Coastal Migratory Pelagics Sale and Permit Provisions

Draft Amendment 19

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

June 2013

This is a publication of the Gulf of Mexico Fishery Management Council Pursuant to National Oceanic and Atmospheric Administration Award No. NA10NMF4410011.

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Name of Action

Amendment 19 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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ABBREVIATIONS USED IN THIS DOCUMENT

ABC	Acceptable biological catch
ACL	Annual catch limit
ACT	Annual catch target
ALS	Accumulated Landings System
AMs	Accountability measures
APA	Administrative Procedures Act
ASMFC	Atlantic States Marine Fisheries Commission
B	Biomass
B_{MSY}	Stock biomass level capable of producing an equilibrium yield of MSY
CFDBS	Commercial Fisheries Data Base System
CFL	Coastal fisheries logbook
CMP	Coastal Migratory Pelagics
Council	Gulf of Mexico and South Atlantic Fishery Management Councils
CPUE	Catch per unit effort
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
F	Instantaneous rate of fishing mortality
FL	fork length
FLS	Federal logbook system
F_{MSY}	Fishing mortality rate corresponding to an equilibrium yield of MSY
F_{OY}	Fishing mortality rate corresponding to an equilibrium yield of OY
$F_{30\% SPR}$	Fishing mortality corresponding to 30% spawning potential ratio
FMP	Fishery Management Plan
FWRI	Florida Wildlife Research Institute
Gulf Council	Gulf of Mexico Fishery Management Council
GMFMC	Gulf of Mexico Fishery Management Council
HAPC	Habitat area of particular concern
HBS	Headboat Survey
IRFA	Initial regulatory flexibility analysis
LOF	List of fisheries
lq	location quotient
M	Mortality
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

NEFSC	New England Fisheries Science Center
NOAA	National Oceanic and Atmospheric Administration
nm	nautical mile
NOS	National Ocean Service
OFL	Overfishing level
OMB	Office of Management and Budget
OY	Optimum yield
PRA	Paperwork Reduction Act
Pw	Product weight
RA	Regional Administrator
RFA	Regulatory Flexibility Act of 1980
RIR	Regulatory impact review
rq	regional quotient
SAV	Submerged aquatic vegetation
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
SOVI	Social Vulnerability Index
SSC	Scientific and Statistical Committee
SPR	Spawning potential ratio
TAC	Total allowable catch
TPWD	Texas Parks and Wildlife Department
ww	whole weight

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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 regulations and submit them to the National Marine Fisheries Service (NMFS) who ultimately approves, disapproves, or partially approves 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?

- NMFS and Council staffs – Develop alternatives based on guidance from the Council, and analyze the environmental impacts of those alternatives
- Gulf and South Atlantic Councils – Determine a range of actions and alternatives, and recommend action to NMFS
- Secretary of Commerce – Will approve, disapprove, or partially approve the amendment

Why Are The Councils Considering Action?

Concerns have arisen that 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 assessments. This amendment will also explore 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.

1.1 Background

Currently, fishermen who do not possess a valid federal commercial permit may sell CMP species (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 during tournaments that are donated through a dealer. The Councils are concerned that harvest from trips by recreational fishermen may contribute significantly to the commercial quota and lead to early closures in the commercial sector of the fishery. The Councils also concluded 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 catches are reported through recreational surveys and through 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. 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 will be 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 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.

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 Fishery Management Plan for Coastal Migratory Pelagic (CMP) Resources in the Gulf of Mexico and South Atlantic (FMP), with Environmental Impact Statement (EIS), was approved in 1982 and implemented by regulations effective in February of 1983. Managed species included king mackerel, Spanish mackerel, and cobia. The FMP treated king and Spanish mackerel as unit stocks in the Atlantic and Gulf of Mexico. The FMP established allocations for the recreational and commercial sectors harvesting these stocks, and the commercial allocations 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).

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

Amendment 2, with environmental assessment (EA), implemented in July of 1987, recognized two migratory groups and established charterboat permit.

Amendment 5, with EA, implemented in August 1990, made the following changes in the management regime:

- 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;
- Provided guidelines for corporate commercial vessel permits;

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

Amendment 8, with EA, implemented March 1998, made the following changes to the management regime:

- 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;
- 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 head boat 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.

Amendment 12, with EA, implemented 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 July 29, 2002, established a three-year moratorium on the issuance of charter vessel and head boat Gulf migratory group king mackerel permits in the Gulf unless sooner replaced by a comprehensive effort limitation system. The control date for eligibility was established as March 29, 2001. Also includes provisions for eligibility, application, appeals, and transferability.

Amendment 15, with EA, implemented August 8, 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 SEIS, implemented June 15, 2006, established a limited access system on for-hire reef fish and CMP permits. Permits are renewable and transferable in the same manner as currently prescribed for such permits.

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 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. **(SA Mackerel AP Preferred)**

Alternative 2: Prohibit sale of king mackerel caught under the bag limit, 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, 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

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 exclusive economic zone (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.

Option a. The South Atlantic Council's jurisdiction

Gulf Preferred Option b. The Gulf Council's jurisdiction **(Gulf AP Preferred)**

South Atlantic Preferred **Alternative 4:** Prohibit sale of king and Spanish mackerel caught under the bag limit with the exception of state-permitted tournaments. 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. King or Spanish mackerel caught during a tournament may be donated to a dealer in exchange for a charitable donation if the tournament organizers have a permit from a state to conduct that tournament, and transfer and reporting requirements are followed.

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

Option b. The Gulf Council's jurisdiction

Transfer and reporting requirements: A federally permitted wholesale dealer[1] that is not part of the tournament must be present to accept the donated fish directly

[1] Currently, a federal dealer permit is not required to buy coastal migratory pelagic species; however, in late 2012, the Councils approved an amendment that would establish such a permit. Regulations requiring a Southeast Dealer Permit for all federally managed species are being processed, and the permit should be available by the time Amendment 19 is approved.

from the anglers. If any value is exchanged for a fish, both parties must be properly licensed. The wholesale dealer sells the fish and donates the money to charity. Tournaments should arrange for the donation of funds from the sale of fish directly to the charity. If any money comes back to the tournament, the exchange would constitute a sale. 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.

Note: Sale or sell means the act or activity of transferring property for money or credit, trading, or bartering, or attempting to so transfer, trade, or barter.

Discussion: Currently a federal commercial king mackerel permit to harvest king mackerel in excess of the bag limit in the Gulf of Mexico (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 southern Florida west coast subzone. As of February 5, 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 February 5, 2013, there were 1,748 valid federal Spanish mackerel permits.

Sale of king and Spanish mackerel without a federal commercial permit is allowed consistent with 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. In some areas, it is common for king mackerel and Spanish mackerel caught under the bag limit on for-hire trips to be sold as additional income for crew, as long as the vessel meets the state license requirements to sell fish. There are also some part-time fishermen who sell king mackerel and Spanish mackerel caught under the bag limit.

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. Under both **Alternative 1** and **Alternative 2**, sale would be prohibited 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.

Alternative 3 would require a vessel to have onboard a federal king and/or Spanish mackerel commercial permit in order to sell these species; **Gulf Preferred 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.

South Atlantic Preferred Alternative 4 is the same as **Alternative 3**, but includes an exception for donation of tournament-caught fish; **Gulf Preferred Option a** would apply to South Atlantic Fishery Management Council (South Atlantic 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[2].

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." Thus a permitting system is needed to prevent misuse of the exception. The Councils considered an action to create a federal tournament permit early in the development of this amendment, but determined the details of a federal permit, such as tournament definition, requirements to receive the permit, reporting methods, and others, would be better addressed in a separate amendment. 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.

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 Hazard Analysis Critical Control Point (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. Further, king mackerel are listed as one of the four fish containing the highest level of mercury. The FDA cautions women who are pregnant or might become pregnant, nursing mothers, and young children about eating king mackerel. Because tournaments target large fish, and large fish have a higher accumulation of mercury, tournament-caught fish are expected to have high mercury levels thus providing a potential food safety hazard.

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

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

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.

The Councils also concluded 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 catches are reported through the Marine Recreational Information Program (MRIP) and through commercial trip tickets and logbooks.

In support of the **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.

Council Conclusions:

2.2 Action 2 – Elimination of Inactive Commercial King Mackerel Permits

Alternative 1: No Action – Do not eliminate any commercial king mackerel permits. **(SA Mackerel AP Preferred) (Gulf AP Preferred)**

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 between 2002-2011.

Option d. The permit has at least 1,000 lbs of king mackerel in at least one year between 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 between 2002-2011.

Option d. The permit has at least 1,000 lbs of king mackerel in at least one year between 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.

NOTE: The options under Alternatives 2 and 3 have been approved as reorganized by the Gulf Council at their April meeting, and will be reviewed by the SA Council in June.

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 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 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. Consequently, although a fisherman may lose his federal permit, he may be able to continue to harvest in state waters.

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 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. **Option a** for each alternative would designate a permit as inactive if the annual average of landings was less than 500 lbs from 2002 to 2011. **Option b** also uses annual average from 2002-2011 for the qualifier but with a minimum of 1,000 lbs. **Option c** allows a permit to qualify as active with at least one year of landings of at least 500 lbs

from 2002 to 2011. Under **Option d** a permit would be considered active if the history had at least 1,000 lbs in at least one year from 2002-2011.

As stated earlier, the nature of this 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 will 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**) will 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**.

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. **Alternative 3** was suggested by the South Atlantic Mackerel Advisory Panel. Members of the panel felt that some people might fish for other species but retain their king mackerel permit in case they have a bad year otherwise. They were reluctant to take away permits from people who had made the effort to renew those permits each year, especially for a fishery 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 endorsements and snapper grouper limited access permits, which were established for the same reason. This alternative would allow permit holders to keep 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, that in order to receive a king mackerel permit, a new entrant would need to purchase two valid king mackerel permits from fishermen exiting the fishery. This would be an identical requirement as the system used for South Atlantic Unlimited Snapper Grouper commercial permits. **Alternative 4** would be another 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 formalized process for resolving disputes regarding eligibility to retain king mackerel permits. In the past, the Council has implemented regulatory actions in a number of fisheries which have included an appeals process for eligibility determinations, e.g., Amendment 29 to the Gulf Reef Fish FMP and Amendment 18A to the South Atlantic Snapper Grouper FMP. 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 Regional Administrator (RA) postmarked no later than 90 days after the effective date of the final rule that would implement Amendment 19. 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 SEFSC 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:

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.

Gulf Preferred Alternative 2: Eliminate income requirements for commercial king and Spanish mackerel permits. **(SA Mackerel AP Preferred) (Gulf AP Preferred)**

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 percent
Option b: 50 percent

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 Coastal Migratory Pelagics has an income requirement. However, the South Atlantic Charter/Headboat permit for Coastal Migratory Pelagics is open access while the Gulf Charter/Headboat permit for Coastal Migratory Pelagics 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 and 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 and 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 and 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 (**Gulf 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 (**Gulf 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:

CHAPTER 3. AFFECTED ENVIRONMENT

3.1 Description of the Fishery and Status of the Stocks

Two migratory groups, Gulf of Mexico (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.

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 under limited access. In addition, a limited-access gillnet endorsement 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 under 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 February 5, 2013, there were 1,488 valid or renewable federal commercial king mackerel permits.

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 of 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).

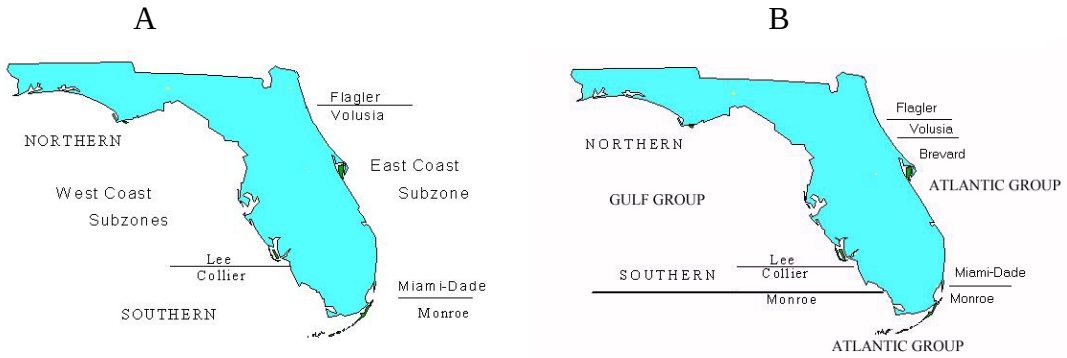

Figure 3.1.1.1. Gulf migratory group king mackerel Eastern zone subzones for A) November 1 – March 31 and B) April 1- October 31.

The West Coast subzone, 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 the hook-and-line sector 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. Fishing is allowed during the first weekend thereafter, but not on subsequent weekends.

Management measures for the South Atlantic apply to king mackerel from New York to Florida. The Atlantic migratory group of king mackerel fishing year is March 1 through end of February. This migratory group is not 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 at around 3.3 mp. The quota was decreased to 3.26 mp starting with the 2000-2001 season. Commercial landings of Atlantic king mackerel have also increased in recent years. The recent three-year annual average was 3.6 mp versus 2.8 mp for the previous ten years (Table 3.1.1.1). Updates for recent years will be added in the next version of this amendment.

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
2011-2012	3,079,256	2,101,530

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 ten years, average annual landings have been about 3.7 mp. The recent ten-year average for the Atlantic migratory group recreational landings is 4.2 mp per year (Table 3.1.1.2).

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
2011-2012	3,121,584	6,184,541

Source: SEFSC; MRFSS, HBS, and TPW databases.
Note: 2009-2010 data as of June 25, 2010, and may not be fully complete.

Spanish Mackerel

A commercial Spanish mackerel permit is required for vessels fishing in the Gulf or South Atlantic. This permit is open access. For-hire vessels must have a charter/headboat CMP permit. 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 February 5, 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 and 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 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. One 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) divide the two migratory groups at the Council boundary (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 boundary and calendar year are included here. Updates for recent years will be added in the next version of this amendment.

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 then increased back 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 ten fish in 1992 to 15 fish in 2000. Recreational landings in the Atlantic also have remained fairly steady over time and averaged around 1.6 mp during the recent five years (Table 3.1.1.4). The recreational allocation in the Atlantic is 45%.

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, September 2010 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, and the majority of the commercial king mackerel sector also occurs primarily in state 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 3.1.1.7).

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 bag limits are substantially less than those within the (commercial) trip limits. For example, the trip limit for king mackerel harvested in the mid-Atlantic and South Atlantic EEZ hook-and-line fishery is 3,500 lbs, as compared to the daily personal bag limit for the species, which is three king mackerel (Table 3.1.1.8). Any vessel in the EEZ without a federal king mackerel or Spanish mackerel permit is restricted to these bag limits.

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

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	3[1]
		Off Florida	2[1]
	Gulf	All	2[1]
Spanish Mackerel	Atlantic	All	15
	Gulf	All	15
Cobia	Atlantic	All	2
	Gulf	All	2

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

A primary reason for a commercial vessel not having a federal king mackerel and/or Spanish mackerel permit is that the CMP fishery tends to be within state waters and the state does not require a federal permit to harvest quantities above the bag limits in its waters. Spanish mackerel most commonly occur in state jurisdictional waters, and the majority of the commercial king mackerel fishery also occurs primarily in state waters. If a vessel's area of operation is exclusively within state waters, a federal permit is an unnecessary and useless expense. However, other reasons for not having a 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 March 2012 online search of sales of existing king mackerel permits found asking prices ranging from $5,800 to $6,500. The cost of acquiring a new Spanish mackerel permit is $25 plus time to complete the application, with its income requirement.

Another reason why a commercial vessel may not have a CMP permit is that it targets other species in the EEZ and may take CMP 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 quotas.
If CMP are a commercial vessel's targeted species, however, 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 not be restricted to catches under the bag limits. Most likely the operator of such a commercial vessel would never venture into federal waters to catch and sell just bag limit quantities, especially given the ex-vessel prices of king mackerel tend to be no greater than $2 per pound, Spanish mackerel no more than $1 per pound, and cobia no more than $3 per pound. 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, 15 Spanish mackerel per person, and two cobia 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 where king mackerel are for an upcoming for-hire trip, particularly, if the vessel is used for commercial fishing in state waters and 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 for 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 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. So, 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, 150 Spanish mackerel, and 20 cobia can be landed and sold. As of July 23, 2012, there were 1,348 valid or renewable federal Gulf charter/headboat CMP vessel permits and 1,550 valid federal South Atlantic CMP charter/headboat permits.

Private recreational fishing vessels must be registered in their state or documented by the USCG. 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 3.1.1.9). 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) in order 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 in order to renew their licenses. There may be recreational fishermen in other states who possess a commercial license in order 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 an 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 quota, although the fish are caught by recreational fishermen onboard a for-hire vessel.

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 kingfish that were sold and not having the necessary license and restricted species endorsement to sell the fish.

3.1.2 Status of Stocks

The benchmark assessment for Spanish mackerel is complete (SEDAR 28 2013) and was reviewed by the South Atlantic Scientific and Statistical Committee (SSC) in April 2013 and by the Gulf SSC in May 2013. Both SSCs made recommendations to the respective Councils for overfishing level (OFL) and acceptable biological catch (ABC). A king mackerel benchmark assessment is scheduled for 2013 (SEDAR 38).

King Mackerel

Both the Gulf and Atlantic migratory groups of king mackerel were assessed by SEDAR in 2008/2009 (SEDAR 16 2009). The 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 overfished however, it was uncertain whether overfishing is occurring, and thought to be at a low level if it is occurring.

Spanish Mackerel

Both the Gulf and Atlantic migratory groups of Spanish mackerel were assessed by SEDAR 28 in 2013. The SEDAR 28 stock assessment for South Atlantic migratory group cobia (2013d) determined that the stock is not overfished or experiencing overfishing. Stock status indicators for the base case model (M = 0.35) were: $F_{Current}$/MFMT = 0.526; $SSB_{Current}$/MSST = 2.29. 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. Stock status indicators for the base case model (M = 0.38) were: $F_{Current}$/MFMT = 0.40; $SSB_{Current}$/MSST = 2.96.

3.2 Description of the Physical Environment

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

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, the discharge of freshwater into the Northern Gulf, and a semi-permanent, anticyclonic gyre in the western Gulf. Gulf water temperatures range from 12º C to 29º C (54º F to 84º F) depending on time of year and depth of water.

The Madison/Swanson and Steamboat Lumps Marine Reserves (219 square nautical miles), which are no-take marine reserves where all fishing except for surface trolling during May through October is prohibited (Figure 3.2.1.1). The Tortugas North and South Marine Reserves are no-take marine reserves cooperatively implemented by Florida, NOAA's National Ocean Service (NOS), the Gulf of Mexico Fishery Management Council (Gulf Council), and the National Park Service (185 square nautical miles). In addition, essential fish habitat (EFH) requirements, habitat areas of particular concern (HAPC), and adverse effects of fishing prohibited the use of anchors in these HAPCs were addressed in the following Gulf Council Fishery Management Plans: Shrimp, Red Drum, Reef Fish, Coral and Coral Reefs in the Gulf, and Spiny Lobster and the Coastal Migratory Pelagic resources of the Gulf and South Atlantic (GMFMC 2005).

Individual reef areas and bank HAPCs of the northwestern Gulf containing pristine coral areas are protected by preventing use of some fishing gear that interacts with the bottom. These areas are: 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 (Figure 3.2.1.1; 263.2 square nautical miles). Some of these areas were made marine sanctuaries by NOS and these marine sanctuaries are currently being

revised. 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 the significant coral resources on Stetson Bank.

Other environmental sites of special interest relevant to CMP species in the Gulf include the Florida Middle Grounds HAPC, where pristine soft corals are protected from use of any fishing gear interfacing with bottom (348 square nautical miles), and the Pulley Ridge HAPC, which is closed to anchoring, trawling gear, bottom longlines, buoy gear, and all traps/pots to protect deepwater hermatypic coral reefs (2,300 square nautical miles). In addition, fishing by a vessel operating as a charter vessel or headboat, a vessel in the Alabama special management zone that does not have a commercial permit for Gulf reef fish, or a vessel with such a permit fishing for Gulf reef fish, is limited to hook-and-line gear with no more than three hooks. Nonconforming gear is restricted to bag limits, or for reef fish without a bag limit, to 5% by weight of all fish aboard.

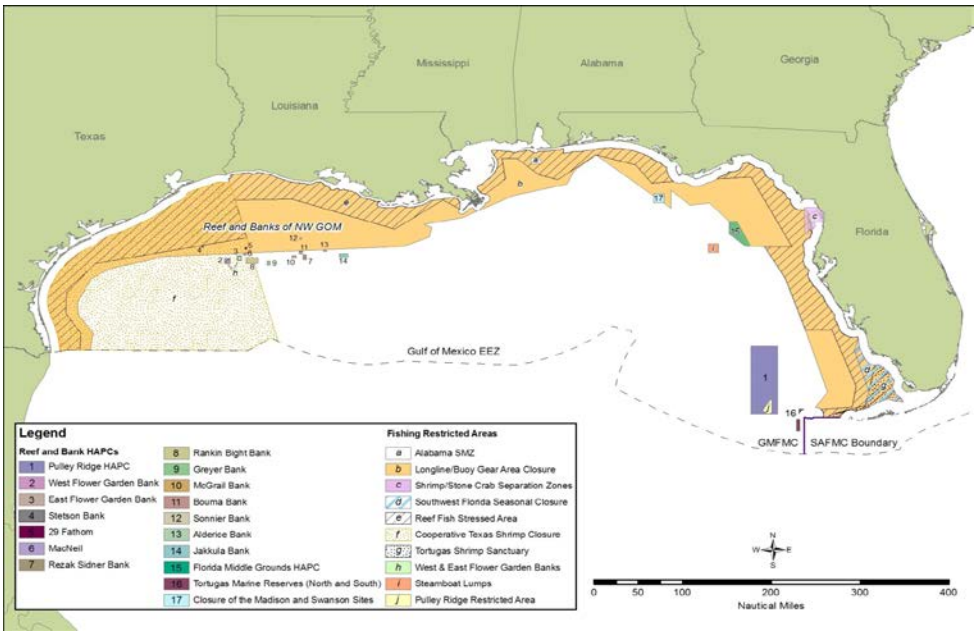

Figure 3.2.1.1. Environmental Sites of Special Interest Relevant to CMP Species in the Gulf of Mexico.

3.2.2 South Atlantic

The South Atlantic Fishery Management Council (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. 1992 and 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.

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.

On April 20, 2010, an explosion occurred on the Deepwater Horizon MC252 oil rig, resulting in the release of an estimated 4.9 million barrels of oil into the Gulf. In addition, 1.84 million gallons of Corexit 9500A dispersant were applied as part of the effort to constrain the spill. The cumulative effects from the oil spill and response may not be known for several years. There have been no observed fish kills from the oil spill in federal waters. 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 every species in the CMP FMP; however, most species have a protracted spawning period that extends beyond the months of the oil spill.

Species in the fishery management plan 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.

If eggs and larvae were affected, impacts on harvestable-size coastal migratory pelagic fish will begin to be seen when the 2010 year class becomes large enough to enter the fishery and be retained. King mackerel and cobia mature at ages of 2-3 years and Spanish mackerel mature at age 1-2; therefore, a year class failure in 2010 could be felt 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 and dispersant from the spill may have 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.

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 [75 FR 24822] 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 are among the most important commercial and sport fishes. The habitat of adults in the coastal pelagic management unit is the coastal waters out to the edge of the continental shelf in the Atlantic Ocean. Within the area, the occurrence of coastal migratory pelagic species 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. Salinity preference of little tunny and cobia is not well defined. The habitat for eggs and larvae of all species in the coastal pelagic management unit is the water column. Within the spawning area, eggs and larvae are concentrated in the surface waters.

King Mackerel

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

Spanish Mackerel

Spanish mackerel is also a pelagic species, occurring in depths 75 meters throughout the coastal zones of the western Atlantic from southern New England to the Florida Keys and throughout the Gulf of Mexico (Collette and Russo 1979). Adults usually are found 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 believed 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. Stage five ovaries, which are the most mature, 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°C to 32°C and salinities between 28 ppt and 37 ppt. They are also most frequently found in water depths from 9 meters to about 84 meters, but are most common in < 50 meters.

3.3.2 Development, Growth and Movement Patterns

King Mackerel
Juveniles are generally found closer to shore than adults (to < 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 in the northern Gulf 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/SAFMC 1985; MSAP 1996; Brooks and Ortiz 2004).

Spanish Mackerel
Juveniles are most often found in coastal and estuarine habitats and at temperatures >25° C and salinities >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).

3.4 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. Select summary statistics are provided in Table 3.4.1.1. Landings information is provided in Section 1.7.

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	Vessels	Ex-vessel Value[2] Specific Species (millions)	Ex-vessel Value All Species (millions)	Average Ex-vessel Value per Vessel
Atlantic Migratory group King Mackerel	742	$4.57	$23.41	$31,600
Atlantic Migratory group Spanish Mackerel	349	$1.85	$9.76	$28,000
Gulf Migratory group King Mackerel	669	$4.99	$29.48	$44,100
Gulf Migratory group Spanish Mackerel	197	$0.31	$9.00	$45,900

[1]Fishing-year (2004/2005, 2005/2006,…, 2008/2009) for king and Spanish mackerel. [2]2008 dollars.
Source: NMFS SEFSC Coastal Fisheries Logbook and NMFS NEFSC Commercial Fisheries Data Base System

Economic Activity

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 (2009c) and are provided in Table 3.4.1.2. Business activity for the commercial sector is characterized in the form of full-time equivalent (FTE) 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.

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

Species	Average Ex-vessel Value[1] (millions)	Total Jobs	Harvester Jobs	Output (Sales) Impacts (millions)	Income Impacts (millions)
Atlantic Migratory group King Mackerel	$4.57	862	112	$60.21	$25.66
- All Species[2]	$23.41	4,412	576	$308.26	$131.38
Atlantic Migratory group Spanish Mackerel	$1.85	348	45	$24.31	$10.36
- All Species	$9.76	1,840	240	$128.52	$54.77
Gulf Migratory group King Mackerel	$4.99	941	123	$65.72	$28.01
- All Species	$29.48	5,556	725	$388.17	$165.43
Gulf Migratory group Spanish Mackerel	$0.31	59	8	$4.10	$1.75
- All Species	$9.00	1,697	221	$118.56	$50.53

[1]2008 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.

As noted in Table 3.4.1.1, the annual period refers to either the fishing year or calendar 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 are replicated from Table 3.4.1.1.

Permits
The numbers of commercial permits associated with the CMP fishery on January 21, 2011, are provided in Table 3.4.1.3

Table 3.4.1.3. Number of permits associated with the CMP fishery.

	Valid[1]	Valid or Renewable
King Mackerel	1,452	1,530
King Mackerel Gillnet	21	23
Spanish Mackerel	1,704	Not applicable

[1]Non-expired. Expired permits may be renewed within one year of expiration.
[2] The gillnet endorsement must be held in combination with a valid king mackerel commercial permit.

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 partyboat) 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.

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. In addition to more trips targeting king mackerel than Spanish mackerel, 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 all three 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, are 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 pelagic 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 70 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 coastal migratory pelagic 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 pelagic 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 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). Comparable estimates have 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 et al. (2009), 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 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 mackerel 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 (2009) and are provided in Tables 3.4.2.15-20. Business activity is characterized in the form of FTE jobs, income impacts (wages, salaries, and self-employed income), output (sales) impacts (gross business sales), and value-added impacts (difference between the value of goods and the cost of materials or supplies). Job and output (sales) impacts are equivalent metrics across both the commercial and recreational sectors. Income and value-added impacts are not equivalent, though similarity in the magnitude of multipliers may result in roughly equivalent values. Neither income nor value-added impacts should be added to output (sales) impacts because this would result in double counting. Job and output (sales) impacts, however, may be added across sectors.

Estimates of the average expenditures by recreational anglers are provided in NMFS (2009) 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 and catch 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 (2009c).

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 (2009c).

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 (2009c).

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 (2009c).

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 (2009) 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

Coastal growth and development affects many coastal communities, especially those with either or both commercial and recreational working waterfronts. The rapid disappearance of these types of waterfronts has important implications as the disruption of various types of fishing-related businesses and employment. The process of "gentrification," which tends to push those of a lower socio-economic class out of traditional communities as property values and taxes rise has become common along coastal areas of the U.S. and around the world. Working waterfronts tend to be displaced with development that is often stated as the "highest and best" use of waterfront property, but often is not associated with water-dependent occupations. However, with the continued removal of these types of businesses over time the local economy becomes less diverse and more reliant on the service sector and recreational tourism. As home values increase, people within lower socio-economic strata find it difficult to live within these communities and eventually must move. Consequently they spend more time and expense commuting to work, if jobs continue to be available. Newer residents often have no association with the water-dependent employment and may see that type of work and its associated infrastructure as unappealing. They often do not see the linkage between those occupations and the aesthetics of the community that produced the initial appeal for many migrants. The demographic trends within counties can provide some indication as to whether these types of coastal change may be occurring if an unusually high rate of growth or change in the demographic character of the population is present. A rise in education levels, property values, fewer owner occupied properties and an increase in the median age can at times indicate a growing process of gentrification. Demographic profiles of coastal communities can be found in Amendment 18 (GMFMC and SAFMC 2011).

3.5.1 Gulf of Mexico Fishing Communities

A recently passed regulatory action includes a description of Gulf communities identified as being strongly associated with fishing for coastal migratory pelagics and is incorporated here by reference: Final amendment 18 to the fishery management plan for coastal migratory pelagic resources in the Gulf of Mexico and Atlantic regions (GMFMC and SAFMC 2011). http://www.gulfcouncil.org/docs/amendments/Final%20CMP%20Amendment%2018%20092311%20w-o%20appendices.pdf

The referenced description focuses on available geographic and demographic data to identify communities having a strong relationship with king mackerel, Spanish mackerel, and cobia fishing. 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.

The referenced analysis uses 2008 ALS data. Below, the Description of the Social Environment for the Gulf of Mexico and South Atlantic has been updated using 2011 ALS data, the most recent year available.

3.5.2 Gulf of Mexico Coastal Pelagic Fishing Communities

The figures below present the top fifteen communities based upon a regional quotient of commercial landings and value for coastal migratory pelagic species (Figures 3.5.2.1, 3.5.2.5, and 3.5.2.8). The regional quotient is the proportion of landings and value out of the total landings and value of that species for that region. The Keys communities are included in both Gulf and South Atlantic communities to allow comparison within each region. Profiles are included for the the top three communities (by commercial pounds landed) for each CMP species. This profile includes a figure which presents the local quotient and a description of the CMP permits held by community members. The local quotient is the proportion of landings and value for the top species out of the total landings and value of all species combined for that community.

King Mackerel

In Figure 3.5.2.1, Destin, Florida lands over 31% of all king mackerel for Gulf fishing communities and those landings represent over 28% of the value. Several Florida Keys communities (Key West, Islamorada, and Marathon) are included in the top fifteen. These communities make up a significant portion of the landings and value (22% of landings and 16.8% of value) of commercial king mackerel. In addition, two other Florida communities make up the top fifteen, three Louisiana communities, one Texas community, and one Mississippi community.

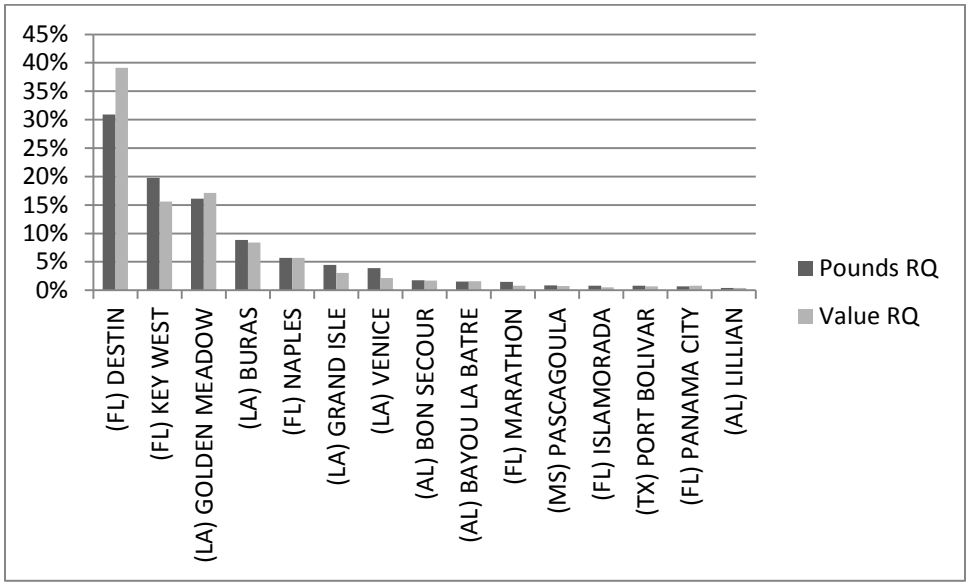

Figure 3.5.2.1. Top Fifteen Gulf of Mexico Communities Ranked by Pounds and Value Regional Quotient of King Mackerel. Source: ALS 2011

Destin

Destin, Florida community members held 81 CMP permits (44 king mackerel and 37 Spanish mackerel) in 2012. Destin ranks first in terms of commercial king mackerel landings in 2011 (Figure 3.5.2.1). Of the commercially landed species in Destin, king mackerel makes up about 24% of all landings and is the most commonly landed species (Figure 3.5.2.2).

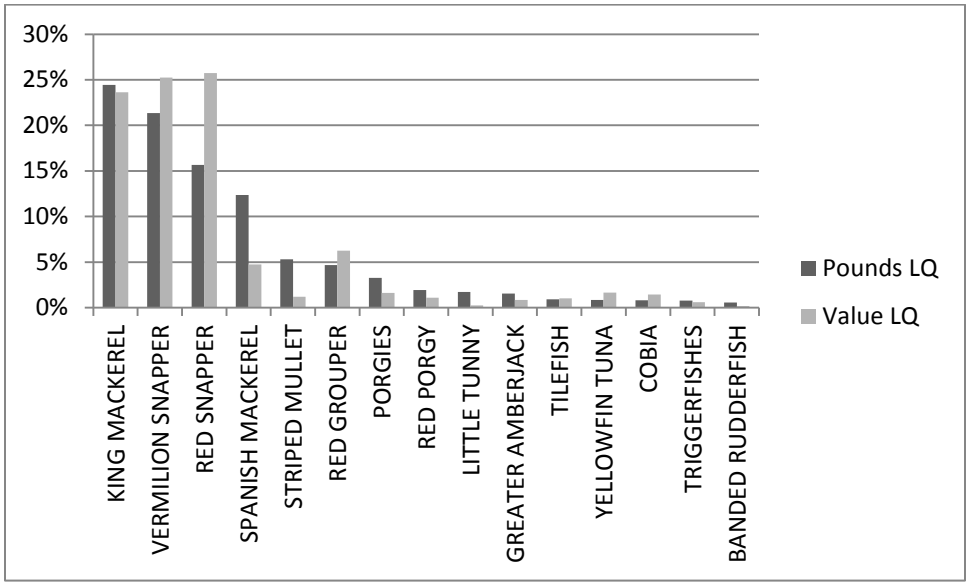

Figure 3.5.2.2. The top fifteen species in terms of proportion (lq) of total landings and value for Destin, Florida. Source: ALS 2011

Key West

Key West, Florida community members held 130 CMP permits (120 king mackerel permits and 10 king mackerel gill net permits) in 2012. Key West ranks second in terms of commercial king mackerel landings in 2011 (Figure 3.5.2.1). Of the commercially landed species in Key West, king mackerel makes up about 24% of all landings and is the fourth most commonly landed species (Figure 3.5.2.3).

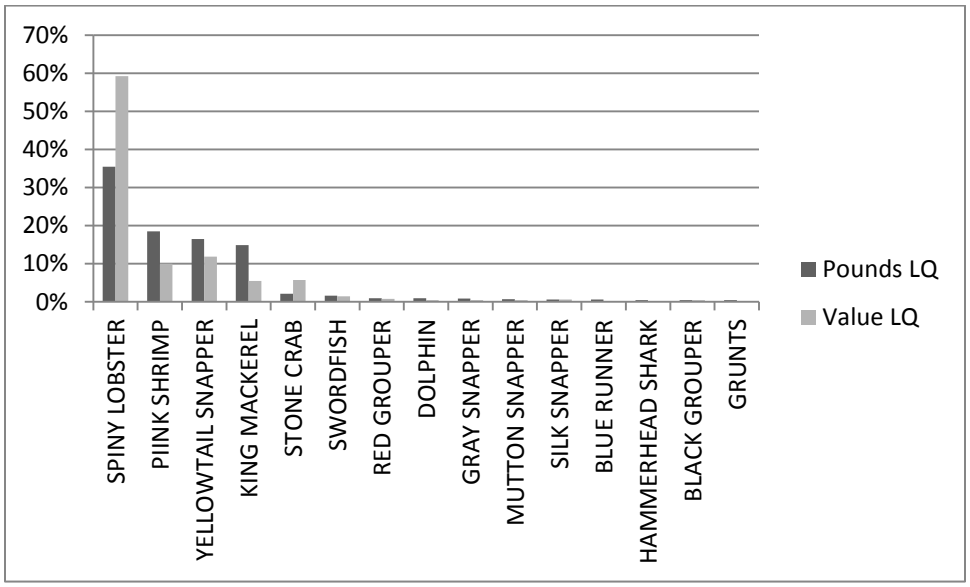

Figure 3.5.2.3. The top fifteen species in terms of proportion (lq) of total landings and value for Key West, Florida. Source: ALS 2011

Golden Meadow

Golden Meadow, Louisiana community members held a total of four CMP permits in 2012. Golden Meadow ranks third in terms of commercial king mackerel landings in 2011 (Figure 3.5.2.1). Of the commercially landed species in Golden Meadow, king mackerel makes up about 6% of all landings and is the fifth most commonly landed species (Figure 3.5.2.4).

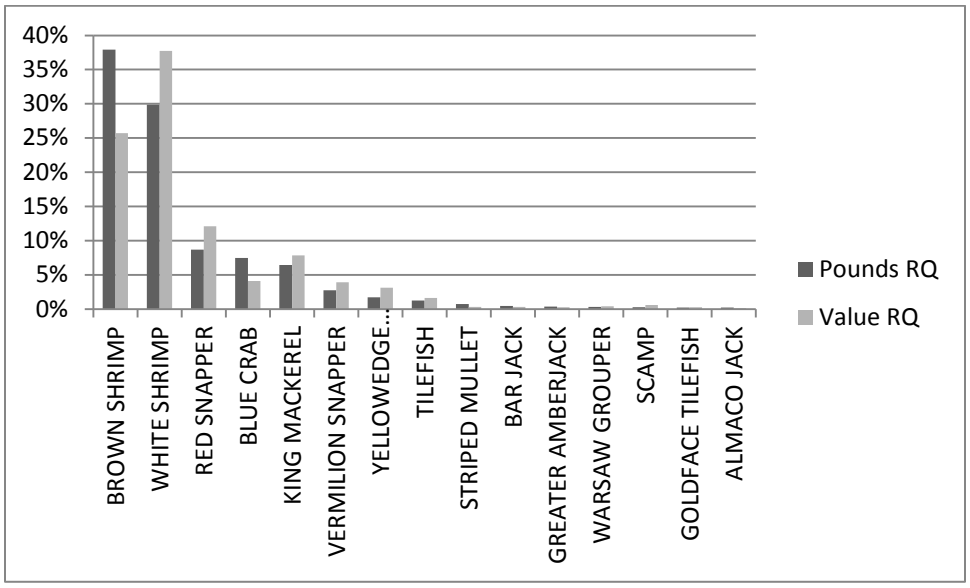

Figure 3.5.2.4. The top fifteen species in terms of proportion (lq) of total landings and value for Golden Meadow, Louisiana. Source: ALS 2011

Spanish Mackerel

In Figure 3.5.2.5, Destin, Florida lands over 28% of all Spanish mackerel for Gulf fishing communities and those landings represent about 31.5% of the value. The second ranked community of Bayou La Batre, Alabama includes about 23% of the landings and about 20% of the value of Spanish mackerel. Nine 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.

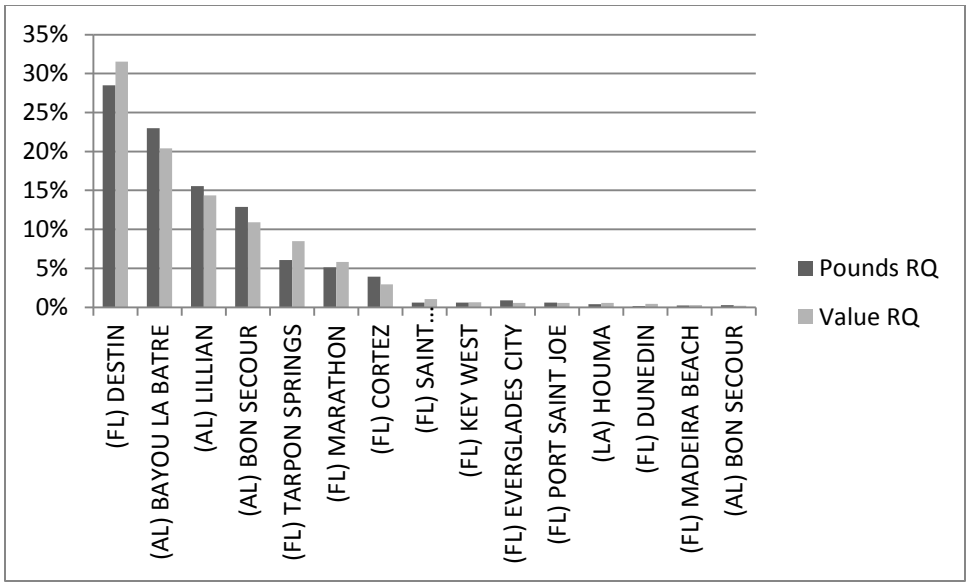

Figure 3.5.2.5. Top Fifteen Gulf of Mexico Communities Ranked by Pounds and Value of Regional Quotient of Spanish Mackerel. Source: ALS 2011

Destin

Destin ranks first in terms of commercial Spanish mackerel landings in 2011 (Figure 3.5.2.5). Of the commercially landed species in Destin, Spanish mackerel makes up about 12% of all landings and 5% of all value and is the fourth most commonly landed species (Figure 3.5.2.2).

Bayou la Batre

Bayou la Batre, Alabama community members held eight CMP permits (four king mackerel and four Spanish mackerel permits) in 2012. Bayou la Batre ranks second in terms of commercial Spanish mackerel landings in 2011 (Figure 3.5.2.5). Of the commercially landed species in Bayou la Batre, Spanish mackerel makes up about 2% of all landings and is the fifth most commonly landed species (Figure 3.5.2.6).

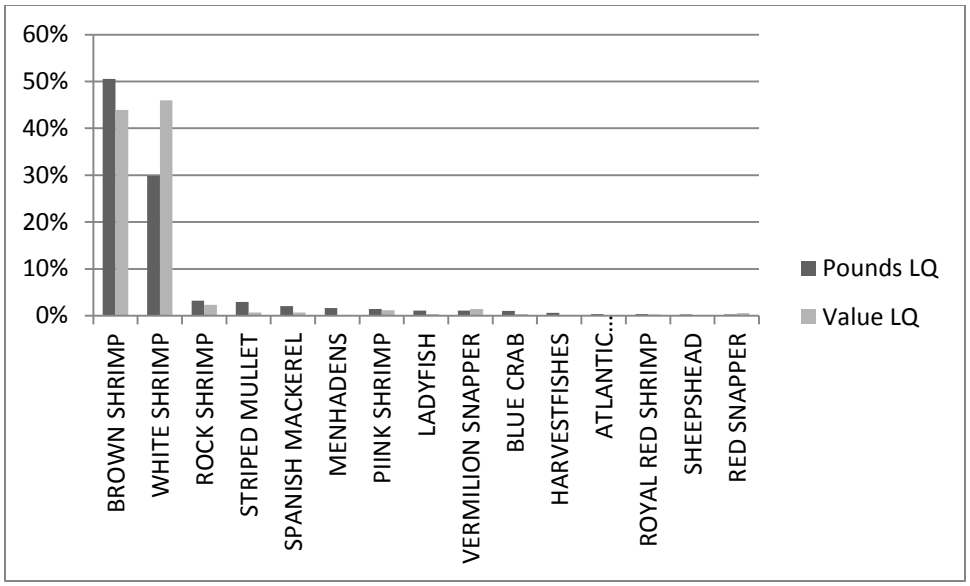

Figure 3.5.2.6. The top fifteen species in terms of proportion (lq) of total landings and value for Bayou la Batre, Alabama. Source: ALS 2011

Lillian

Lillian, Alabama community members held no CMP permits in 2012. Lillian ranks third in terms of commercial Spanish mackerel landings in 2011 (Figure 3.5.2.5). Of the commercially landed species in Lillian, Spanish mackerel makes up about 22% of all landings and 27% of all value and is the third most commonly landed species (Figure 3.5.2.7).

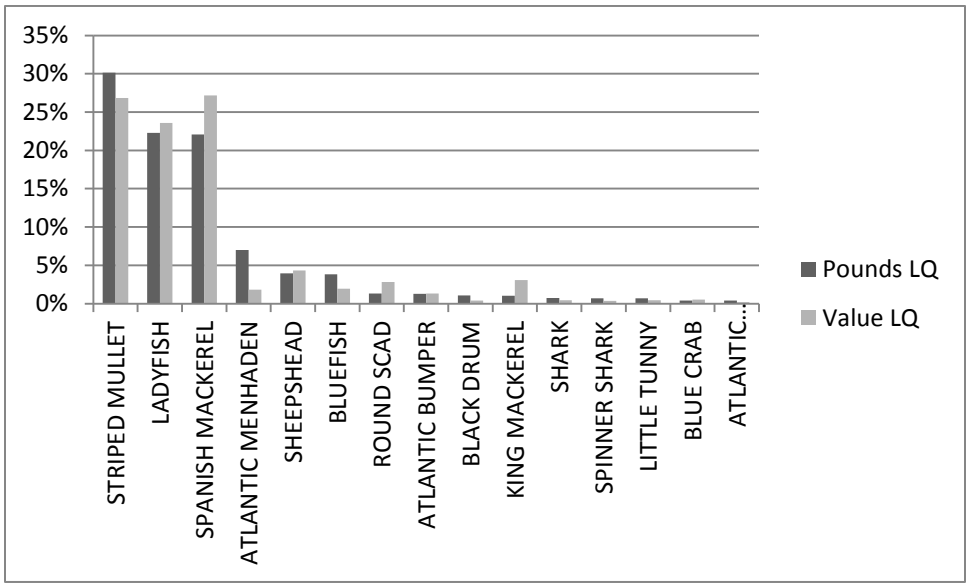

Figure 3.5.2.7. The top fifteen species in terms of proportion (lq) of total landings and value for Lillian, Alabama. Source: ALS 2011

Gulf of Mexico Recreational Fishing Communities

Landings for the recreational sector are not available by species at the community level; therefore, it is difficult to identify communities as dependent on recreational fishing for coastal migratory pelagic species. The 20 Gulf of Mexico communities which scored highest for recreational fishing engagement based on the analysis described above are listed in Table 3.5.2.1. Because the analysis used discrete geo-political boundaries, Panama City and Panama City Beach had separate values for the associated variables. Calculated independently, each still ranked high enough to appear in the top 20 list suggesting a greater importance for recreational fishing.

Table 3.5.2.1. Top ranking Gulf of Mexico communities based on recreational fishing engagement and reliance, in descending order.

Community	County	State
Destin	Okaloosa	FL
Orange Beach	Baldwin	AL
Panama City	Bay	FL
Port Aransas	Nueces	TX
Pensacola	Escambia	FL
Panama City Beach	Bay	FL
Naples	Collier	FL
St. Petersburg	Pinellas	FL
Freeport	Brazoria	TX
Biloxi	Harrison	MS
Galveston	Galveston	TX
Clearwater	Pinellas	FL
Fort Myers Beach	Lee	FL
Sarasota	Sarasota	FL
Tarpon Springs	Pinellas	FL
Dauphin Island	Mobile	AL
Apalachicola	Franklin	FL
Carrabelle	Franklin	FL
Port St. Joe	Gulf	FL
Marco Island	Collier	FL

Source: SERO permit office 2008, MRIP site survey 2010.

3.5.3 South Atlantic Fishing Communities

The communities displayed in the maps below represent a categorization of communities based upon their overall value of local commercial landings divided by the overall value of commercial landings referred to as a "regional quotient." These data were assembled from the accumulated landings system which includes all species from both state and federal waters landed in 2010. All communities were ranked on this "regional quotient" and divided by those who were above the mean and those below. Those above the mean were then divided into thirds with the top tier classified as Primarily Involved in fishing; the second tier classified as Secondarily Involved; and the third classified as being Tangentially Involved. The communities included within the

maps below were only those communities that were categorized as primarily or secondarily involved. This breakdown of fisheries involvement is similar to the how communities were categorized in the community profiling of South Atlantic fishing communities (Jepson et al. 2005). However, the categorization within the community profiles included other aspects associated with fishing such as infrastructure and other measures to determine a community's status with regard to reliance upon fishing. While these communities represent all fishing, communities those that are more involved in the coastal migratory pelagic species are represented in more depth within their respective county descriptions.

The social vulnerability index (SoVI) was created to understand social vulnerability of communities to coastal environmental hazards and can also be interpreted as a general measure of vulnerability to other social disruptions, such as adverse regulatory change or manmade hazards. Detailed information about the SoVI can be found in Amendment 18 (GMFMC and SAFMC 2011). High social vulnerability does not necessarily mean that there will be adverse effects of proposed actions in this amendment, only that there may be a potential for adverse effects under the right circumstances. Fishing communities in these counties may have more difficulty adjusting to regulatory changes if those impacts affect employment or other critical social capital. The SoVI for counties in each state is illustrated in the maps (Figures 3.5.3.4 and 3.5.3.12-14) below.

3.5.4 South Atlantic Coastal Pelagic Fishing Communities

The figures below present the top fifteen communities based upon a regional quotient of commercial landings and value for coastal migratory pelagic species (Figures 3.5.4.1 – 3.5.4.3). The regional quotient is the proportion of landings and value out of the total landings and value of that species for that region. The Keys communities are included in both South Atlantic and Gulf communities to allow comparison within each region.

Those communities that are categorized within the top fifteen for regional quota are profiled under their county description which includes the top fifteen species landed within each community by local quotient (lq) and represents those species ranked according to their contribution to landings and value out of total landings and value for each community. Only those communities that have landings or landed value of 3% or more will be profiled under a county description.

King Mackerel

In Figure 3.5.4.1, Cocoa, Florida lands over 25% of all king mackerel for South Atlantic fishing communities and those landings represent over 30% 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.

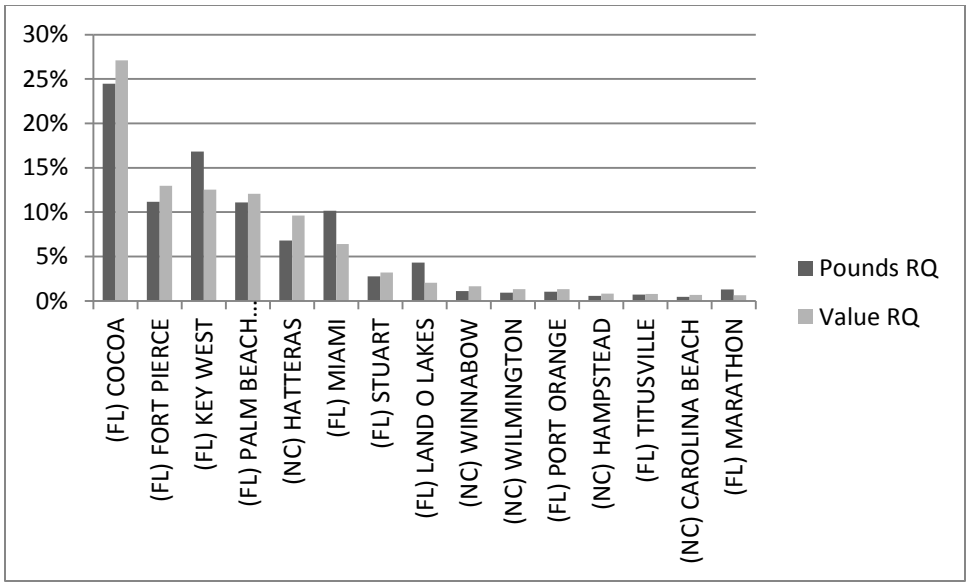

Figure 3.5.4.1. Top Fifteen South Atlantic Communities Ranked by Pounds and Value Regional Quotient of King Mackerel. Source: ALS 2011

Spanish Mackerel

For Spanish mackerel in the Atlantic (Figure 3.5.4.2), Fort Pierce has almost 32% of the landings and 50% of the value. Cocoa is second with about 16.5% of landings and about 31% 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.

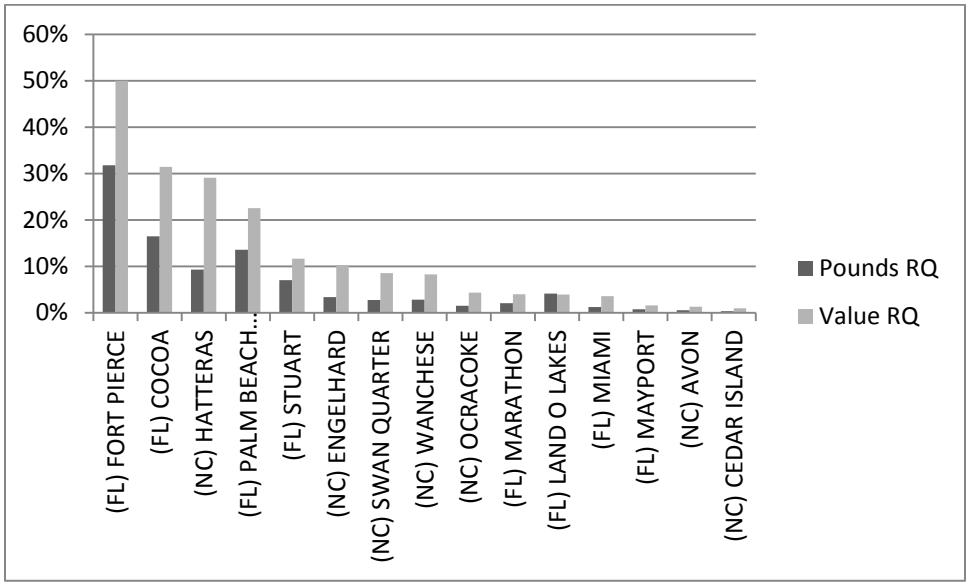

Figure 3.5.4.2. Top Fifteen South Atlantic Communities Ranked by Pounds and Value of Regional Quotient of Spanish Mackerel. Source: ALS 2011

South Atlantic Recreational Fishing Communities

Recreational fishing communities in the South Atlantic are listed in Table 3.5.4.1. These communities were selected by their ranking on a number of criteria including number of charter permits per thousand population and recreational fishing infrastructure as listed under the MRIP survey identified within each community.

Table 3.5.4.1. South Atlantic Recreational Fishing Communities.

Community	State	Community	State
Jekyll Island	GA	Cape Carteret	NC
Hatteras	NC	Kill Devil Hill	NC
Manns Harbor	NC	Murrells Inlet	SC
Manteo	NC	Little River	SC
Atlantic Beach	NC	Georgetown	SC
Wanchese	NC	Islamorada	FL
Salter Path	NC	Cudjoe Key	FL
Holden Beach	NC	Key West	FL
Ocean Isle	NC	Tavernier	FL
Southport	NC	Little Torch Key	FL
Wrightsville Beach	NC	Ponce Inlet	FL
Marshallberg	NC	Marathon	FL
Carolina Beach	NC	Sugarloaf Key	FL
Oriental	NC	Palm Beach Shores	FL
Topsail Beach	NC	Big Pine Key	FL
Swansboro	NC	Saint Augustine	FL
Nags Head	NC	Key Largo	FL
Harkers Island	NC	Summerland Key	FL
Calabash	NC	Sebastian	FL
Morehead City	NC	Cape Canaveral	FL

Florida Counties

A good portion of Florida's east coast (Figure 3.5.4.4) is considered either medium high or highly vulnerable in terms of social vulnerability. In fact, the only counties not included in those two categories are Nassau, St. John's and Monroe. Those counties with communities with significant landings of coastal pelagics are profiled below.

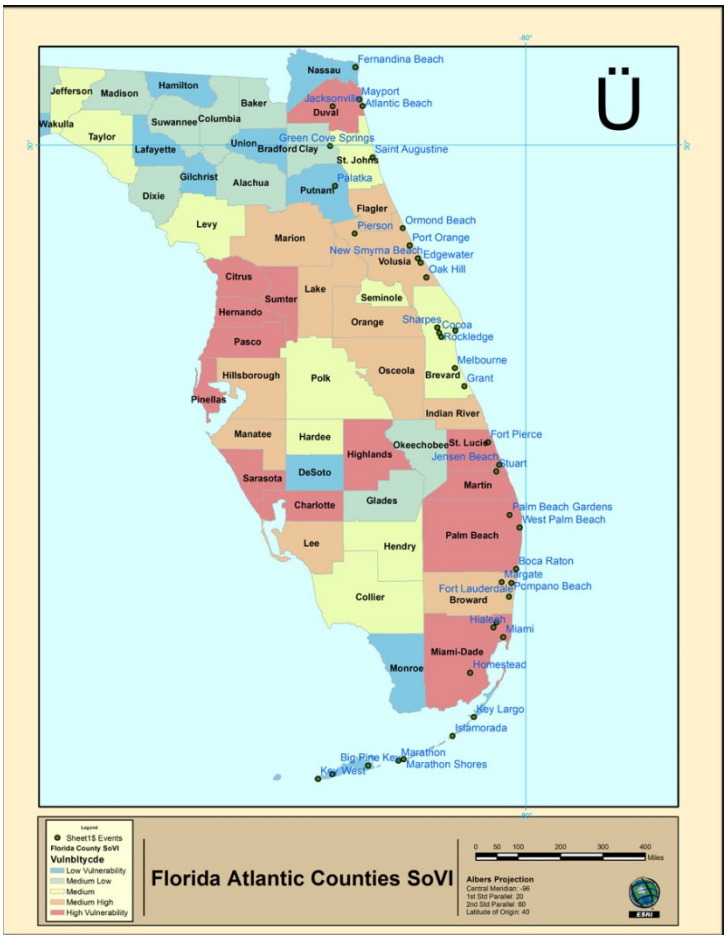

Figure 3.5.4.4. The Social Vulnerability Index applied to South Atlantic Florida Counties.

In 2012, Florida vessels had 1,690 king mackerel and Spanish mackerel commercial permits, including king mackerel gillnet permits (there is no cobia permit at this time) (Table 3.5.4.2). Monroe County (Florida Keys) has the largest number of king mackerel and Spanish mackerel permits, followed by Palm Beach County. In general, the more southern counties have more CMP permits. Most vessels have permits for both king and Spanish mackerel.

Table 3.5.4.2. Number of CMP permits in Florida counties (2012).

County*	King Mackerel Gill Net	King Mackerel	Spanish Mackerel	Total
Brevard	0	84	85	**169**
Broward	0	47	60	**107**
Duval	0	27	26	**53**
Indian River	0	51	54	**105**
Martin	4	55	72	**131**
Miami-Dade	0	82	153	**235**
Monroe	11	152	245	**408**
Nassau	0	5	5	**10**
Palm Beach	0	150	156	**306**
St Johns	0	6	7	**13**
St Lucie	0	52	69	**121**
Volusia	0	15	17	**32**
Total	**15**	**726**	**949**	**1,690**

*Based on mailing address of permit holder.

Duval County

Detailed demographic information about Duval County can be found in Amendment 18 (GMFMC and SAFMC 2011). The primary fishing communities in Duval County are Jacksonville and Mayport, but because Jacksonville is a large city, the commercial fisheries have less of a local economic impact than in a smaller community like Mayport. Figure 3.5.4.5 shows the top fifteen commercial species landed in Mayport. Overall, white shrimp is the most important commercial fishery in the community, and just over 3% of landings consisting of CMP species with king mackerel making up the largest proportion of CMP landings.

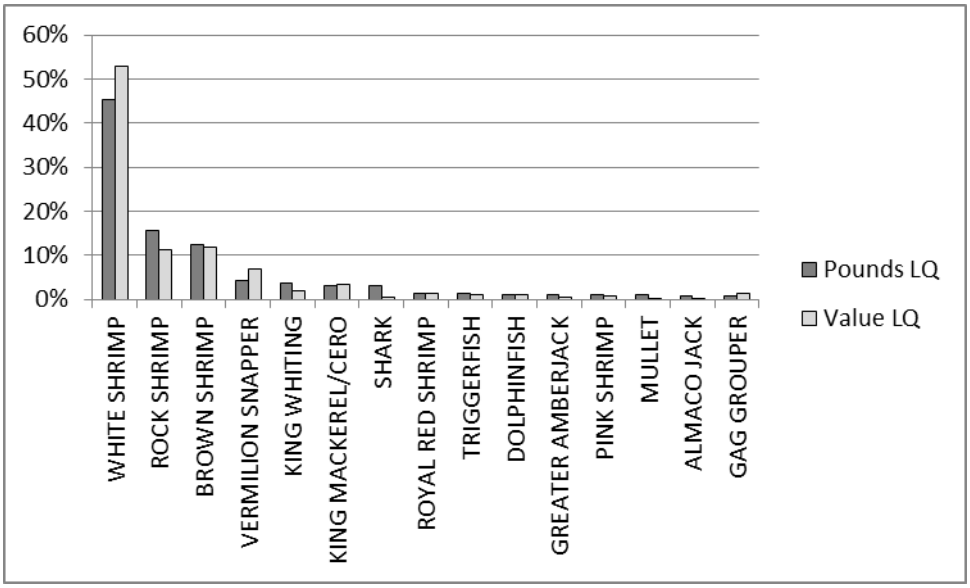

Figure 3.5.4.5. The top fifteen species in terms of proportion (lq) of total landings and value for Mayport, Florida. Source: ALS 2010

Brevard County

Detailed demographic information about Brevard County can be found in Amendment 18 (GMFMC and SAFMC 2011). The primary fishing communities are Cape Canaveral, Cocoa, Melbourne, and Titusville. Brevard County is also home to a large cruise terminal and the Kennedy Space Center in Cape Canaveral. Both Cocoa and Cape Canaveral are included in the top fifteen South Atlantic communities with CMP landings.

Cocoa is the top community in the South Atlantic for king mackerel and cobia commercial landings, and the second community for Spanish mackerel. King mackerel and Spanish mackerel make up almost 70% of landings in the community and about 70% of the local commercial value (Figure 3.5.4.6).

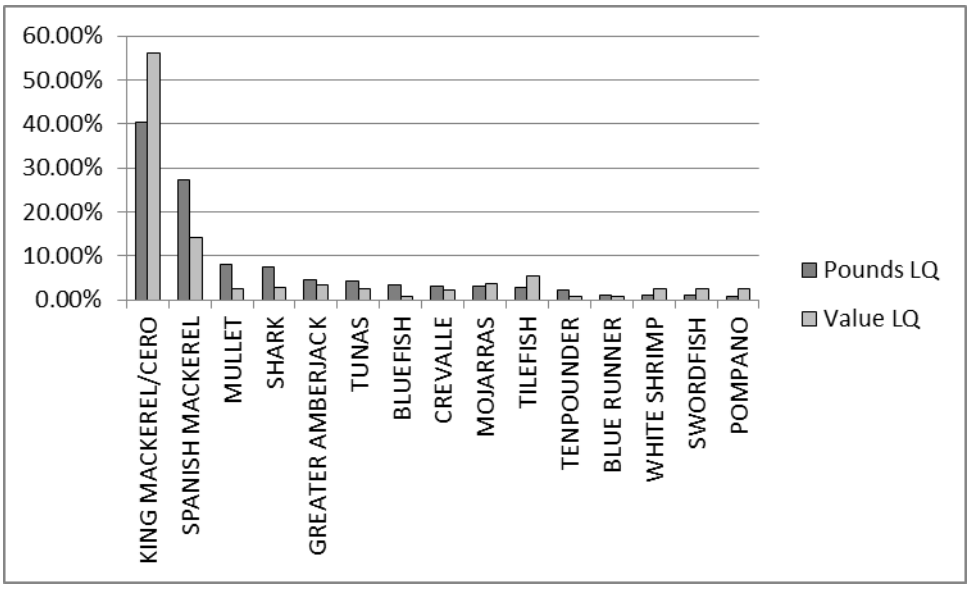

Figure 3.5.4.6. The top fifteen species in terms of proportion (lq) of total landings and value for Cocoa, Florida. Source: ALS 2010

Although Cape Canaveral is one of the top fifteen South Atlantic communities in commercial cobia landings, the species does not make up a significant portion of local landings (Figure 3.5.3.7). Deepwater and penaeid shrimp species are the majority of landings in this community.

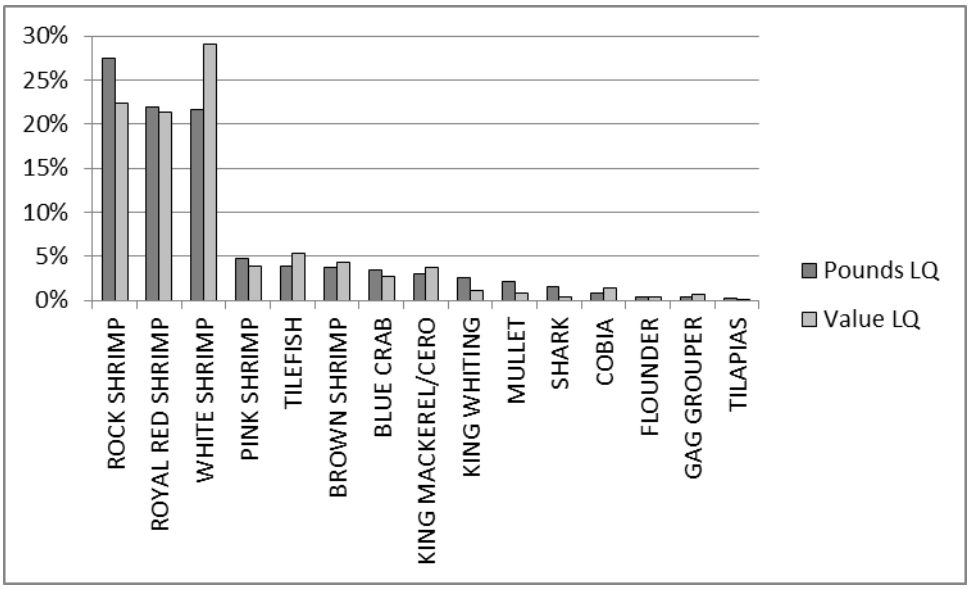

Figure 3.5.4.7. The top fifteen species in terms of proportion (lq) of total landings and value for Cape Canaveral, Florida. Source: ALS 2010

St. Lucie County

Detailed demographic information about St. Lucie County can be found in Amendment 18 (GMFMC and SAFMC 2011). The primary fishing communities are Port St. Lucie and Fort Pierce.

Fort Pierce was included in the top fifteen communities for CMP species and the distribution of commercial landings is shown in Figure 3.5.4.8. Spanish mackerel and king mackerel make up more than 60% of all commercial landings and commercial value.

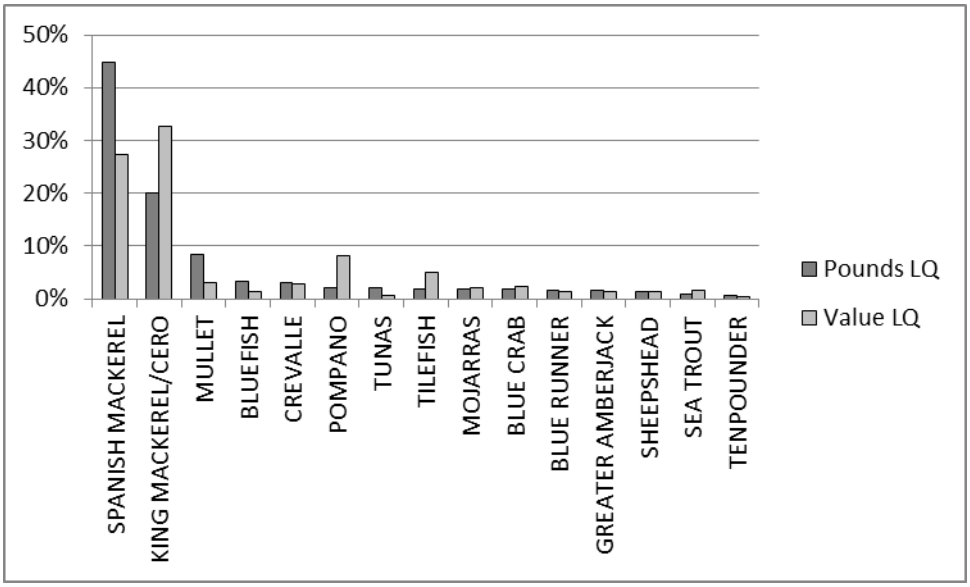

Figure 3.5.4.8. The top fifteen species in terms of proportion (lq) of total landings and value for Fort Pierce, Florida. Source: ALS 2010

Martin County

Detailed demographic information about Martin County can be found in Amendment 18 (GMFMC and SAFMC 2011). The primary fishing communities are Stuart, Port Salerno, Jensen Beach, and Hobe Sound. Stuart is one of the top fifteen communities in the South Atlantic for CMP species. Spanish mackerel and king mackerel make up about 45% of commercial landings in Stuart and almost 50% of commercial fishing value (Figure 3.5.4.9).

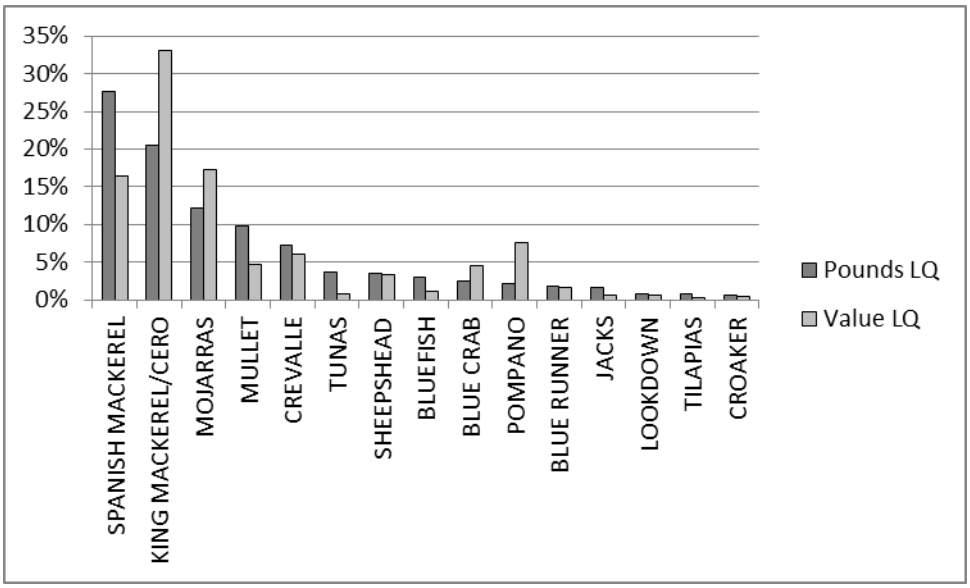

Figure 3.5.4.9. The top fifteen species in terms of proportion (lq) of total landings and value for Stuart, Florida. Source: ALS 2010

Palm Beach County

Detailed demographic information about Palm Beach County can be found in Amendment 18 (GMFMC and SAFMC 2011). The primary fishing communities are Atlantic Beach, Boynton Beach, Delray Beach, Jupiter, Lake Worth, Palm Beach, and Palm Beach Gardens. Palm Beach Gardens is one of the top fifteen South Atlantic communities for CMP species, and king mackerel and Spanish mackerel make up about 40% of local landings and about 20% of local fishery value (Figure 3.5.4.10). Although swordfish and tuna make up about the same proportion of landings, these two fisheries make up a substantial part of the local fishery value.

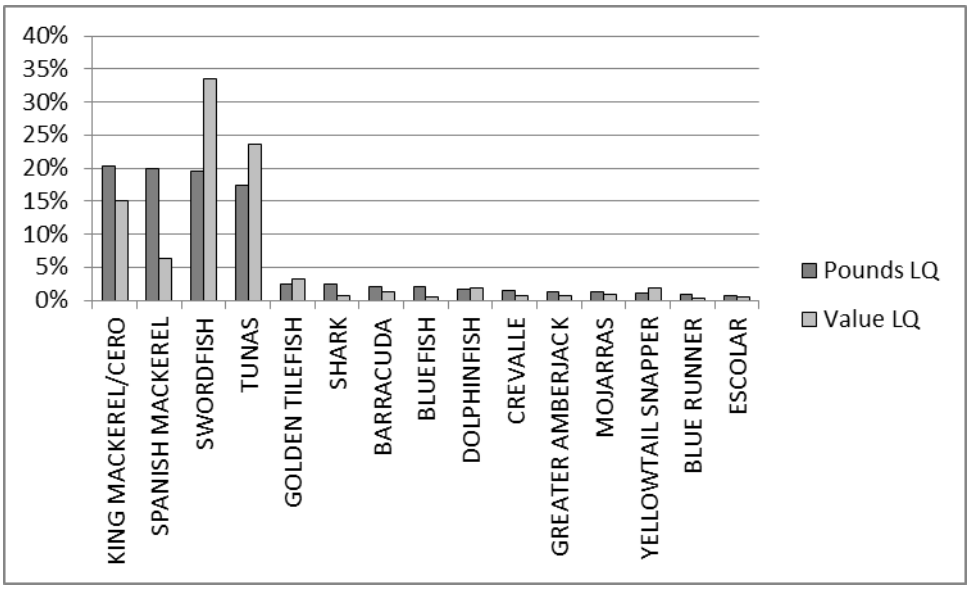

Figure 3.5.4.10. The top fifteen species in terms of proportion (lq) of total landings and value for Palm Beach Gardens, Florida. Source: ALS 2010

Monroe County

Detailed demographic information about Monroe County can be found in Amendment 18 (GMFMC and SAFMC 2011). The primary fishing communities are Key Largo, Islamorada, Tavernier, Marathon, Big Pine Key, Summerland Key, and Key West. Key West is one of the top fifteen communities in the South Atlantic and in the Gulf (see section 3.5.4). Spiny lobster and pink shrimp are the primary commercial species in Key West (Figure 3.5.4.11), with king mackerel making up almost 20% of local landings.

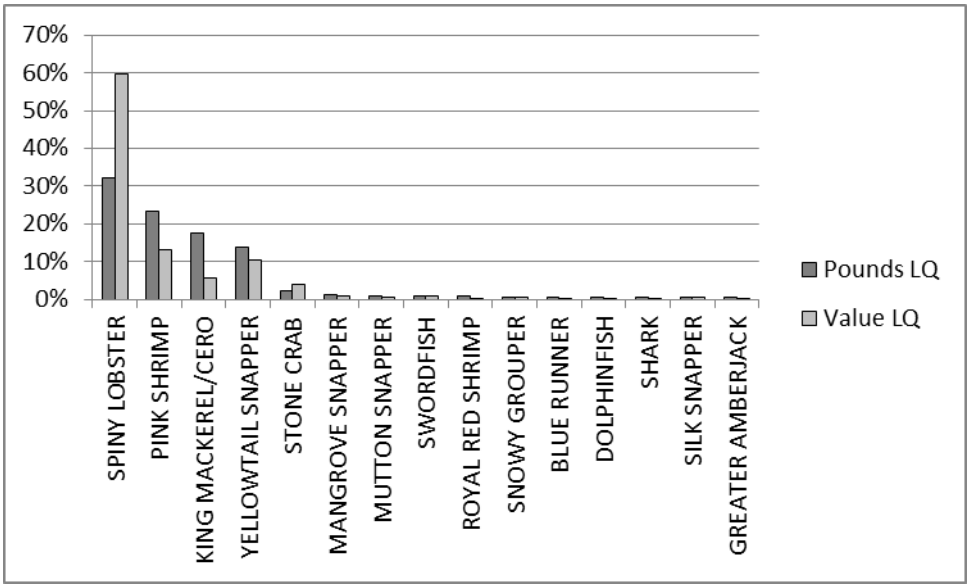

Figure 3.5.4.11. The top fifteen species in terms of proportion (lq) of total landings and value for Key West, Florida. Source: ALS 2010

Georgia Counties

There were two counties in Georgia with medium high vulnerability and those were Liberty and Chatham (Figure 3.5.4.12). The fishing communities located in those counties are Savannah, Thunderbolt, Tybee Island and Skidaway Island in Chatham County, and Midway in Liberty County. There are few king mackerel and Spanish mackerel permits in Georgia, with the largest number in McIntosh County (Table 3.5.4.3).

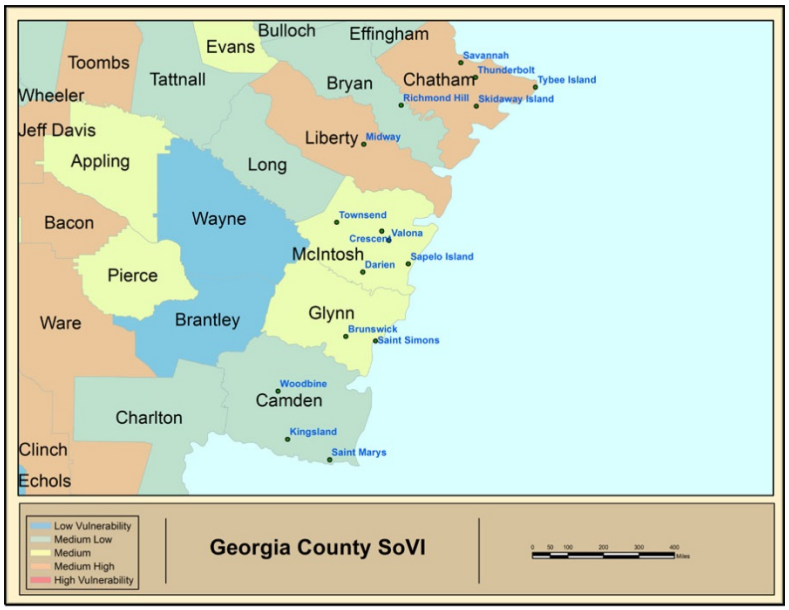

Figure 3.5.4.12. The Social Vulnerability Index applied to Georgia Coastal Counties.

Table 3.5.4.3. Number of CMP permits in Georgia counties (2012).

County*	King Mackerel	Spanish Mackerel	Total
Camden	1	1	**2**
Chatham	1	1	**2**
Glynn	1	1	**2**
McIntosh	3	2	**5**
Putnam	1	0	**1**
Telfair	1	1	**2**
Other	3	1	**4**
Total	**11**	**7**	**18**

*Based on the mailing address of the permit holder.

Georgia had no communities with landings or value over 3% for any coastal pelagic. While there were no substantial commercial landings within the state, the recreational fishery may be important. However, it is unfeasible to place recreational landings at the community level. Recreational fishing communities in the state are listed above in Table 3.5.4.1.

South Carolina Counties

Coastal South Carolina had no counties that were either medium or highly vulnerable (Figure 3.5.4.13). This does not mean that communities could not be vulnerable to adverse impacts because of regulatory action. It may suggest that coastal South Carolina is more resilient and capable of absorbing such impacts without substantial social disruption. South Carolina had no communities with landings or value over 3% for any coastal pelagic. While there were no substantial commercial landings within the state, the recreational fishery may be important. However, it is unfeasible to place recreational landings at the community level. Recreational fishing communities in the state are listed above in Table 3.5.4.1.

South Carolina Counties

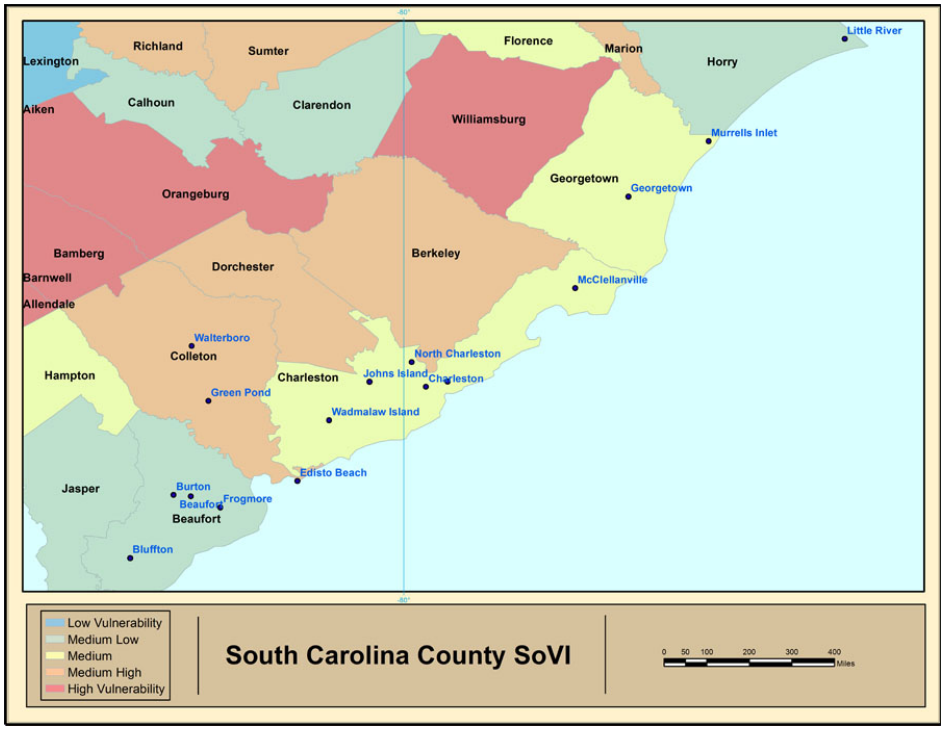

Figure 3.5.4.13. The Social Vulnerability Index applied to South Carolina Coastal Counties.

In comparison to other states, South Carolina has a lower number of king mackerel and Spanish mackerel permits. Most of the permit holders live in Georgetown County or Horry County, with some individuals from Charleston County (Table 3.5.4.3).

Table 3.5.4.4. Number of CMP permits in South Carolina counties (2012).

County*	King Mackerel	Spanish Mackerel	Total
Berkeley	1	0	**1**
Charleston	4	2	**6**
Georgetown	11	4	**15**
Hampton	2	1	**3**
Horry	7	6	**13**
Williamsburg	0	2	**2**
Total	**25**	**15**	**40**

*Based on mailing address of the permit holder.

South Carolina had no communities with landings or value over 3% for any coastal pelagic. While there were no substantial commercial landings within the state, the recreational fishery, particularly for cobia, is important for private anglers and the for-hire sector.

North Carolina Counties

There are a number of North Carolina counties classified as being either medium high or high on the social vulnerability scale and within those counties there are numerous fishing communities (Figure 3.5.4.14). Those counties that are considered to be either medium high or high on the SoVI are: New Hanover, Onslow, Carteret, Washington, Bertie, Chowan, Pasquotank, and Perquimans.

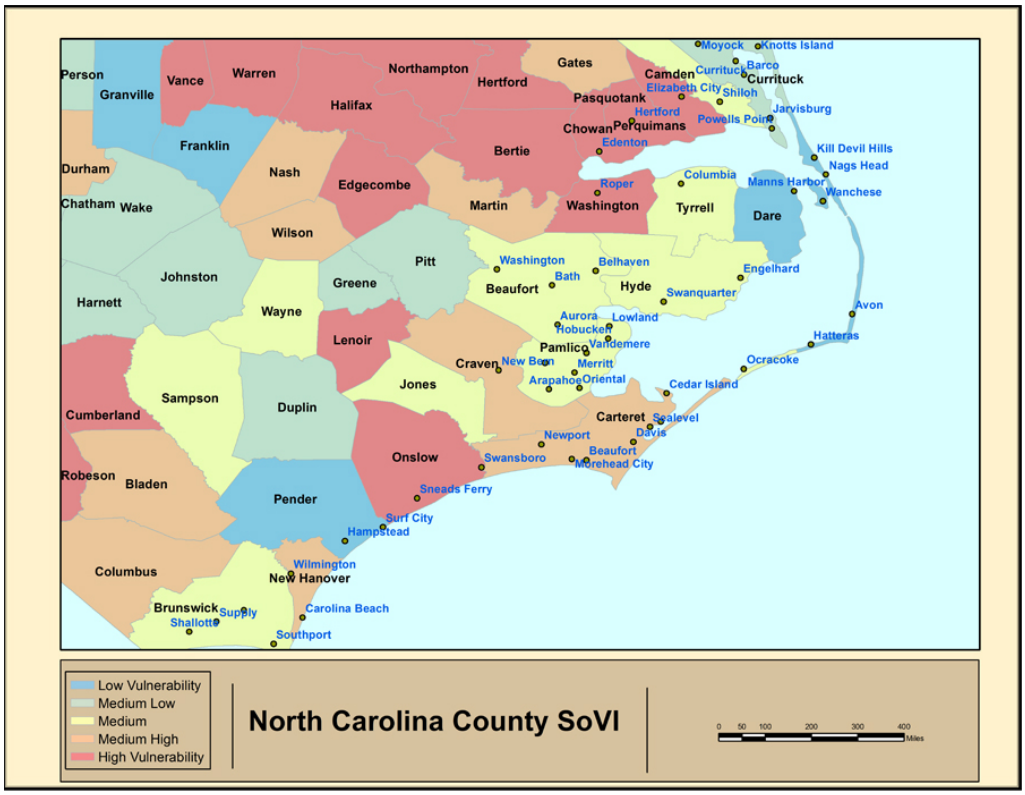

Figure 3.5.4.14. The Social Vulnerability Index applied to North Carolina Coastal Counties.

North Carolina has slightly more king mackerel permits than Spanish mackerel permits, and in general most vessels have both permits. Dare County has the highest number of CMP permits followed by Brunswick County. Carteret County and New Hanover County also have relatively significant numbers of CMP permits.

Table 3.5.4.5. Number of CMP permits in North Carolina counties (2012).

County*	King Mackerel	Spanish Mackerel	Total
Beaufort	1	1	**2**
Brunswick	55	37	**92**
Carteret	30	23	**53**
Dare	77	76	**153**
Hyde	4	8	**12**
New Hanover	35	13	**48**
Onslow	6	2	**8**
Pamlico	0	8	**8**
Pasquotank	0	1	**1**
Pender	10	4	**14**
Pitt	1	2	**3**
Randolph	3	3	**6**
Wake	1	0	**1**
Other	15	13	**28**
Total	**238**	**191**	**429**

*Based on mailing address of the permit holder.

Hatteras is the only community in North Carolina with landings or value over 3% for any coastal pelagic. While there were no substantial commercial landings within the state, the recreational fishery is important for private anglers and the for-hire sector.

3.5.5 Environmental Justice Considerations

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

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

In order to identify the potential for EJ concern, the rates of minority populations (non-white, including Hispanic) and the percentage of the population that was below the poverty line were examined. The threshold for comparison that was used was 1.2 times the state average for minority population rate and percentage of the population below the poverty line. If the value for the community or county was greater than or equal to 1.2 times the state average, then the community or county was considered an area of potential EJ concern. Census data for the year 2010 was used. Estimates of the state minority and poverty rates, associated thresholds, and community rates are provided in Table 3.5.5.1 and 3.5.5.2; note that only communities that exceed the minority threshold and/or the poverty threshold are included in the table**.**

Table 3.5.5.1. Environmental Justice thresholds (2010 U.S. Census data) for counties in the Gulf of Mexico 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 3.5.5.2. 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.

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.

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.

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 Section 9. 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 public members appointed by the Secretary; one each from the fishery agencies of Texas, Louisiana, Mississippi, Alabama, and Florida; and one from NOAA Fisheries.

The South Atlantic Council is responsible for conservation and management of fishery resources in federal waters of the U.S. South Atlantic. These waters extend from 3 to 200 miles offshore from the seaward boundary of the States of North Carolina, South Carolina, Georgia, and east Florida to Key West. The South Atlantic Council has thirteen voting members: one from 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, U.S. Coast Guard (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 a Scientific and Statistical Committee to review the data and science being used in assessments and fishery management plans/amendments. Regulations contained within FMPs are enforced through actions of the NOAA's 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 Gulf of Mexico Marine Fisheries Commission 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 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. **(SA Mackerel AP Preferred)**

Alternative 2: Prohibit sale of king mackerel caught under the bag limit, 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, 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

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 exclusive economic zone (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.

Option a. The South Atlantic Council's jurisdiction

Gulf Preferred Option b. The Gulf Council's jurisdiction **(Gulf AP Preferred)**

South Atlantic Preferred **Alternative 4:** Prohibit sale of king and Spanish mackerel caught under the bag limit with the exception of state-permitted tournaments. 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. King or Spanish mackerel caught during a tournament may be donated to a dealer in exchange for a charitable donation if the tournament organizers have a permit from a state to conduct that tournament, and transfer and reporting requirements are followed.

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

Option b. The Gulf Council's jurisdiction

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 reduces overall population size. 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 causing some fish to be counted against both the commercial hook-and-line and recreational allocations of TAC, particularly with regard to catches from for-hire vessels. The majority of commercial sales by charter vessels occurs 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 catch, contributing to TAC 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 earlier than they would in the absence of double counting, 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 biological or ecological environment. The potential for double counting of fish still exists under this alternative.

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. Vessel-level harvest data are not systematically collected for the charterboat and private angler sectors, so the average number of anglers per vessel is not known. Additionally, the potential for double counting of fish still exists 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), yet if queried by MRIP report having harvested those fish recreationally, then that recreational angler's landings could be counted against both the recreational and commercial TACs.

Alternative 3 would prohibit the sale of all bag limit caught king and Spanish mackerel. For a person to sell either species, the 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. **Gulf Preferred Alternative 3, Option b** would make this alternative applicable only to those individuals fishing for mackerel in or from the EEZ of the Gulf of Mexico. This would rectify any issues with double counting of mackerel in the EEZ of the Gulf of Mexico. Some reduction in recreational catch could 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.

South Atlantic Preferred **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. Tournament-caught mackerel may be donated to a dealer in exchange for a charitable donation if the tournament organizers have a permit from a state to conduct that tournament, and transfer and reporting requirements are followed. As long as money from the sale of the fish goes to the charity and not the tournament or angler donating the fish, the catch would count towards the recreational quota. **Gulf Preferred** **Alternative 4, Option a** would make this alternative applicable only to those individuals fishing for mackerel in or from the EEZ of the Atlantic. This would rectify any issues with double counting of mackerel in the EEZ of the South Atlantic.

4.1.2 Direct and Indirect Effects on the Economic Environment

Federal data sources for the economic analyses are incomplete in that federal logbooks do not capture landings of species that come from state waters. 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 lbs total of Spanish mackerel landed in SC. Consequently, SC is not included in the Spanish mackerel analyses. North Carolina, South Carolina, Georgia and Florida (separated by Council jurisdiction) were provided. 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 impacted by the Deepwater Horizon 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 a CMP for-hire and king and/or Spanish mackerel commercial permits. 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. **Alternative 2** and **Alternative 3** each have two options with **Option a** applying only to the South Atlantic Council's jurisdiction and **Gulf Preferred** **Option b** applying only to the Gulf Council's jurisdiction. The Gulf Council prefers **Alternative 3, Option b**. The South Atlantic Council prefers **Alternative 4**, with the Gulf Council only preferring **Alternative 4, Option a**. The Gulf Council prefers that tournament sales be allowed only in the South Atlantic, not in the Gulf region.

The difference between **Alternative 2** and **Alternative 3** is that a vessel operating as a for-hire vessel could sell a bag limit 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, Option a** and **Alternative 3, Option a** for West Florida, East Florida/Georgia, South Carolina and North Carolina 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. Had a king mackerel permit been required to sell any king mackerel, including bag limits, the 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. 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 king mackerel permit. Had a king mackerel permit been required to sell any king mackerel, including bag limits, the 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. 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. Had a king mackerel permit been required to sell any king mackerel, including bag limits, the 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. 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. Had a king mackerel permit been required to sell any king mackerel, including bag limits, 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 4.1.2.1. 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 by Gulf and South Atlantic states. Note: Data is not available for AL, MS, LA, and TX.

		2007	2008	2009	2010	2011	Average
W-FL	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%

E-FL/GA	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%
NC	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%
SC	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 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 4.1.2.2 shows the economic effects of **Alternative 2, Option a** and **Alternative 3, Option a** for West Florida, East Florida/Georgia, and North Carolina 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 dollars 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.

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 dollars 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.

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, the all the vessels combined that did not have a federal Spanish mackerel permit would have lost an average of $511,159 dollars 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 4.1.2.2. 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 by Gulf and South Atlantic states. Note: Data is not available for AL, MS, LA, and TX.

		2007	2008	2009	2010	2011	Average
W-FL	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%
E-FL/GA	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%
NC	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 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.

Prohibiting bag limit sales of king and Spanish mackerel, as proposed under **Alternative 2, Options a** and **b**, and **Alternative 3, Option a** and **Gulf Preferred Option b**, would have a greater economic effect on king mackerel fishermen who don't have a federal king mackerel permit as this permit is limited access. The average annual loss of nominal ex-vessel value 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. The downward trend in tournament sold king mackerel went $65,000 in 2007 to $13,000 in 2011. Not knowing specifically the amount of king mackerel sales from tournaments in South Carolina, Georgia or Florida, it is estimated that **South Atlantic Preferred Alternative 4** would provide less direct negative economic effects than would **Alternatives 2** or **3**.

Alternative 1 would have the 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 East Florida, Georgia, South Carolina and North Carolina. **South Atlantic Preferred Alternative 4** would mitigate the direct negative economic effects somewhat by allowing for tournament sales.

4.1.3 Direct and Indirect Effects on the Social Environment

In general, the debate over allowing recreational vessels to sell species that are under a recreational bag limit has several 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 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 4.1.3 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 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 will 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 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.

Because bag limit sales for king mackerel and Spanish mackerel would continue under **Alternative 1** and **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, which is under a limited entry program and may be difficult for some fishermen to obtain.

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. **Alternative 3** would also impact organizers and participants in tournaments, and would likely result in the most significant social impacts with little social benefits because as long as king mackerel tournaments continue, tournament fish may be discarded or otherwise disposed if not personally consumed. Any local organizations that depend on the sale of tournament fish will lose that source of funds. Under the options of this alternative, only fishermen working in the South Atlantic would be affected by **Option 3a** and only fishermen working in the Gulf would be affected by **Gulf Preferred Option 3b.**

Because **South Atlantic Preferred Alternative 4** includes a provision to allow tournament sales, 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. Expected impacts on for-hire crew and other individuals who sell king mackerel and Spanish mackerel under the bag limit would be the same as under **Alternative 3**. Additionally, only fishermen working in the South Atlantic and tournaments in the South Atlantic would be affected by **Gulf Preferred Option 4, Option a** and only fishermen working in the Gulf and tournaments in the Gulf would be affected by **Option b.**

The options under **Alternative 2, Alternative 3** and **South Atlantic Preferred Alternative 4** allow the Councils to recommend different regulations in the region. 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.

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** 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** 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. **Gulf Preferred Option b** would apply this measure only in Gulf Council jurisdictional waters. **South Atlantic 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. **Gulf Preferred Option a** would apply this measure only in South Atlantic Council jurisdictional waters.

4.2 Action 2: Elimination of Inactive Commercial King Mackerel Permits

Alternative 1: No Action – Do not eliminate any commercial king mackerel permits. **(SA Mackerel AP Preferred) (Gulf AP Preferred)**

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 between 2002-2011.

Option d. The permit has at least 1,000 lbs of king mackerel in at least one year between 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 between 2002-2011.

Option d. The permit has at least 1,000 lbs of king mackerel in at least one year between 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

King mackerel are typically caught at the ocean surface and therefore neither hook-and-line nor run-around gillnet gear typically come in contact with bottom habitat. These gears 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 the coral.

This action 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. If a low threshold is chosen (for example, **Option c**), the fishermen affected likely have had minimal impact on the physical and biological environments and so benefits would be minimal. 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 within twelve months after expiration. Presently, a permit can be renewed regardless of its landings history. **Alternative 1** is the No Action alternative, which would have no effect on permit renewals and no economic impacts beyond the baseline.

Alternative 2, Options a – d would establish a landings history requirement that would reduce the number of permits that could be renewed. **Option b** is expected to result in the largest number of terminated permits and 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 king mackerel, however, are expected to be substantially less than the relative losses of valid 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).

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 **Alternatives 1** and **2**.

Alternative		Number of Permits		Percent Permits Terminated	Terminated Permits		Terminated Permits	
		Terminated	Valid & Renewable		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 would represent more than a loss of king mackerel landings and dockside revenues to entities whose permits could not be renewed. It would also represent the taking of their property by the federal government. A preliminary search of online king mackerel permit sales found prices ranging from approximately $3,500 to $6,000. Consequently, each of the terminated permits would also reduce the wealth of the terminated permit holder by $3,500 to $6,000. That presumes king mackerel permits are not leased; however, vessels with a permit may be leased. If a king mackerel permit holder leases rather than sells the permit and leases it at $1,000 per year, the value of a permit after six years exceed the maximum price of selling the permit. Reducing that revenue stream would be the cost of renewing the permit every two years, which is presently $25 plus any time and additional expenses to complete and submit the renewal application.

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). The average vessel with a permit has king mackerel revenues that represent approximately 21% of annual revenues from all species (**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.

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 **Alternative 1** (because permit holders would increase landings to avoid having their permits terminated because of a future renewal requirement).

Alternative 2 would increase the price of a king mackerel permit by reducing supply. Assuming demand does not change, **Option b** would result in the largest increase in the price of a 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 figures would represent the maximum losses if all inactive permits are not transferred. If all inactive permits are transferred, there would be no losses of landings or revenues.

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 increase the cost of entering the king mackerel commercial fishery. It would not affect the supply of permits, but would increase demand.

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 comment has 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 has foregone the benefit of selling the permit, with current prices between $5,000-7,000 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. **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). **Alternative 2** would have the most significant impact on fishermen with permits designated as inactive. 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** will 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** would eliminate or restrict the most permits, particularly impacting North Carolina and Florida. **Option c** will 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 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 SC), Georgetown (Georgetown County SC), and Townsend (McIntosh GA).

Florida- East Coast

The primary communities that could be affected on the Florida East Coast include Port Canaveral (Brevard County), Ft 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:			
	# 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

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 Lousiana, the primary communities that could be impacted by eliminiation 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 Neuces 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
Neuces	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.

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 **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 could not be transferred. None of the alternatives should have any impact on the level of enforcement.

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.

Gulf Preferred Alternative 2: Eliminate income requirements for commercial king and Spanish mackerel permits. **(SA Mackerel AP Preferred) (Gulf AP Preferred)**

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 percent

Option b: 50 percent

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 increases 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 4.2.1.

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.

Gulf 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; 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.

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 Council 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**.

Gulf Preferred Alternative 2 would eliminate existing income qualification requirements from the commercial coastal migratory pelagic permit application and/or renewal process. Under **Alternative 2**, applicants would get their commercial permits renewed provided that the applications were submitted within the prescribed application period.

Gulf Preferred Alternative 2 is expected to streamline and ease the commercial CMP permit application process. **Gulf 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 **Gulf 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 of Mexico 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 a substantial number of 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. **Gulf Preferred Alternative 2** would allow commercial CMP 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 Council's 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 coastal migratory pelagic 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 CMP commercial 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 CMP 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 fishermen 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 (no action) 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 (**Gulf Preferred Alternative 2**) is not expected to affect permits kept under commercial fishing business entities. Positive social impacts may be expected from **Gulf 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 **Gulf 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** would only change the qualifying level and therefore would not change the impacts relative to **Alternative 1**. In either case, NMFS Permits Office would need to ensure the income qualifying affidavit is signed, but no other verification is carried out.

A slight positive impact is likely to accrue with the removal of the income requirement (**Gulf Preferred Alternative 2**) 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 Council 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 Council 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.

On April 20, 2010, an explosion occurred on the Deepwater Horizon MC252 oil rig, resulting in the release of an estimated 4.9 million barrels of oil into the Gulf. In addition, 1.84 million gallons of Corexit 9500A dispersant were applied as part of the effort to constrain the spill. The cumulative effects from the oil spill and response may not be known for several years. The oil spill affected more than one-third of the Gulf area from western Louisiana east to the panhandle of Florida and south to the Campeche Bank in Mexico. The impacts of the Deepwater Horizon MC252 oil spill on the physical environment are expected to be significant and may be long-

term. Oil 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.

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 would 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 and Spanish mackerel mature at 1-2 years; 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.

Recent 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 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 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 by the Councils are expected to benefit fishermen and managed species. Amendment 20 contains actions that would ease restrictions by increasing trip limits and allowing transit through closed areas. A South Atlantic framework action addresses bycatch in Spanish mackerel nets and seeks to modify regulations.

How global climate changes will affect Gulf fisheries is unknown. Climate change can impact marine ecosystems through ocean warming by increased thermal stratification, reduced upwelling, sea level rise; and through increases in wave height and frequency, loss of sea ice, and increased risk of diseases in marine biota. Decreases in surface ocean pH due to absorption of anthropogenic CO_2 emissions may impact a wide range of organisms and ecosystems, particularly organism that absorb calcium from surface waters, such as corals and crustaceans (IPCC 2007, and references therein).

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.

Monitoring

The effects of the proposed action are, and will continue to be, monitored through collection of landings data by NOAA Fisheries Service, 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 of Mexico are collected through Marine Recreational Information Program (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 scheduled to begin in 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.

CHAPTER 5. REGULATORY IMPACT REVIEW

5.1 Introduction

5.2 Problems and Objectives

5.3 Methodology and Framework for Analysis

5.4 Description of the Fishery

A description of the xx fishery, with particular reference to xx, is contained in Chapter 3.

5.5 Effects on Management Measures

5.6 Public and Private Costs of Regulations

Council costs of document preparation, meetings, public hearings, and information Dissemination $x0,000

NOAA Fisheries administrative costs of document preparation, meetings and review $x0,000

TOTAL $x0,000

5.7 Determination of Significant Regulatory Action

CHAPTER 6. REGULATORY FLEXIBILITY ACT ANALYSIS

6.1 Introduction

6.2 Statement of the need for, objective of, and legal basis for the rule

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

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

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

6.6 Significance of economic impacts on a substantial number of small entities

6.7 Description of the significant alternatives to the proposed action and discussion of how the alternatives attempt to minimize economic impacts on small entities

CHAPTER 7. BYCATCH PRACTICABILITY ANALYSIS

CHAPTER 8. 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 and 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
Christina Package, NMFS/SF	Anthropologist	Social environment

REVIEWERS

Name	Discipline/Expertise	Role in EA Preparation
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Noah Silverman, NMFS SERO	Natural resource management specialist	NEPA review
David Dale, NMFS/HC	EFH Specialist	Habitat Review
Jennifer Lee, NMFS SERO	Protected Resources Specialist	Protected Resources review
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Christopher Liese, NMFS/SEFSC	Economist	Economic review

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 9. LIST OF AGENCIES, ORGANIZATIONS AND PERSONS 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. Elimination of Inactive King Mackerel Permits

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

Option a. All years with data available

Suboption i. Average of all years

Suboption ii. Average of the best x years of the 12 years

Sub option iii. At least one of the 12 years

Suboption iv. At least two of the 12 years

Suboption v. At least three of the 12 years

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

Suboption i. 1 lbs

Suboption ii. 100 lbs

Alternative: 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 (1998-2011)

Suboption i. Average of all years

Suboption ii. At least one of the 14 years

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

Suboption i. 1 lb

Suboption ii. 100 lbs

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

Option a. The fishing year ending September 17, 2010

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

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

Alternative: Establish an appeals process.

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

Alternative: 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

Actions completely removed:

Passive Reduction of Permits
Alternative 1: No Action – To transfer a commercial king mackerel vessel permit, the permit must be valid or renewable.

Alternative 2: To transfer a commercial king mackerel vessel permit, the permittee must possess two valid or renewable permits at the time of transfer; only one permit would be reissued and the other would be retired.

Discussion: This action would over time reduce the number of active permits and the resultant effort in the king mackerel fishery. As of March 28, 2012, the number of valid or renewable permits is 1,507. The number of permits has declined since the inception of the moratorium in 1998. This phenomenon is generally true for other fisheries that have incorporated moratoria as part of the management strategy. Although the commercial sector has generally caught its allocation of TAC in recent years, the recreational sector has consistently been under its allocation of TAC by approximately 2.0 mp over the past 10 years. Furthermore, the Gulf group king mackerel stock is not considered to be overfished or undergoing overfishing. This action would likely have negative social and economic impacts on this sector of the fishery.

Tournament Sale of King Mackerel
Alternative 1: No Action - no federal permit requirement to sell king mackerel caught during a tournament. Sale of king mackerel harvested during a tournament is allowed for tournament organizers that possess the necessary state permits. 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.

Alternative 2: Require tournament organizers to obtain a federal commercial king mackerel permit to sell tournament-caught king mackerel. Prohibition of sale during a commercial closure would apply.

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.

Elimination of Latent Gulf Migratory Group King Mackerel Gillnet Endorsements
Alternative 1: No Action – do not eliminate any commercial king mackerel gillnet endorsements

Alternative 2: Renew commercial king mackerel gillnet endorsements for commercial king mackerel permits if average landings under that endorsement 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.

Note: If the Councils chose an option from a-b, they must also choose an option from c.

Alternative 3: Renew commercial king mackerel gillnet endorsements only if the endorsement 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

Spanish Mackerel Gillnet Endorsement

Alternative 1: No Action – Do not establish a Spanish Mackerel gillnet endorsement

Alternative 2: Establish an Atlantic group Spanish mackerel gillnet endorsement with qualifying poundages for a commercial gillnet endorsement based on average landings during the most recent 5 years prior to the control date September 17, 2010, for Atlantic group Spanish mackerel).

Option a: 30,000 pounds

Option b: 20,000 pounds

Option c: 10,000 pounds

Option d: 5, 000 pounds

Alternative 3: Establish an Atlantic group Spanish mackerel gillnet endorsement with qualifying poundages for a commercial gillnet endorsement based on average landings during the most recent 10 years prior to the control date September 17, 2010, for Atlantic group Spanish mackerel).

Option a: 30,000 pounds

Option b: 20,000 pounds

Option c: 10,000 pounds
Option d: 5, 000 pounds

Sale of Cobia

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 commercial 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 of the Atlantic or Gulf of Mexico, those fish must have been harvested aboard a vessel with a commercial cobia vessel permit.

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

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 aboard a vessel with one or more of the following commercial vessel permits: king mackerel, Spanish mackerel, Gulf reef fish, South Atlantic snapper/grouper, or South Atlantic dolphin/wahoo.

Federal Regulatory Compliance

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 permit must comply with federal cobia regulations when fishing in state waters if the federal regulations are more restrictive.

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 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 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, National Marine Fisheries Service 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, National Marine Fisheries Service 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.

Endangered Species Act

The Endangered Species Act (ESA) of 1973, as amended, (16 U.S.C. Section 1531 et seq.) requires federal agencies use their authorities to conserve endangered and threatened species. The ESA requires National Marine Fisheries Service, when proposing a fishery action that "may affect" critical habitat or endangered or threatened species, to consult with the appropriate administrative agency (itself for most marine species, the U.S. Fish and Wildlife Service for all remaining species) to determine the potential impacts of the proposed action. Consultations are concluded informally when proposed actions may affect but are "not likely to adversely affect" endangered or threatened species or designated critical habitat. Formal consultations, including a biological opinion, are required when proposed actions may affect and are "likely to adversely affect" endangered or threatened species or adversely modify designated critical habitat. If jeopardy or adverse modification is found, the consulting agency is required to suggest reasonable and prudent alternatives. National Marine Fisheries Service, as part of the Secretarial review process, will make a determination regarding the potential impacts of the proposed actions.

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. 12866: Regulatory Planning and Review

Executive Order 12866: Regulatory Planning and Review, signed in 1993, requires federal agencies to assess the costs and benefits of their proposed regulations, including distributional impacts, and to select alternatives that maximize net benefits to society. To comply with E.O. 12866, National Marine Fisheries Service prepares a Regulatory Impact Review (RIR) for all

fishery regulatory actions that either implement a new fishery management plan or significantly amend an existing plan. RIRs provide a comprehensive analysis of the costs and benefits to society of proposed regulatory actions, the problems and policy objectives prompting the regulatory proposals, and the major alternatives that could be used to solve the problems. The reviews also serve as the basis for the agency's determinations as to whether proposed regulations are a "significant regulatory action" under the criteria provided in E.O. 12866 and whether proposed regulations would have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Act. A regulation is significant if it a) has an annual effect on the economy of $100 million or more or adversely affects 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 and communities; b) creates a serious inconsistency or otherwise interferes with an action taken or planned by another agency; c) materially alters the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or d) raises novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order. National Marine Fisheries Service has preliminarily determined that this action will not meet the economic significance threshold of any criteria.

E.O. 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations

This Executive Order mandates that each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions. Federal agency responsibilities under this Executive Order include conducting their programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons from participation in, denying persons the benefit of, or subjecting persons to discrimination under, such, programs policies, and activities, because of their race, color, or national origin. Furthermore, each federal agency responsibility set forth under this Executive Order shall apply equally to Native American programs. Environmental justice considerations are discussed in detail in Section 2.5.

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 National Marine Fisheries Service 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 National Marine Fisheries Service, 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.

Essential Fish Habitat

The amended Magnuson-Stevens Act included a new habitat conservation provision known as Essential Fish Habitat (EFH) that requires each existing and any new FMPs to describe and identify EFH for each federally managed species, minimize to the extent practicable impacts from fishing activities on EFH that are more than minimal and not temporary in nature, and identify other actions to encourage the conservation and enhancement of that EFH. To address these requirements the Council has, under separate action, approved an environmental impact statement (GMFMC 2004) to address the new EFH requirements contained within the Magnuson-Stevens Act. Section 305(b)(2) requires federal agencies to obtain a consultation for any action that may adversely affect EFH. An EFH consultation will be conducted for this action.

APPENDIX C. SUMMARIES OF PUBLIC COMMENTS RECEIVED

List the locations of the scoping hearings and public hearings, then list the summaries and written comments

APPENDIX D. DECISIONS TOOLS