3: Renew permits for commercial king mackerel gillnet vessels only if the vessel had reported landings in:

Option a. The fishing year ending June 30, 2009
Option b. At least one of the five years preceding the June 30, 2009 control date
Option c. At least two of the five years preceding the June 30, 2009 control date

King Mackerel Inactive Permits

Alternative 2: Renew commercial king mackerel permits if average landings met the threshold (defined below) during:

Option a. All years with data available (1998/1999-2009/2010)

Suboption i. Average of all years

Suboption ii. At least one of the 12 years

Option c. The threshold for average reported landings would be:

Suboption i. 1 lbs

Suboption ii. 100 lbs

Alternative 3: Renew commercial king mackerel permits only if the permit had reported landings in:

Option a. At least one of the five years preceding the September 17, 2010 or September 30, 2010 control date

Option b. At least two of the five years preceding the September 17, 2010 or September 30, 2010 control date

South Atlantic Alternative 4: Do not allow sale (allow transfer to family members) of latent permits but do not eliminate them.

Gulf Alternative 4: Allow transfer of latent commercial king mackerel permits only to immediate family members and allow transfer to another vessel owned by the same entity. Permits will be considered latent if average landings did not meet the threshold (defined below) during:

Option a. All years with data available (1998/1999-2009/2010)

Suboption i. Average of all years

Suboption ii. At least one of the 12 years

Option c. The threshold for average reported landings would be:

Suboption i. 1 lb

Suboption ii. 100 lbs

Alternative 5: Establish an appeals process.

Action 4. Federal Regulatory Compliance

Gulf Preferred Alternative 1: No Action - All vessels with federal commercial king and/or Spanish mackerel permits, as well as CMP charter permits are subject to applicable federal CMP regulations when fishing in the EEZ, and are subject to applicable state CMP regulations when fishing in state waters.

Alternative 2: All vessels with federal commercial king and/or Spanish mackerel permits, as well as CMP charter/headboat permits, must comply with federal CMP regulations when fishing in state waters if the federal regulations are more restrictive.

Alternative 3: If a cobia permit is established in Action 2, all vessels with federal commercial cobia permits must comply with federal cobia regulations when fishing in state waters if the federal regulations are more restrictive.

Income requirements
Alternative 4: Replace the current income requirements for king and Spanish mackerel (and cobia, if applicable) with a Coastal Migratory Pelagics landings requirement, such that in one of the three years preceding the application, landings must be greater than:

Option a. 500 lbs of coastal migratory pelagic species
Option b. 1,000 lbs of coastal migratory pelagic species
Option c. 5,000 lbs of coastal migratory pelagic species
Option d. 10,000 lbs of coastal migratory pelagic species

Action 8. Atlantic Group Spanish Mackerel Gillnet Endorsement

Background: The fishing power of gillnets is substantially higher than cast net and hook-and-line gears. In the past there was an equitable balance among the gears. In recent years there have been additional vessels entering the gillnet fishery in the Atlantic and this will negatively impact hook-and-line and cast-net fishermen as the gillnet catches occur earlier in the season, than the other gears.
Alternative 1: No Action – Do not establish an Atlantic group Spanish mackerel gillnet endorsement

Alternative 2: Establish an Atlantic group Spanish mackerel gillnet endorsement with qualifying poundages for a commercial gillnet endorsement based on the new control dates and average landings during the most recent 5, 10, or 15 years prior to these control dates (September 17, 2010 for Atlantic group Spanish mackerel)

Option a: 30,000 lbs
Option b: 20,000 lbs
Option c: 10,000 lbs

APPENDIX B. OTHER APPLICABLE LAW

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801 et seq.) provides the authority for fishery management in federal waters of the Exclusive Economic Zone. However, fishery management decision-making is also affected by a number of other federal statutes designed to protect the biological and human components of U.S. fisheries, as well as the ecosystems that support those fisheries. Major laws affecting federal fishery management decision-making include the Endangered Species Act (Section 4.2), E.O. 12866 (Regulatory Planning and Review, Chapter 5) and E.O. 12898 (Environmental Justice, Section 3.5.5). Other applicable laws are summarized below.

Administrative Procedures Act

All federal rulemaking is governed under the provisions of the Administrative Procedure Act (APA) (5 U.S.C. Subchapter II), which establishes a "notice and comment" procedure to enable public participation in the rulemaking process. Under the APA, National Marine Fisheries Service (NMFS) is required to publish notification of proposed rules in the *Federal Register* and to solicit, consider, and respond to public comment on those rules before they are finalized. The APA also establishes a 30-day waiting period from the time a final rule is published until it takes effect.

Coastal Zone Management Act

Section 307(c)(1) of the federal Coastal Zone Management Act of 1972 (CZMA), as amended, requires federal activities that affect any land or water use or natural resource of a state's coastal zone be conducted in a manner consistent, to the maximum extent practicable, with approved state coastal management programs. The requirements for such a consistency determination are set forth in NOAA regulations at 15 C.F.R. part 930, subpart C. According to these regulations and CZMA Section 307(c)(1), when taking an action that affects any land or water use or natural resource of a state's coastal zone, NMFS is required to provide a consistency determination to the relevant state agency at least 90 days before taking final action.

Upon submission to the Secretary, NMFS will determine if this plan amendment is consistent with the Coastal Zone Management programs of the states of Alabama, Florida, Louisiana, Mississippi, and Texas to the maximum extent possible. Their determination will then be submitted to the responsible state agencies under Section 307 of the CZMA administering approved Coastal Zone Management programs for these states.

Data Quality Act

The Data Quality Act (DQA) (Public Law 106-443) effective October 1, 2002, requires the government to set standards for the quality of scientific information and statistics used and disseminated by federal agencies. Information includes any communication or representation of knowledge such as facts or data, in any medium or form, including textual, numerical, cartographic, narrative, or audiovisual forms (includes web dissemination, but not hyperlinks to information that others disseminate; does not include clearly stated opinions).

Specifically, the DQA directs the Office of Management and Budget (OMB) to issue government wide guidelines that "provide policy and procedural guidance to federal agencies for ensuring

and maximizing the quality, objectivity, utility, and integrity of information disseminated by federal agencies." Such guidelines have been issued, directing all federal agencies to create and disseminate agency-specific standards to: 1) ensure information quality and develop a pre-dissemination review process; 2) establish administrative mechanisms allowing affected persons to seek and obtain correction of information; and 3) report periodically to OMB on the number and nature of complaints received.

Scientific information and data are key components of fishery management plans (FMPs) and amendments and the use of best available information is the second national standard under the Magnuson-Stevens Act. To be consistent with the DQA, FMPs and amendments must be based on the best information available. They should also properly reference all supporting materials and data, and be reviewed by technically competent individuals. With respect to original data generated for FMPs and amendments, it is important to ensure that the data are collected according to documented procedures or in a manner that reflects standard practices accepted by the relevant scientific and technical communities. Data will also undergo quality control prior to being used by the agency and a pre-dissemination review.

Executive Orders

E.O. 12630: Takings

The Executive Order on Government Actions and Interference with Constitutionally Protected Property Rights that became effective March 18, 1988, requires each federal agency prepare a Takings Implication Assessment for any of its administrative, regulatory, and legislative policies and actions that affect, or may affect, the use of any real or personal property. Clearance of a regulatory action must include a takings statement and, if appropriate, a Takings Implication Assessment. The NOAA Office of General Counsel will determine whether a Taking Implication Assessment is necessary for this amendment.

E.O. 12962: Recreational Fisheries

This Executive Order requires federal agencies, in cooperation with states and tribes, to improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities through a variety of methods including, but not limited to, developing joint partnerships; promoting the restoration of recreational fishing areas that are limited by water quality and habitat degradation; fostering sound aquatic conservation and restoration endeavors; and evaluating the effects of federally-funded, permitted, or authorized actions on aquatic systems and recreational fisheries, and documenting those effects. Additionally, it establishes a seven-member National Recreational Fisheries Coordination Council responsible for, among other things, ensuring that social and economic values of healthy aquatic systems that support recreational fisheries are considered by federal agencies in the course of their actions, sharing the latest resource information and management technologies, and reducing duplicative and cost-inefficient programs among federal agencies involved in conserving or managing recreational fisheries. The Council also is responsible for developing, in cooperation with federal agencies, States and Tribes, a Recreational Fishery Resource Conservation Plan - to include a five-year agenda. Finally, the Order requires NMFS and the U.S. Fish and Wildlife Service to develop a joint agency policy for administering the ESA.

E.O. 13132: Federalism

The Executive Order on Federalism requires agencies in formulating and implementing policies, to be guided by the fundamental Federalism principles. The Order serves to guarantee the division of governmental responsibilities between the national government and the states that was intended by the framers of the Constitution. Federalism is rooted in the belief that issues not national in scope or significance are most appropriately addressed by the level of government closest to the people. This Order is relevant to FMPs and amendments given the overlapping authorities of NMFS, the states, and local authorities in managing coastal resources, including fisheries, and the need for a clear definition of responsibilities. It is important to recognize those components of the ecosystem over which fishery managers have no direct control and to develop strategies to address them in conjunction with appropriate state, tribes and local entities (international too).No Federalism issues have been identified relative to the action proposed in this amendment. Therefore, consultation with state officials under Executive Order 12612 is not necessary.

APPENDIX C. SUMMARIES OF PUBLIC COMMENTS RECEIVED

South Atlantic
August 2013
South Atlantic Public Hearing Comments
Joint CMP Amendment 20A

Summary of Comments
14 individuals provided public comment at the hearings.
10 individuals provided written comments.

Action 1- bag limit sales of king mackerel and Spanish mackerel:
- Eight comments supported prohibition on bag limit sales. Most stated that recreational fish should not be sold, and that the South Atlantic and Gulf of Mexico Fishery Management Councils (Councils) should be consistent with dolphin wahoo and snapper grouper regulations to prohibit bag limit sales.
- Five comments supported no action.
- One commenter felt for-hire vessels with the commercial permits should be allowed to sell fish caught on a for-hire trip.
- Five commenters supported the exemption to allow tournament sales because they felt contributions from donations benefitted the community and local charities.
- Three commenters did not support allowing tournament sales. One commenter felt that tournament organizers should only be allowed to directly donate fish for consumption, such as to a food bank, but not for money. Two commenters (including a Mid-Atlantic Fishery Management Council (MAFMC) member) noted that allowing tournament sales was inconsistent with prohibiting bag limit sales, since tournament fish are also recreationally caught fish.
- One commenter felt there should be more specifications for states to allow and monitor tournament sales, including a cap on total tournament sales.
- One commenter felt that there was an inconsistency with allowing cobia bag limit sales but prohibiting king mackerel and Spanish mackerel bag limit sales.

Action 2- elimination of inactive king mackerel commercial permits:
- Six opposed elimination of inactive permits, because permits are part of the fishing portfolio, and the Councils should not take away permits.
- One commenter suggested that permits issued before 1995 should be grandfathered in, if the Councils decide to eliminate inactive permits.
- Two commenters supported eliminating inactive permits and supported Option A under Alternative 2.
- Two commenters supported making inactive permits non-transferable (Alternative 3) because at least permit holders could continue fishing the permit. Both recommended Option C.
- Seven commenters supported the two-for-one requirement to reduce the number of permits over time. One commenter recommended finding a way to minimize the loophole for corporate permit transfers.

- Three commenters opposed the two-for-one requirements because of the impact on new entrants and the requirement would de-value the permits.
- A member of the MAFMC commented in opposition to the two-for-one requirement and recommended the Councils define a specific outcome before removing inactive permits.
- One commenter felt that there should be a threshold for the snapper grouper two-for-one requirement and the potential requirement for mackerel that designates a minimum number of permits.
- One commenter noted that there was a conflict between eliminating inactive permits and eliminating income requirements. If the intent of Action 2 is to remove latent effort and keep fishermen in who were consistently fishing, eliminating income requirements in Action 3 seems like it would keep latent effort in the fishery.

Action 3- eliminate or modify income requirements:
- Three commenters felt that income requirements should be kept but modified. Two commenters felt that income from commercial fishing only should qualify, and one commenter suggested changing the requirement to at least $20,000 in two of the last five years.
- Three commenters supported eliminating income requirements (Preferred Alternative 2).
- Two commenters supported no action.

Dates and Locations

August 5, 2013
Richmond Hill City Center
520 Cedar Street
Richmond Hill, Georgia 31324

August 6, 2013
Jacksonville Marriott
4670 Salisbury Road
Jacksonville, Florida 32256

August 7, 2013
Doubletree Hotel
2080 N. Atlantic Avenue
Cocoa Beach, Florida 32931

August 8, 2013
Hilton Key Largo Resort
97000 South Overseas Highway
Key Largo, Florida 33037

August 13, 2013
Hilton Garden Inn Airport
5265 International Boulevard
North Charleston, South Carolina 29418

August 14, 2013
Double Tree by Hilton Wilmington
4727 Concord Pike
Wilmington, Delaware 19803

August 15, 2013
Bridgepoint Hotel
101 Howell Road
New Bern, North Carolina 28582

Gulf of Mexico

Summary of the Public Hearings on
Coastal Migratory Pelagics Amendments 20A and 20B

D'Iberville, Mississippi
8/5/2013

Council/Staff
Dale Diaz
Corky Perret
Ava Lasseter

Seven members of the public attended.

Gary Smith: Recreational angler
The commercial fishermen he knows complain that the Gulf of Mexico Fishery Management Council (Gulf Council) is constantly trying to downsize the fleet, which conflicts with free markets. The commercial fishermen are against that. The fish houses want to see the industry shrink. His friends have to fish under a fish house permit because they can't get their own permit. When is the Gulf Council going to make their own permits so the fishermen don't have to fish under a fish house, which controls what price they get paid? That's the reality of what the Gulf Council has created in this system. They ought to have the ability to get their own permits.

He's against removing inactive permits as he's in the insurance business and you have to be inactive sometimes. For Amendment 19 (20A) Gary supports the Gulf Council's preferred alternative (Action 2, Alternative 1); permits should be allowed to go inactive which would allow others to come in and they could get their license reactivated. The Gulf Council has increased the commercial red snapper quota but not increased the number of people who can fish it. It would scare him to depend on a fish house owner like the commercial fishermen do. His biggest concern is that fishermen not be beholden to the fish houses.

Panama City, Florida
8/6/2013

Council/Staff
Pam Dana
Ryan Rindone
Ava Lasseter

Two members of the public attended.

BJ Burkett: Charter and Commercial Fisherman: Hook 'Em Up Charters
Mr. Burkett prefers an October 1 opening for the Eastern Zone, northern subzone (Amendment 20B, Action 1, Alternative 3b). He thinks the Western Zone should be reduced to a 1,250 pound

trip limit. He also thinks permitted vessels should be required to declare the zone in which they want to fish. He needs his zone open when he can fish it. October would be the best time for him to fish off Panama City. Any one of the three things mentioned would help, but not all of them are necessary.

He also doesn't necessarily agree with the sale of bag limit mackerel (Amendment 20A, Action 1). He says it takes fish out of his subzone's quota.

He would also like to see a change in the commercial allocation between the zones, which would shift more of the quota to the Eastern Zone northern subzone.

Randall Akins: Charter and Commercial Fisherman
Mr. Akins is a federal Spanish mackerel permit holder. He thinks there is a problem with the distribution of information, since he did not know that he could sell bag limit caught Spanish mackerel. He also wants a chance to read the documents ahead of time, as opposed to receiving them at the meetings. In the past, he has found words like "estimated" and "probably" in reference to quantitative values- these should be exact numbers, not estimates.

Mr. Akins prefers the elimination of the income requirement for CMP permits (Amendment 20A, Action 3, Alternative 1)

Mobile, Alabama
8/8/2013

Council/Staff
Kevin Anson
Chris Blankenship
Ryan Rindone
Ava Lasseter

Eleven members of the public attended.

No comments received.

St. Petersburg, Florida
8/12/2013

Council/Staff
Martha Bademan
Ryan Rindone
Ava Lasseter

Eight members of the public attended.

Gary Smith: Retired FL Commercial Fisherman
Mr. Smith has been a king mackerel fisherman for 51 years. He wonders why there can't be a central zone from the Collier/Monroe County line north to Cedar Key. The Martin Luther King Day opening of net season took all those fishermen out of the fishery, and they can't get back in. Give the king mackerel increases to the Florida West Coast fishermen, not the Keys. Make it a 5,000 pound trip limit for the few net boats that would fish there.

On changing the trip limit in the Eastern Zone southern subzone (Amendment 20B, Action 1), increasing the trip limit to 3,000 pounds with no reduction is going to shorten the season and drive the price down. Naples fishermen prefer the 1,250 pound trip limit, and they have to go further than the Keys fishermen. It would have to be a cold winter to push the fish down to the Tortugas.

Buddy Bradham: Recreational Fishing Alliance, Retired for-hire fishermen, and Commercial Fisherman
The following are preferred alternatives for Amendment 20A to the CMP FMP:

- Action 1, Alternative 1- Selling recreational fish helps cover expenses for the for-hire industry. Most commercial fishermen just go along with it. Why not have the Marine Recreational Information Program (MRIP) have an extra question to indicate whether the fish caught are going to a fish house?
- Action 2, Alternative 1- Don't eliminate permits. If the trip limit is increased to 3,000 pounds, guys who have not been fishing their permits will be able to do so again, as it will become economically feasible to go after the fish.
- Action 3, Alternative 1- Keep the income requirement to qualify for permits. It has worked in the past, and it helps to limit entry into the fishery.

The following are preferred alternatives for Amendment 20B to the CMP FMP:

- Action 1, Alternative 3- For the Eastern Zone, southern subzone.
- Action 2, Alternative 1- Leave the season opening as it is.
- Action 3, Alternative 4- Allow transit through all zones.

League City, Texas
8/13/2013

Council/Staff
Robin Riechers
Lance Robinson
Emily Muehlstein
Charlotte Schiaffo

21 members of the public attended.

Scott Hickman: Charter Owner/Operator

The science does not show the damage that has been done to cobia since oil spill. They have seen very few juvenile cobia and would like the Gulf Council to consider going to a one fish limit.

Shane Cantrell: Charter Owner/Operator
According the most recent stock assessment the cobia population is in good shape but his eyes on the water are not seeing any little cobia. He would like to see caution with the possibly of missing juvenile cobia. He does not like to lose a fish because he doesn't see the bag increase once it decreases but if it helps ensure the health of the cobia stock he would make the sacrifice.

Grand Isle, Louisiana
8/14/2013

Council/Staff
Camp Matens
Emily Muehlstein
Charlotte Schiaffo

27 members of the public attended.

Don Comron: Commercial Fisherman - Florida
Mr. Comron agreed with participation reduction, stating he would like to reduce participation as much as possible especially on the east coast and he would like to see the reduction 2 for 1 or increasing to a 75% earned income requirement, which he considered the ideal solution. He expressed a desire to see the reduction of part-time fishing, adding that he could not make a living on the east coast of Florida and so he had to travel over to the Gulf to fish. He emphasized that he did not want to keep anyone from fishing if that is what they genuinely do for a living but he did not appreciate recreational part time fishers who made money and filled the quota at the expense of full time commercial fishermen.

Ryan Mallory: 3rd Generation Fisherman - Florida
Mr. Mallory stated that everyone should have the opportunity to fish but the problem was that there were so many people that want to work and jump on the bandwagon when the fishing is good and take away from the commercial fleet who depend on the fishery for their livelihood. He stated that some action to reduce the number of permits would be better than no action, and asked what would happen to the next generation of fishermen? He stated that if the Gulf Council went to a two for one permit reduction it would reduce the fishery and increase the cost of a permit. He noted that it costs $30-50K to get a snapper grouper permit in the east coast before you ever catch a fish. He asked why the fishery could not just have more fish. He stated that the stocks were fine, and that mackerel fishers filled the quotas, which they would not be able to do if there was not enough stock. He wanted the quota to stay open until Lent when the fish were worth more, adding that when the price goes down its hard to make money.

Michael Sappe: 3rd Generation Fishermen: King and Spanish mackerel on 2 boats

Mr. Sappe asked why permits cannot be taken away from people who are not using them- noting that this is done in other fisheries. He noted that all these permits were taken away because they aren't being used. He added that if 1,400 people were in Louisiana catching king mackerel and they all came in with the allowed amount it would exceed the quota, and pointed out that there would need to be enough at least 30,000 pounds of fish per permit each year to satisfy them. He strongly urged limiting the permits.

Dean Blanchard: Seafood Dealer: Dean Blanchard Seafood
Mr. Blanchard stated that the regulations were causing much friction between the fishermen and urged the different stakeholders to cooperate and not argue amongst themselves. His preferences on the actions are:

For Amendment 20A **Dean supports Action 2, Alternative 1 do not eliminate inactive king mackerel permits.** On Action 3, he would rather no one be restricted from having a permit but he supports Alternative 4, Option a. **Modify Income Requirements for Gulf and South Atlantic Commercial Coastal Migratory Pelagic Permits by requiring people to earn at least 75% of their income from fishing to renew or obtain a commercial mackerel permit.** He urged that part time fishermen should not take the place of real commercial fishermen. He would rather the Gulf Council not reduce permits at all but if they had to do something then the option of a 75% of the earned income requirement should be enacted. He questioned why permits should be taken from someone, and added that the Gulf Council was funneling everyone into certain fisheries, then after so long saying this stock is overfished. He stated his opinion that the stock was overfished because the Gulf Council had created a system were commercial boats were forced to fish single species. He emphasized that there were plenty of fish in the sea, so they should be allowed to fish for them.

For Amendment 20B Actions 2 he backed the idea of having the season in the Western Zone open as late as possible (Alternative 3a).

Tim O'Malley: Commercial King Mackerel Fisherman - Florida
Mr. O'Malley stated that he first came over to the area in the 70's and had been fishing every year for 25 years in the Gulf. He noted that the 500 pound requirement on local fishermen made it harder for them to earn a living when several hundred recreational fishermen from the East Coast came over drinking beer and harvesting 200 pounds of quota each. He stated he has to come over from the East Coast, and he had to harvest fish from Louisiana and take those fish away from the locals. For Amendment 20A Action 3 he supported Alternative 4a and noted that if someone made 75% of their living commercial fishing then they were meeting the requirements. He added that 1,400 permits were too many, suggesting that the number be reduced to 300, and noted that many of the current 1,400 permits were not active. He stated that his quota in Fort Walton Beach was useless since it was so small, that it was met too quickly, and needed to be increased because the fish were plentiful in the Panhandle. For Amendment 20B he supported pushing back the season opening in September in the western zone (Action 2, Alternative 2a) and using a 2007 control date. Otherwise, he suggested not opening it because every little boat on the East coast would descend on the area because the fish could be caught within 10 miles of the beach in the Grand Isle area.

James Turner: Commercial Mackerel Fisherman - Florida

Mr. Turner testified that things were getting worse in the fishery each year. He explained that his trips had gone down from 18 per season to 10 and added that if it went any lower he would be out of business. He stated that there are more and more participants and he kept hearing the Gulf Council was going to individual fishing quotas (IFQ) and that there were not going to be any new participants allowed, but there had been not any change. He supported endorsements, and a control or cut-off date of 2007 or 2010. He urged the Gulf Council to act now and quit allowing more boats to come over and harvest the fish. He added that he could not afford to come over for one week of fishing, and that the price dropped with so many people selling kingfish from three areas at the same time. In Amendment 20B, Action 2, Alternative 1 he suggested that the season opening date should be left alone so the market was not flooded, adding that if the season was opened when the fish were closer to shore it would close after a week because of all the boats coming over and the quota being quickly filled. For Amendment 20A, Action 2, Alternative 4 he supported two for one permit reduction for the king mackerel portion of the commercial CMP fishery. He catches his fish and he hates having to travel and have people think he is taking local fish. He urged the Gulf Council to either give them more fish or stop new fishermen.

Nick Hill: Commercial Fisherman - Florida
Mr. Hill stated that this was the 12th fishery he has been kicked out of, and that none of his permit losses were based on science. He asked why the Gulf Council was constantly changing the rules before stock assessments were done. He lamented that the Gulf Council parroted the same broken record and nobody followed the rules. For Amendment 20, Action 5 he believed that changing the framework would only make it easier to make the changes that no one wants before the science says anything. He supports Amendment 20B, Action 3, Alternative 1: if the transit rule was put into effect it would be a law enforcement nightmare. For Amendment 19, Action 3 he expressed his opinion that the only way to get a permit is by lying on the form so if you don't fish you don't qualify, adding that if you have not used it in the last 2 or 3 years then you do not need a permit. He urged the Gulf Council to be sure if limits were based on landings that the Gulf Council do something to look out for people who have new permits but have been fishing them actively.

For Amendment 20A, Action 2 – Elimination of Inactive King Mackerel Permits Nick said that if the rules currently in place- (with a qualifier on the vessel) were enforced it would eliminate a lot of fishermen. He expressed frustration that the Mackerel AP came up with various proposals which were then shot down by the International Protocol Team, ignoring the will of the fishermen. He worried that the children of fishers would not go into the fishery because there was no future in it. Action 1: He suggested that the recreational sale of fish should be counted under the recreational quota, not the commercial quota.

Al Cassagne: Commercial Fisherman
On Amendment 20A Mr. Cassagne testified that permits seemed to be an East Coast of Florida issue which followed everyone down Grand Isle. He noted that all he had ever done for a living was to fish and that there did not use to be so many people in the area fishing for mackerel. He added that he had lost his right to some permits as well and does not want to lose another permit. He explained that he has one he doesn't use so he doesn't hurt the quota but he will sell it to someone who wants to fish it and then there will be more people harvesting the permit. He did

not have a solution but he does not want his permit to be eliminated and he is worried that this will become like snapper where one person who does not fish will make all the money because he owns the permits. He asked that the Gulf Council go back and set control dates/time frames so that people who have not fished an area historically cannot start now.

For Amendment 20B, Action 2 he supported a later opening date.
Jack Robinson: Commercial Fisherman
Mr. Robinson said that this was the 3rd time he come and made comments. For Amendment 20A he would like there to be some type of historical qualifier to eliminate permits, noting that people were getting pushed out of the different fisheries so they were turning into mackerel fishermen. For Action 3 he supported raising the earned income requirement as a good way to eliminate part-time fishermen.

For Amendment 20B Action 2 he opposed a September opening, stating that it would not be good for Texas fishermen who would not get a chance to fish and added that the price would be too low.

He suggested that the mackerel committee should be used more and it seemed that all the suggestions in the presentations were from the Gulf Council. Jack also suggested that the two Councils (S. Atlantic & Gulf) should divorce their co-management of mackerel so that it could be simplified and move faster.

Dan Kane: Commercial King Fisherman
Mr. Kane did not understand how the Gulf Council could manage the fisheries without doing the math correctly. He stated that there should only be 350 permits with the amount of quota that there is currently allowed. He noted that in 2008 the number of king fish permits almost doubled and added that mackerel needed to be a commercial fishery only. He gave his opinion that recreational fishers did not need so many fish and the commercial quota needed to be increased. He reemphasized the urgency of correct math being used to determine what needs to be done in the fishery. He stated that he lost two months of fishing on the east coast of Florida because there are so many fishermen and the fishing over there was not worthwhile, and that he lost over $200,000 because of the bad math. He stated that there were too many permits and not enough fish. He noted that there were over 50 boats from the east coast in the Grand Isle area, and that the market could only handle about 40,000lbs a week. For Amendment 20B, Action 2 he opposed opening the season on September 1st, adding that this would cause the market to flood and the fish price to drop. He stated that there was enough room for 18 or 21 boats in the Western zone, and suggested that the Gulf Council decide how many boats can fish in each zone. He suggested going back to historical fishermen of 20 years ago. He urged the Gulf Council to figure out how to let people make a living.

Mickey Readenour: Commercial Fisherman - Grand Isle
Mr. Readenour stated that fishermen in the area have had several events that have happened in the past 10 years; hurricanes oil spills etc.; that have limited fishermen from participating in the fishery. For Amendment 20B, Action 2 he supported an October 1st opening for the Western Gulf (Alternative 3a), adding that locals who have not been able to participate would then be allowed to because when the quota was reduced to a 3000lbs trip limit it made small boats

unable to fish. He suggested a September 1st opening would be fine for Florida (Alternative 2 b & c).

Key West, Florida
8/15/2013

Council/Staff
John Sanchez
Doug Gregory
Ryan Rindone

35 members of the public attended.

David Fleming: Commercial Fisherman – Naples
Mr. Fleming is opposed to the 3000 pound trip limit increase for the southern subzone (Amendment 20B, Action 1, Alternative 3b). Keep it at 1,250 pounds. Remove the trip limit reduction (Action 2, Alternative 4b).

Pedro Almanza: Commercial Fisherman – Key West
At 1,250 pounds, the trip limit is too low for me to make any money. He supports the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b)

Rick J. Matthews: Commercial Fisherman – Naples
Raising the trip limit to 3,000 pounds would drop the price of king mackerel and shorten the season. He prefers the 1,250 pound trip limit. He is not opposed to the trip limit reduction (Amendment 20B, Action 1, Alternative 1).

James Cass: Commercial Fisherman – Naples
Mr. Cass is opposed to the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b). The price would drop, the season would be too short, and he can't transport that many fish.

Patrick Purslow: Commercial Fisherman – Naples
Mr. Purslow opposed to the 3,000 pound trip limit (Amendment 20B, Action 1, Alternative 3b). It has worked fine at 1,250 pounds for the past 15 years. Don't fix what isn't broken. Keep the trip limit reduction. Increasing to 3,000 pounds would create more problems than it would solve.

Bill Kelly: Florida Key Commercial Fishing Association (FKCFA)
For Amendment 20A the FKCFA prefer no action on eliminating latent permits (Action 2, Alternative 1). FKCFA opposes the 2 for 1 permit reduction proposal from the South Atlantic Council (Action 2, Alternative 4). They state that there is a need to create opportunity- not restrict it. FKCFA is opposed to an income requirement (Action 3, Alternative 1). They have multi-species fishermen. For Amendment 20B FKCFA fully supports transit through closed areas from open areas (Action 3, Alternative 4). FKCFA supports increasing the trip limit in the southern subzone to 3000 pounds (Amendment 20B, Action 1, Alternative 3b). The fish stock is

healthy. They are not worried about a price drop. This is an opportunity for better marketing. The current low trip limit is hamstringing opportunities. FKCFA completely oppose Action 4. They oppose any IFQ or catch share system. Keep the Gulf mackerel fishery catch share-free.

Josh Nicklaus: Commercial Fisherman – Key West
Mr. Nicklaus prefers the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b). It is too expensive to fish for mackerel at 1,250 pounds per trip.

Billy Niles: Commercial Fisherman – Summerland Key
Mr. Niles has fished for 61 years, often at Half Moon Shoal. It's always been that the price drops when the fish hit Monroe County. He can't land fish because it is too expensive to fish with a 1250 pound trip limit. He says they need more fish. They need a 3,000 pound trip limit in the southern subzone (Amendment 20B, Action 1, Alternative 3b). He is opposed to the 2 for 1 permit reduction (Amendment 20A, Action 2, Alternative 4). Charter for hire sales should be under a separate quota. The fish stocks are healthy.

Mario Torres: Commercial Fisherman – Hialeah
Mr. Torres is currently pursuing a Gulf king mackerel permit. It may not be economically feasible to fish king mackerel with a 1,250 pound trip limit. He prefers the 3,000 pound trip limit increase (Amendment 20B, Action 1, Alternative 3b).

Bobby Pillar: Commercial Fisherman – Summerland Key
Mr. Pillar understands the argument from the Naples fishermen. The 1,250 pound trip limit came about to keep the price up. That was when diesel was 75 cents a gallon. Fuel is just too expensive these days to make any money with a 1,250 pound trip limit. If they can't get a 3,000 pound trip limit, traditional fishermen will be regulated out of the fishery. 1,250 pounds per trip may be okay in Naples, but no fishermen are going out for kingfish in Key West at 1,250 pounds. They catch their fish from December to January.

Brian Bennett: Commercial Fisherman – Key West
Mr. Bennett makes more money on kingfish than anything else. He is opposed to the 3,000 pound trip limit increase (Amendment 20B, Action 1, Alternative 3b). The quota will be filled too quickly and the price will drop. The price is great right now. More boats will fish our zone with a higher trip limit.

George Niles: Commercial Fisherman – Summerland Key
In Amendment 19 (20A) do not eliminate any permits. He is against the 2-for-1 permit reduction proposed by the South Atlantic (Amendment 20A, Action 2, Alternative 4). Fuel costs are too high and trip limits are too restrictive. The current southern subzone trip limits are from a time when they had $1 diesel. There needs to be 3,000 pound trip limits (Amendment 20B, Action 1, Alternative 3). He is opposed to trip limit reductions. He wants the season in the southern subzone to open on January 1. They need to be able to transit to the closest fish house to offload. Fishermen should have to declare their zone. Fish should be reallocated from the recreational fishery to the commercial fishery.

Daniel Padron- Commercial Fisherman – Key West
Mr. Padron supports the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b). It is too expensive to fish for mackerel at 1,250 pounds per trip. He is opposed to sale of bag limit caught fish. Don't eliminate permits. They need new people in the fishery. Give folks a chance to fish. He is opposed to the trip limit reduction (Amendment 20B, Action 1). He supports open transit through closed zones from open zones (Amendment 20B, Action 3, Alternative 4). He is opposed to any vessel monitoring system to monitor transit.

Jason Yarborough: Commercial Fisherman – Key West
Mr. Yarborough supports the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b). Fuel is just too expensive. Only one boat landed 1,250 pounds at his fish house last year. Increasing the trip limit to 3,000 pounds will allow folks to fish again and make money. He is opposed to eliminating permits (Amendment 20A, Action 2, Alternative 1). They need to preserve fishing opportunities for future generations.

Eduardo Gomez: Commercial Fisherman – Key West
Mr. Gomez supports the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b). Key West is one of the most important seafood ports in Florida. With fuel costs and distance to the fish, a 1,250 pound trip limit is not doable.

Eduardo Sariol: Commercial Fisherman – Key West
Mr. Sariol supports the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b). They need more fish to make money. Trip limit reductions are unnecessary. He is opposed to any VMS for monitoring transit.

Mike Pierce: Commercial Fisherman – Key West
Mr. Pierce supports the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b). He is opposed to the trip limit reduction. Fuel is too expensive to make 1,250 pounds economically doable.

Juan Blanco: Commercial Fisherman – Key West
Boats used to be loaded with fish. They don't need quotas. More fish coming in means more fish to sell. He supports the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b). He is opposed to the trip limit reduction. He sees fishermen breaking the law all the time. Fuel is too expensive, and you have to support your mates. He just wants to work. He is opposed to the 2 for 1 permit reduction (Amendment 19 (20A), Action 2, Alternative 4). They can still sell the fish. The most they get is $2, then it drops to about $1.

Yordy Martinez: Commercial Fisherman – Key West
Speaking for: Himself, and Alberto and Carlos Martinez
Mr. Martinez supports the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b). He wants his son to be a fisherman. The regulations make fishing hard. He is opposed to the trip limit reductions and VMS.

Marco Herrera: Commercial Fisherman – Key West
Mr. Herrera is a multispecies fisherman. He supports the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b). The Gulf Council needs to give something back to the fishermen. Give the commercial sector some of the recreational quota.

Jose Blanco: Commercial Fisherman – (No Location Given)
Mr. Blanco has been fishing in Naples and Tampa. He's seen Naples fishermen catching four days' worth of trip limits, and then sell them at Naples fish houses. They are in 43' and 39' boats. They are selling 6,000 pounds of fish at a time. They are hurting everyone.

Nicholas DeMauro: Commercial Fisherman – Sugarloaf Key
Mr. DeMauro fishes for snapper/grouper and kingfish. He needs a 250 pound bycatch permit for the charter for hire industry.

Omar Manso: Commercial Fisherman – Miami
Mr. Manso supports the 3,000 pound trip limit for the southern subzone (Amendment 20B, Action 1, Alternative 3b). Fuel costs and distance are just too great for 1,250 pounds.

Tom Marvel: Commercial Fisherman – Naples
Mr. Marvel travels for kingfish. Maintain the trip limit at 1,250 pounds (Action 1, Alternative 1). The season would be too short at 3,000 pounds. The price of fish would be too low. Collier County fishermen would suffer; they rely on the spring fish. They have to fish for multiple species. At 3,000 pounds, no one will catch more fish. With unlimited transit, more folks will travel. For Amendment 20A, he prefers Action 1 Alternative 3b. Action 2 Alternative 1, and Action 3 Alternative 2. For Amendment 20B, he prefers Action 1 Alternative 4c and Action 2 Alternative 1.

Randy Wamble: Commercial Fisherman – Naples
Mr. Wamble has to run long distances for fish. He has tailored his business for 1,250 pound trip limits. 3,000 pounds is no good (Amendment 20B, Action 1, Alternative 3b). The price and season would drop, and effort would increase. He opposes the 500 pound reduction.

Johnny Brown: Commercial Fisherman – Naples
Mr. Brown opposes the 3,000 pound trip limit increase (Amendment 20B, Action 1, Alternative 3b). 95% of his income is from king mackerel fishing. He fishes alone. He only has 1,900 pounds of grouper allocation. He needs the 1,250 pound kingfish trip limit to keep the season long and the price up. The 500 pound reduction is not needed. He obeys the rules and does not want to be punished.

Rick Matthews, Sr.: Commercial Fisherman – Naples
Mr. Matthews is a multispecies fisherman. The net ban hurt. He got into stone crab, sharks, and grouper. Now he only fishes stone crabs and king mackerel. He opposes the 3,000 pound trip limit because the season will drop (Amendment 20B, Action 1, Alternative 3b). The 500 pound trip limit reduction is not needed. He would rather spend more time fishing than have a higher trip limit.

https://docs.google.com/spreadsheet/ccc?key=0AhC1wo3e6k8TdC1KUk9VNjA5aWVwRUtiazNYYkxqRUE#gid=0

APPENDIX D. BYCATCH PRACTICABILITY ANALYSIS (BPA)

Population Effects for the Bycatch Species

Background
This Amendment to the Fishery Management Plan for Coastal Migratory Pelagic (CMP) Resources of the Gulf of Mexico and South Atlantic (FMP) (CMP Amendment 20A) includes actions that consider prohibiting the sale of king and Spanish mackerel, eliminating inactive commercial king mackerel permits, and modifying or eliminating income requirements for Gulf of Mexico (Gulf) and South Atlantic commercial CMP permits.

In the Gulf and Atlantic (Florida through New York) regions, most king mackerel and cobia are harvested with hook and line gear; however, gillnets are the predominant gear type used to harvest Spanish mackerel.

Commercial Sector
Currently, discard data are collected using a supplemental form that is sent to a 20% stratified random sample of the active permit holders in CMP fishery. However, in the absence of any observer data, there are concerns about the accuracy of commercial logbook data in collecting bycatch information. Biases associated with logbooks primarily result from inaccuracy in reporting of species that are caught in large numbers or are of little economic interest (particularly of bycatch species), and from low compliance rates. During 2008-2012, the commercial sector for CMP species in both the Gulf and Atlantic landed 11,714,560 lbs whole weight (ww) and discarded 44,035 lbs ww (Table D-1). The commercial sector predominantly harvested king and Spanish mackerel, with relatively few cobia (Table D-1).

Recreational Sector
For the recreational sector, during 2008-2012, estimates of the number of recreational discards were available from Marine Recreational Fisheries Statistical Survey (MRFSS) and the National Marine Fisheries Service (NMFS) headboat survey. The MRFSS system classifies recreational catch into three categories:

- Type A - Fishes that were caught, landed whole, and available for identification and enumeration by the interviewers.
- Type B - Fishes that were caught but were either not kept or not available for identification:
    - Type B1 - Fishes that were caught and filleted, released dead, given away, or disposed of in some way other than Types A or B2.
    - Type B2 - Fishes that were caught and released alive.

During 2008-2012, the private recreational landings and discards for all three CMP species were higher than for either the headboat or charterboat category (Table D-1). Landings and subsequent discards for the private recreational category were highest for Spanish mackerel, followed by king mackerel (Table D-1). Discards in the private recreational category for cobia were dis-proportionally high compared with its landings (Table D-1). A similar trend was seen for the charterboat category, with landings and discards for Spanish mackerel higher than king mackerel and cobia (Table D-1). However, in the headboat category, landings and discards were higher for king mackerel, followed by Spanish mackerel, and cobia (Table D-1). Discards for each of the three species were proportionally higher in the recreational sector than in the commercial sector (Table D-1).

During 2008-2012, information for charter trips came from two sources. Charter vessels for the CMP fishery were selected to report by the Science and Research Director (SRD) to maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, and on forms provided by the SRD. Harvest and bycatch information was monitored by MRFSS. Since 2000, a 10% sample of charter vessel captains were called weekly to obtain trip level information, such as date, fishing location, target species, etc. In addition, the standard dockside intercept data were collected from charter vessels and charter vessel clients were sampled through the standard random digital dialing of coastal households. Precision of charter vessel effort estimates has improved by more than 50% due to these changes (Van Voorhees et al. 2000).

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

Recent improvements have been made to the MRFSS program, and the program is now called the Marine Recreational Information Program (MRIP). Beginning in 2013, samples were drawn from a known universe of fishermen rather than randomly dialing coastal households. Other improvements have been and will be made that should result in better estimating recreational catches and the variances around those catch estimates.

Table D-1. Mean Headboat, MRFSS, and commercial estimates of landings and discards in the Gulf and U.S. Atlantic Ocean (Florida to New York) during 2008-2012. Headboat and MRFSS (charter and private) landings are in numbers of fish (N); commercial landings are in pounds whole weight (lbs ww). Discards represent numbers of fish that were caught and released alive (B2).

MRFSS CHARTER				MRFSS PRIVATE				COMMERCIAL					
Landings (N)	**Discards (N)**	**Percent Discards**	**Catch (N)**	**Landings (N)**	**Discards (N)**	**Percent Discards**	**Catch (N)**	**Landings (N)**	**Discards (N)**	**Percent Discards**	**Landings (lbs ww)**	**Discards (N)**	**Percent Discards**
2,393	0	0%	22,579	12,256	10,323	84%	191,018	71,916	119,102	166%	202,991	0	0%
31,254	2,195	7%	182,772	153,474	29,297	19%	622,353	441,727	180,625	41%	6,380,061	42,323	<1%
11,997	1,458	12%	437,110	334,701	102,409	31%	5,250,479	2,708,586	2,541,893	94%	5,131,508	1,712	<1%
45,644	**3,653**		**642,461**	**500,431**	**142,030**		**6,063,850**	**3,222,229**	**2,841,621**		**11,714,560**	**44,035**	

Sources: MRFSS data from SEFSC Recreational ACL Dataset (May 2013); Headboat data from SEFSC Headboat Logbook CRNF files (expanded; May 2013);

Commercial landings data from SEFSC Commercial ACL Dataset (July 10, 2013) with discard estimates from expanded SEFSC Commercial Discard Logbook (Jun 2013).

Notes: Commercial discard estimates are for vertical line gear only. Commercial king mackerel includes "king and cero mackerel" category;

Estimates of commercial discards are highly uncertain; No reported discards for Commercial and Headboat Cobia.
King mackerel, cobia, and Spanish mackerel data include both Atlantic coast and Gulf of Mexico. Note that discard estimates for commercial and headboat include only the Gulf of Mexico and SAFMC jurisdiction; discards from the Mid-Atlantic would likely be relatively low, but are not reported here.

Finfish Bycatch Mortality
Release mortality rates are unknown for most managed species. Recent Southeast Data, Assessment, and Review (SEDAR) assessments include estimates of release mortality rates based on published studies. Stock assessment reports can be found at http://www.sefsc.noaa.gov/sedar/.

SEDAR 28 (2013a, 2013b, 2013c, 2013d) assessed Spanish mackerel and cobia stocks in the South Atlantic and the Gulf. The stocks were determined to be neither overfished nor undergoing overfishing. Both the Gulf and Atlantic migratory groups of king mackerel were assessed by SEDAR 16 (SEDAR 16 2009), and will be assessed again by SEDAR 38 in 2013 through 2014. The SEDAR 16 (2009) assessment determined the Gulf migratory group of king mackerel was not overfished and was uncertain whether the Gulf migratory group was experiencing overfishing. Subsequent analyses showed that $F_{Current}/F_{MSY}$ has been below 1.0 since 2002. Consequently, the most likely conclusion is the Gulf migratory group king mackerel stock is not undergoing overfishing. Atlantic migratory group king mackerel were also determined not to be overfished; however, it was uncertain whether overfishing is occurring, and thought to be at a low level if it is occurring.

SEDAR 16 (2009) provided a 20% estimate of release mortality of king mackerel for private and charter vessels and 33% release mortality for the headboat fleet. For Spanish mackerel, SEDAR 17 (2008) used the following discard mortality rates: gillnets 100%, shrimp trawls 100%, trolling 98%, hook-and-line 80%, and trolling/hook-and-line combined 88%. SEDAR 28 (2013c) recommended identical discard mortality for Spanish mackerel as 100% for gillnets and shrimp trawls, but recommended a 10% discard mortality rate for commercial handlines, and 20% for recreational handlines. For cobia, SEDAR 28 (2013a and 2013b) used a discard mortality rate of 5% for the hook-and-line gear (both commercial and recreational sectors), and 51% for gillnets. Most king mackerel and cobia are harvested using hook-and-line gear, and gillnets are the primary gear for Spanish mackerel. As shown in Table 1, discards in the commercial sector are relatively low for all three CMP species, and while discards of cobia in the private recreational sector are very high, the discard mortality rate is very low for this species using hook-and-line gear (SEDAR 28 2013a and 2013b).

Practicability of Management Measures in Directed Fisheries Relative to their Impact on Bycatch and Bycatch Mortality
Bycatch information is currently being collected in the CMP fishery. The anticipated effects on bycatch mortality of target and non-target species as a result of the actions contained in CMP Amendments 20A would depend on whether the action is decreasing fishing or increasing opportunities for harvest.

Action 1 would prohibit the sale of all king and Spanish mackerel caught under the recreational bag limit in the exclusive economic zone (EEZ) of the Gulf, and with the exception of state-permitted tournaments, in the Atlantic. Some reduction in recreational catch may occur if a portion of resource participants elect not to harvest mackerel if they are not allowed to sell them. In such cases, there may be some, however minimal, positive benefits to stock size. Prohibiting bag limit sales would also rectify any issues with double counting of mackerel, but recreational landings may increase as states create and implement tournament permits. Action 2 includes

alternatives that could eliminate inactive commercial king mackerel permits or create a two-for-one permit requirement like the snapper grouper commercial permits. However, Alternative 1 (No Action) has been selected as the preferred alternative. Action 3 would eliminate income requirements for Gulf and South Atlantic commercial king and Spanish mackerel permits. By not requiring fishing effort for the renewal of permits, fishermen would not be encouraged to increase effort to renew their permit. More individuals could potentially qualify to obtain a permit; however, the low level of the current income requirement means it is unlikely many individuals who want a permit are not able to qualify currently. Additionally, many loopholes exist that make an income requirement virtually non-restrictive. Therefore, no increase in fishing effort is expected. Overall, the actions in CMP Amendment 20A would not be expected to increase bycatch and bycatch mortality.

According to the bycatch information for mackerel gillnets, menhaden, smooth dogfish sharks, and spiny dogfish sharks were the three most frequently discarded species (SAFMC 2004). There were no interactions of sea turtles or marine mammals reported (Poffenberger 2004). The Southeast Region Current Bycatch Priorities and Implementation Plan FY04 and FY05 reported that 26 species of fish are caught as bycatch in the Gulf king mackerel gillnet sector. Of these, 34% are reported to be released dead, 59% released alive, and 6% undetermined. Bycatch was not reported for the Gulf Spanish mackerel portion of the CMP fishery. The Atlantic Spanish mackerel portion of the CMP fishery has 51 species reported as bycatch with approximately 81% reported as released alive. For the South Atlantic king mackerel portion of the CMP fishery 92.7% are reported as released alive with 6% undetermined. Bycatch was not reported separately for gillnets and hook-and-line gear. Additionally, the supplementary discard program to the logbook reporting requirement shows no interactions of gillnet gear with marine mammals or birds. Tables D-2, D-3, and D-4 list the species most often caught with king and Spanish mackerel in the Gulf and South Atlantic from the SEFSC commercial logbooks. There is very little bycatch in the Spanish mackerel component of the fishery with gillnet gear, and the king mackerel component is also associated with a low level of bycatch. CMP Amendment 20A would not modify the gear types or fishing techniques in the mackerel segments of the CMP fishery. Therefore, bycatch and subsequent bycatch mortality in the CMP fishery is likely to remain very low if these amendments are implemented.

Table D-2. Top 6 species caught on trips where at least one pound of Spanish mackerel was caught with gillnet gear in the Gulf and South Atlantic for 2008 and 2012.

Species	Percent of Harvest (Gillnets Only)
Spanish mackerel	94.1%
Blue runner	2.8%
King mackerel & Cero	2.6%
Unclassified jacks	0.38%
Crevalle jack	0.09%
Black sea bass	0.02%
Sheepshead	0.01%

Source: Southeast Fisheries Science Center Commercial Logbook (June 2013)

Table D-4. Top 10 species caught on trips where at least one pound of king-cero mackerel with all gear types in the Gulf and in the South Atlantic from 2008-2012.

Species	Percent of Total Harvest
King mackerel & Cero	73.83%
Vermilion snapper	5.93%
Red grouper	3.10%
Red snapper	2.76%
Spanish mackerel	2.47%
Yellowtail snapper	2.14%
Greater amberjack	2.07%
Gag	1.31%
Red porgy	0.89%
Gray triggerfish	0.83%
Scamp	0.80%

Source: Southeast Fisheries Science Center Commercial Logbook (June 2013)

Additional information on fishery related actions from the past, present, and future considerations can be found in Chapter 4 (Cumulative Effects Analysis).

Ecological Effects Due to Changes in the Bycatch

The ecological effects of bycatch mortality are the same as fishing mortality from directed fishing efforts. If not properly managed and accounted for, either form of mortality could potentially reduce stock biomass to an unsustainable level. The Gulf Council, South Atlantic Council, and NMFS are in the process of developing actions that would improve bycatch monitoring in all fisheries including the CMP fishery. For example, the Joint South Atlantic/Gulf of Mexico Generic Charter/Headboat Reporting in the South Atlantic Amendment (Charter/Headboat Amendment), which has been approved by both Councils, includes an action that would require weekly electronic reporting of landings and bycatch data for headboats in the South Atlantic. A framework action to require electronic reporting of landings and bycatch by headboats in the Gulf has been approved by the Gulf Council. The Gulf and South Atlantic Councils are developing an amendment that would require electronic reporting of commercial logbook data, which would include landed and discarded fish. Better bycatch and discard data would provide a better understanding of the composition and magnitude of catch and bycatch, enhance the quality of data provided for stock assessments, increase the quality of assessment output, provide better estimates of interactions with protected species, and lead to better decisions regarding additional measures to reduce bycatch. Management measures that affect gear and effort for a target species can influence fishing mortality in other species. Therefore, enhanced catch and bycatch monitoring would provide better data that could be used in multi-species assessments.

Ecosystem interactions among CMP species in the marine environment are poorly known. The three species are migratory, interacting in various combinations of species groups at different levels on a seasonal basis. With the current state of knowledge, it is difficult to evaluate the potential ecosystem-wide impacts of these species interactions, or the ecosystem impacts from

the limited mortality estimated to occur from mackerel fishing effort. However, there is very little bycatch in the Spanish mackerel portion of the CMP fishery with gillnet gear, and the king mackerel portion of the CMP fishery is also associated with a low level of bycatch (Tables D-2, D-3, and D-4; discussion of practicability of management measures in Section 1.1 of this BPA). CMP Amendment 20A would not modify the gear types or fishing techniques in the CMP fishery. Therefore, ecological effects due to changes in bycatch in the CMP fishery are likely to remain very low if implemented. For more details on ecological effects, see Chapters 3 and 4.

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

Actions in CMP Amendment 20A are not expected to affect bycatch of other non-mackerel fish species. Less than 7% of the total landings in the mackerel and cobia components of the CMP fishery are non-targeted species (Tables D-2, D-3, and D-4). As discussed in the "practicability of management measures" portion of this BPA, the actions in CMP Amendment 20A are not expected to substantially affect bycatch of other fish species or result in population and ecosystem effects.

Effects on Marine Mammals and Birds

Under Section 118 of the Marine Mammal Protection Act (MMPA), NMFS must publish, at least annually, a List of Fisheries that places all U.S. commercial fisheries into one of three categories based on the level of incidental serious injury and mortality of marine mammals that occurs in each fishery. The 2013 proposed List of Fisheries classifies the Gulf and South Atlantic CMP hook-and-line fishery as a Category III fishery (78 FR 23008, April 22, 2013). Category III designates fisheries with a remote likelihood or no known serious injuries or mortalities. The Gulf and South Atlantic CMP gillnet portion of the CMP fishery is classified as a Category II fishery. This classification indicates an occasional incidental mortality or serious injury of a marine mammal stock resulting from the fishery (1-50 % annually of the potential biological removal). The gillnet portion of the CMP fishery has no documented interaction with marine mammals; NMFS classifies the gillnet portion of the CMP fishery as Category II based on analogy (similar risk to marine mammals) with other gillnet fisheries.

The Bermuda petrel and roseate tern occur within the action area. Bermuda petrels are occasionally seen in the waters of the Gulf Stream off the coasts of North Carolina and South Carolina during the summer. Sightings are considered rare and only occurring in low numbers (Alsop 2001). Roseate terns occur widely along the Atlantic coast during the summer but in the southeast region, they are found mainly off the Florida Keys (unpublished USFWS data). Interaction with fisheries has not been reported as a concern for either of these species.

Fishing effort reductions have the potential to reduce the amount of interactions between the fishery and marine mammals and birds. Although, the Bermuda petrel and roseate tern occur within the action area, these species are not commonly found and neither has been described as associating with vessels or having had interactions with the CMP fishery. Thus, it is believed that the CMP fishery is not likely to negatively affect the Bermuda petrel and the roseate tern.

Spanish mackerel are among the species targeted with gillnets in North Carolina state waters. Observer coverage for gillnets is up to 10% and provided by the North Carolina Division of Marine Fisheries, primarily during the fall flounder fishery in Pamlico Sound. Gillnets are also used from the North Carolina/South Carolina border and south and east of the Regional Fishery Management Council demarcation line between the Atlantic Ocean and the Gulf. In this area gillnets are used to target finfish including, but not limited to king mackerel, Spanish mackerel, whiting, bluefish, pompano, spot, croaker, little tunny, bonita, jack crevalle, cobia, and striped mullet. The majority of fishing effort occurs in federal waters because South Carolina, Georgia, and Florida prohibit the use of gillnets, with limited exceptions, in state waters.

There is some observer coverage of CMP targeted trips by vessels with an active directed shark permit. The Shark Gillnet Observer Program is mandated under the Atlantic Highly Migratory Species FMP, the Atlantic Large Whale Take Reduction Plan (50 CFR Part 229.32), and the Biological Opinion for the Continued Authorization of the Atlantic Shark Fishery under Section 7 of the Endangered Species Act. Observers are deployed on any active fishing vessel reporting shark drift gillnet effort. In 2005, this program also began to observe sink gillnet fishing for sharks along the southeastern U.S. coast.

The shark gillnet observer program now covers all anchored (sink, stab, set), strike, or drift gillnet fishing by vessels that fish from Florida to North Carolina year-round. The observed fleet includes vessels with an active directed shark permit and fish with sink gillnet gear.

Changes in Fishing, Processing, Disposal, and Marketing Costs

It is likely that all states within the Gulf and South Atlantic Councils' jurisdictions would be affected by the regulations associated with actions in CMP Amendment 20A. Action 1 includes an exception for donation of tournament-caught king and Spanish mackerel. It is a common practice for tournament organizers to donate fish to a dealer, who in turn donates money to a charity. This practice allows for disposal of fish without waste and supports charitable organizations. Sale of tournament-caught mackerel raises health issues because the Food and Drug Administration requires processors of fish and fishery products to develop and implement hazard analysis and critical control points (HACCP) systems for their operations. When a food safety hazard can be introduced or made worse by a harvester or carrier, the processor should include controls in a HACCP plan that requires, as a condition of receipt, demonstration that the hazard has been controlled by the harvester or carrier. Therefore, tournament organizers and the dealer who would take the fish must assure that the fish are properly handled and iced or refrigerated if they are to enter commerce, which may be difficult.

Both Councils are considering options to enhance current data collection programs in future amendments. This might provide more insight in calculating the changes in fishing, processing, disposal, and marketing costs. See Chapter 4 for a complete description of how the CMP fishery and the species would be impacted by the proposed actions.

Changes in Fishing Practices and Behavior of Fishermen

Actions proposed in CMP Amendment 20A could result in a modification of fishing practices by commercial and recreational fishermen. Action 1 could result in more recreational fishermen targeting king and Spanish mackerel during tournaments as states create and implement tournament permits, which would allow for charitable contributions of fish. Under Actions 2 and 3, by not requiring fishing effort for the renewal of permits, fishermen would not have the incentive to increase effort to renew their permits. More individuals could potentially qualify to obtain a permit; however, the low level of the current requirement means it is unlikely many individuals who want a permit are not able to qualify currently. Additionally, many loopholes exist that make an income requirement virtually non-restrictive. Therefore, the expectation is that eliminations of the requirement would not change effort relative to the status quo.

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

All actions in CMP Amendment 20A would affect some measure of change in research, administration, and enforcement costs and management effectiveness. See Chapter 4 of this amendment for more details.

Research and monitoring is ongoing to understand the effectiveness of proposed management measures and their effect on bycatch. In 1990, the SEFSC initiated a logbook program for vessels with federal permits in the reef fish and snapper grouper fishery from the Gulf and South Atlantic. In 1999, logbook reporting was initiated for vessels catching king and Spanish mackerel (Gulf and South Atlantic Councils). The Atlantic Dolphin and Wahoo FMP required logbook reporting by fishermen with Commercial Atlantic Dolphin/Wahoo Permits. Approximately 20% of commercial fishermen from snapper grouper, dolphin wahoo, and CMP fisheries are asked to fill out discard information in logbooks; however, a greater percentage of fishermen could be selected with emphasis on individuals that dominate landings. Recreational discards are obtained from the MRIP and logbooks from the NMFS headboat program.

The preferred alternative in Charter/Headboat Amendment, which has been approved by the South Atlantic Council, would require electronic reporting for headboats and increase the frequency of reporting to seven days for the snapper grouper, dolphin wahoo, and CMP fisheries in the Atlantic. A similar amendment is being developed by the Gulf Council to require electronic reporting for headboats and increase the frequency of reporting to seven days for the reef and CMP fisheries in the Gulf. Some observer information for the snapper grouper fishery has been provided by the SEFSC, Marine Fisheries Initiative, and Cooperative Research Programs (CRP), but more is desired for the snapper grouper, dolphin wahoo, reef fish, and CMP fisheries. An observer program is in place for headboats in the southeast for the snapper grouper, reef fish, dolphin wahoo, and CMP fisheries. Observers in the NMFS Headboat survey collect information about numbers and total weight of individual species caught, total number of passengers, total number of anglers, location fished (identified to a 10 mile by 10 mile grid), trip duration (half, ¾, full or multiday trip), species caught, and numbers of released fish with their disposition (dead or alive). The headboat survey does not collect information on encounters with protected species. At the September 2012 South Atlantic Council meeting, the SEFSC indicated

that observers are placed on about 2% of the headboat trips out of South Carolina to Florida, and about 9% of the headboat trips out of North Carolina (http://www.safmc.net/LinkClick.aspx?fileticket=XGaVZzxLePY%3d&tabid=745).

Cooperative research projects between science and industry are being used to a limited extent to collect bycatch information from fisheries in the Gulf and South Atlantic. Research funds for observer programs, as well as gear testing and testing of electronic devices are also available each year in the form of grants from the Foundation, Marine Fisheries Initiative, Saltonstall-Kennedy program, and the CRP. Efforts are made to emphasize the need for observer and logbook data in requests for proposals issued by granting agencies. A condition of funding for these projects is that data are made available to the Councils and NMFS upon completion of a study.

Stranding networks have been established in the Southeast Region. The SEFSC is the base for the Southeast United States Marine Mammal Stranding Program (http://sero.nmfs.noaa.gov/pr/strandings.htm). NMFS authorizes organizations and volunteers under the MMPA to respond to marine mammal strandings throughout the United States. These organizations form the stranding network whose participants are trained to respond to, and collect samples from live and dead marine mammals that strand along southeastern United State beaches. The SEFSC is responsible for: coordinating stranding events; monitoring stranding rates; monitoring human caused mortalities; maintaining a stranding database for the southeast region; and conducting investigations to determine the cause of unusual stranding events including mass strandings and mass mortalities (http://www.sefsc.noaa.gov/species/mammals/strandings.htm).

The NMFS Southeast Regional Office and the SEFSC participate in a wide range of training and outreach activities to communicate bycatch related issues. The NMFS Southeast Regional Office issues public announcements, Southeast Fishery Bulletins, or News Releases on different topics, including use of turtle exclusion devices, bycatch reduction devices, use of methods and devices to minimize harm to turtles and sawfish, information intended to reduce harm and interactions with marine mammals, and other methods to reduce bycatch for the convenience of constituents in the southern United States. These are mailed out to various organizations, government entities, commercial interests and recreational groups. This information is also included in newsletters and publications that are produced by NMFS and the various regional fishery management councils. Announcements and news releases are also available on the internet and broadcasted over NOAA weather radio.

Additional administrative and enforcement efforts would help to implement and enforce fishery regulations. NMFS established the South East Fishery-Independent Survey in 2010 to strengthen fishery-independent sampling efforts in southeast U.S. waters, addressing both immediate and long-term fishery-independent data needs, with an overarching goal of improving fishery-independent data utility for stock assessments. Meeting these data needs is critical to improving scientific advice to the management process, ensuring overfishing does not occur, and successfully rebuilding overfished stocks on schedule.

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

Proposed management measures, and any changes in economic, social, or cultural values are discussed in Chapter 4. Further analysis can be found in Chapter 5 (Regulatory Impact Review) and Chapter 6 (Regulatory Flexibility Act Analysis).

Changes in the Distribution of Benefits and Costs

The distribution of benefits and costs expected from actions in CMP Amendment 20A are discussed in Chapters 4, 5, and 6.

Social Effects

The social effects of all measures are described in detail in Chapter 4.

Conclusion

This section evaluates the practicability of taking additional action to minimize bycatch and bycatch mortality using the ten factors provided at 50 CFR 600.350(d)(3)(i). In summary, measures proposed in this amendment will address issues associated with CMP permits, including whether to require commercial permits for sale of fish caught under the bag limit, eliminate some permits, and modify conditions for obtaining and holding permits. None of the actions in this amendment are expected to significantly increase or decrease the magnitude of bycatch or bycatch mortality in the CMP fishery. Both sectors of the CMP fishery have relatively low baseline levels of bycatch, which are not expected to change as a result of implementation of this amendment. No additional action is needed to further minimize bycatch in the CMP fishery.

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