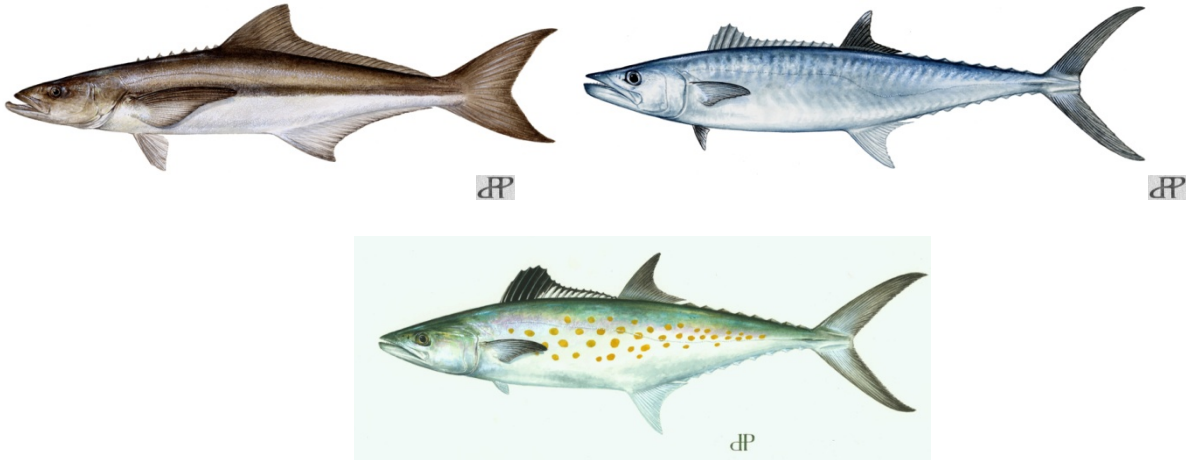


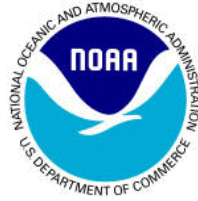
# Modifications to the Coastal Migratory Pelagic Zones



## Draft Amendment 20 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

February 2013



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## **Name of Action**

Draft Amendment 20 to Fishery Management Plan for Coastal Migratory Pelagics in the Gulf of Mexico and South Atlantic addressing modifications to the Coastal Migratory Pelagic Zones, 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 <sub>MSY</sub>	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 <sub>MSY</sub>	Fishing mortality rate corresponding to an equilibrium yield of MSY
F <sub>OY</sub>	Fishing mortality rate corresponding to an equilibrium yield of OY
F <sub>30% SPR</sub>	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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# FISHERY IMPACT STATEMENT

# CHAPTER 1. INTRODUCTION

## What Actions Are Being Proposed?

Actions in this amendment will address issues associated with the boundaries between migratory groups, zones, and subzones for king mackerel, Spanish mackerel, and cobia.

## 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 Councils, 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?

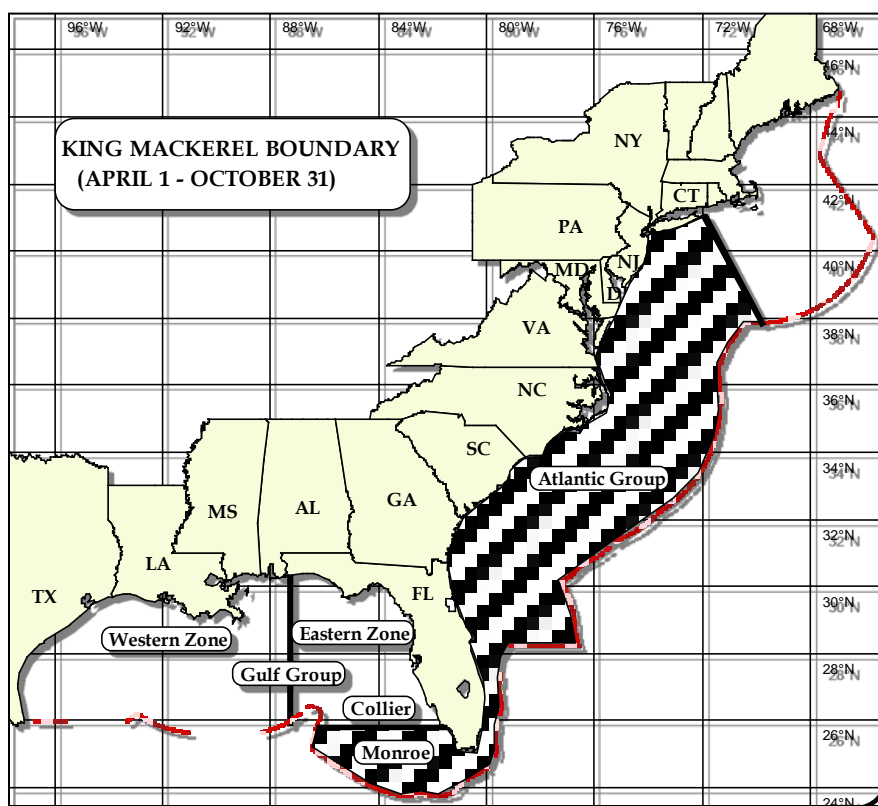
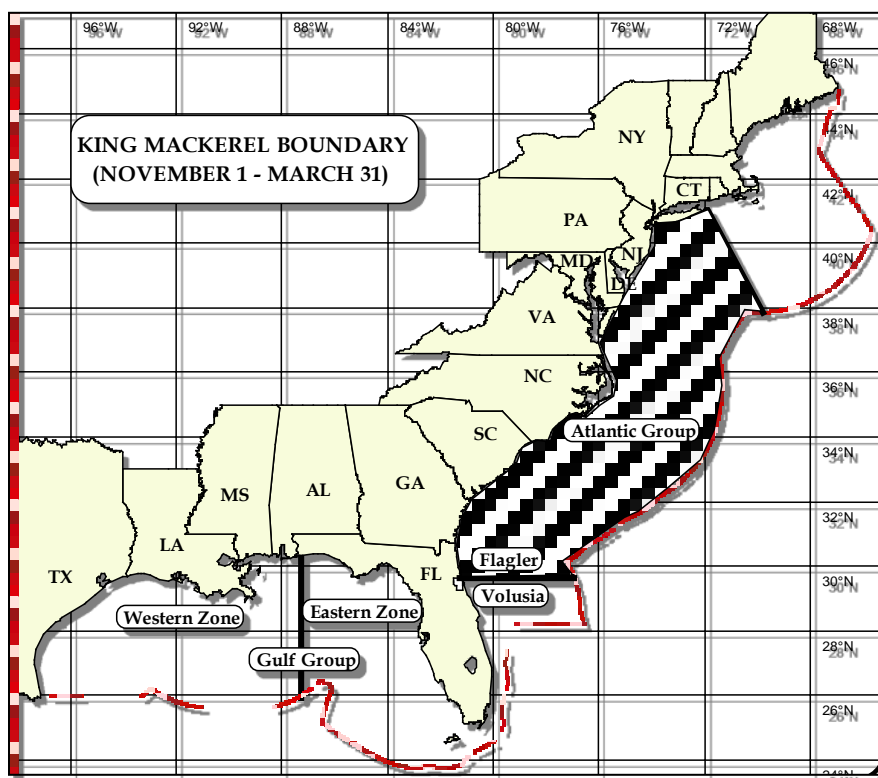
For king mackerel, conflicts have arisen due to early closures of zones and subzones. For Spanish mackerel and cobia, a new stock assessment will be completed in 2013. The actions in this amendment will address issues arising from these situations

## 1.1 Background

The Fishery Management Plan for the Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic (CMP FMP), effective February 1983, treated king mackerel, Spanish mackerel, and cobia each as one U.S. stock. The present management regime recognizes two migratory groups of each species, the Gulf migratory group and the Atlantic migratory group.

Each migratory group is managed separately. The Gulf king mackerel migratory group and the Atlantic Spanish mackerel migratory group are also divided into zones or subzones for management purposes. This amendment will evaluate the appropriateness of these divisions, and consider changes or additions, to allow for more targeted management.

**King mackerel:** The two migratory groups seasonally mix off the east coast of Florida and in Monroe County, Florida. For management and assessment purposes, a boundary between the migratory groups of king mackerel was specified at the Volusia/Flagler County border on the Florida east coast in the winter (November 1 - March 31) and the Monroe/Collier County border on the Florida southwest coast in the summer (April 1 - October 31) (Figure 1.1.1).



**Figure 1.1.1.** Seasonal boundary between Atlantic and Gulf migratory groups of king mackerel.

When the original boundary between the Gulf and Atlantic migratory groups of king mackerel was set, it was based on tagging data that indicated the mix was approximately 60% Gulf and 40% Atlantic. The Councils agreed to count king mackerel in the winter mixing zone (previously discussed) as 100% Gulf migratory group fish to help rebuild the then overfished Gulf migratory group. The most recent scientific information used in the Southeast Data, Assessment, and Review (SEDAR) 16 stock assessment (2008) indicated the mixing rate is probably closer to 50% Atlantic and 50% Gulf. Actions to set annual catch limits (ACLs) in Amendment 18 (GMFMC and SAFMC 2011) were based upon this 50/50 mixing rate assumption.

Amendment 1 to the CMP FMP (GMFMC and SAFMC 1985) established separate commercial allocations for the Gulf migratory group divided at the Alabama/Florida border into eastern and western zones. Amendment 9 to the CMP FMP (GMFMC and SAFMC 2000) further subdivided the commercial hook-and-line king mackerel allocation for the Eastern Zone Florida west coast by establishing two subzones, north and south, with a dividing line between the two subzones at the Collier/Lee County line. These zones and subzones were established to ensure that fishermen throughout the Gulf had an opportunity to fish in their homeport area and that some of the allowable quota was available for those areas.

The fishing year for the Gulf Western Zone and west coast Florida subzones is July 1- June 30. The trip limit is 3,000 lbs per day for the Western Zone. In general, the quota in this zone is met in September to November of each year, and fishing is closed; in 2008-2009, the zone remained open until March, but in 2012-2013 the zone closed in August. Both the Northern and Southern Subzones have a 1,250-lb trip limit until 75% of the quota is reached, and then the trip limit is 500 lbs until the quota is taken, or the end of the fishing year. The Northern Subzone has closed in the past four years, but previously had not closed since 2003-2004. The quota for the Southern Subzone for the hook-and-line sector generally is met in February or March, but occasionally the quota is not filled before the end of the fishing year. In the Southern Subzone, the gillnet season opens on the day after the Martin Luther King, Jr. holiday. The fishing year ends June 30, but the quota is usually reached within one to two weeks after opening.

The fishing year for the Atlantic migratory group is March 1 – end of February. The northern boundary for this group is at the jurisdictional boundary between the Mid-Atlantic and New England Councils, which is at the intersection point of Connecticut, Rhode Island, and New York.

Many king mackerel fishermen will travel throughout the southeast region to fish under different quotas. For example, fishermen from the east coast of Florida may fish in the Western Zone in the summer and early fall until that quota is filled. They will then move to the panhandle of Florida to fish under the Northern Subzone quota. When that quota is filled, they generally will travel back to their homeport to fish during the winter and spring.

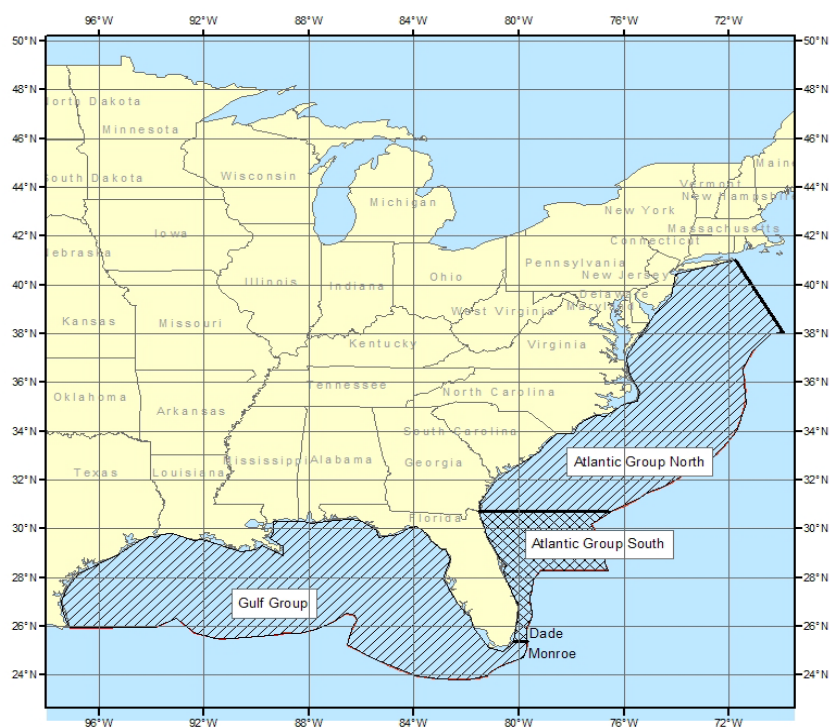
Recently, some fishermen who do not travel have expressed discontent with fishermen from outside their area contributing to filling the quota. In particular, fishermen from Louisiana and the Florida panhandle feel that their zone/subzone is closed too quickly each year, depriving those who do not travel of fishing opportunities. Additionally, because of the fall closures of the



Northern Subzone, fishermen on the west central coast of Florida have fewer opportunities to fish for mackerel; by the time the fish have migrated that far south, the subzone is closed. Proposed actions to address these problems include moving boundaries, creating new subzones, and changing the dates of the fishing year.

Another problem resulting from management by subzones is that in spring, often the Florida west coast subzones are closed, but Monroe County is open (because starting April 1, that county is part of the Atlantic group). Some fishermen from southwest Florida, particularly from Collier County, fish in waters of northern Monroe County on the Florida west coast. Currently, regulations prevent them from transiting the closed area (Collier County) with king mackerel to return to their homeport. Their only option is to travel to the Florida Keys, a considerable distance from the fishing area. A similar issue arises when the Northern Subzone is closed but the Southern Subzone is open. This amendment will consider allowing transit of closed areas by vessels possessing king mackerel, provided gear is appropriately stowed.

**Spanish mackerel:** Although these two migratory groups mix in south Florida, abundance trends along each coast of Florida are different, indicating sufficient isolation between the two migratory groups. Consequently, the boundary for Spanish mackerel was fixed at the Miami-Dade/Monroe County border on Florida's southeast coast (Figure 1.1.2). The Atlantic migratory group is divided into northern and southern zones at the Florida/Georgia border and the northern zone extends to the jurisdictional boundary between the Mid-Atlantic and New England Councils. Although only one quota is assigned to both zones, each zone has different trip limits and accountability measures. The fishing year for the Gulf migratory group is April 1 – March 30 and the fishing year for the Atlantic migratory group is March 1 – end of February.



**Figure 1.1.2.** Fixed boundary between Atlantic and Gulf migratory groups of Spanish mackerel.

**Cobia:** Separate migratory groups of cobia were established in Amendment 18 to the CMP FMP (GMFMC and SAFMC 2011). The division between Gulf and Atlantic migratory groups was set at the Council jurisdictional boundary, off the Florida Keys. During the data workshop for SEDAR 28, participants determined the biological boundary between the Gulf and Atlantic migratory groups should be at the Florida/Georgia border. This decision was based on genetic and tagging data, and recommendations from the commercial and recreational working groups. They determined that a mixing zone occurs around Brevard County, Florida, and potentially to the north. Although they did not find enough resolution in the data to specifically identify a biological boundary, the Florida/Georgia line did not conflict with life history information and would be easiest for management (SEDAR 2012). The northern boundary of the Atlantic migratory group is at the jurisdictional boundary between the Mid-Atlantic and New England Councils (Figure 1.1.3).

Because the biological boundary from the stock assessment differs from the management boundary, the acceptable biological catch (ABC) will need to be allocated for the east coast of Florida. Further, the assessment is expected to produce new recommendations for ABC, which would result in new ACLs and annual catch targets for cobia.



**Figure 1.1.3.** Jurisdictional boundaries of the Gulf of Mexico (blue), South Atlantic (orange), Mid-Atlantic (green), and New England (peach) Management Councils.

## 1.2 Purpose and Need

### *Purpose for Action*

The purpose of this amendment is to determine if the current and proposed zones along with their allocations, commercial trip limits, and other regulations are necessary and appropriate and provide the greatest benefit to the coastal migratory pelagic fishery.

### *Need for Action*

The need for the proposed actions is to achieve optimum yield while ensuring regulations are fair and equitable and fishery resources are utilized efficiently.

## 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.

### FMP Amendments

**Amendment 1**, with EIS, implemented in September of 1985, provided a framework procedure for pre-season adjustment of total allowable catch (TAC), revised the estimate of king mackerel maximum sustainable yield (MSY) downward, recognized separate Atlantic and Gulf migratory groups of king mackerel, and established fishing permits and bag limits for king mackerel. Commercial allocations among gear users, except purse seines, which were allowed 6% of the commercial allocation of TAC, were eliminated. The Gulf commercial allocation for king mackerel was divided into Eastern and Western Zones for the purpose of regional allocation, with 69% of the remaining allocation provided to the Eastern Zone and 31% to the Western Zone. Amendment 1 also established minimum size limits for Spanish mackerel at 12 in fork length (FL) or 14 in total length (TL), and for cobia at 33 in FL or 37 in TL.

**Amendment 2**, with environmental assessment (EA), implemented in July of 1987, revised MSY for Spanish mackerel downward, recognized two migratory groups, established allocations of TAC for the commercial and recreational sectors, and set commercial quotas and bag limits. Charter boat permits were established, and it was clarified that TAC must be set below the upper range of ABC. The use of purse seines on overfished stocks was prohibited, and their allocation of TAC was redistributed under the 69%/31% split.

**Amendment 3**, with EA, was partially approved in August 1989, revised, resubmitted, and approved in April 1990. It prohibited drift gillnets for coastal pelagic species and purse seines for the overfished migratory groups of mackerels.

**Amendment 4**, with EA, implemented in October 1989, reallocated Atlantic migratory group Spanish mackerel equally between recreational and commercial fishermen.

**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;
- Revised problems in the fishery and plan objectives;
- Revised the fishing year for Gulf Spanish mackerel from July-June to April-March;
- Revised the definition of "overfishing";
- Added cobia to the annual stock assessment procedure;
- Provided that the South Atlantic Council will be responsible for pre-season adjustments of TACs and bag limits for the Atlantic migratory groups of mackerels while the Gulf Council will be responsible for Gulf migratory groups;
- Continued to manage the two recognized Gulf migratory groups of king mackerel as one until management measures appropriate to the eastern and western migratory groups can be determined;
- Re-defined recreational bag limits as daily limits;
- Deleted a provision specifying that bag limit catch of mackerel may be sold;
- Provided guidelines for corporate commercial vessel permits;
- Specified that Gulf migratory group king mackerel may be taken only by hook-and-line and run-around gillnets;
- Imposed a bag and possession limit of two cobia per person per day;
- Established a minimum size of 12 in FL or 14 in TL for king mackerel and included a definition of "conflict" to provide guidance to the Secretary.

**Amendment 6**, with EA, implemented in November of 1992, made the following changes:

- Identified additional problems and an objective in the fishery;
- Provided for rebuilding overfished stocks of mackerels within specific periods;
- Provided for biennial assessments and adjustments;
- Provided for more seasonal adjustment actions;
- Allowed for Gulf migratory group king mackerel stock identification and allocation when appropriate;
- Provided for commercial Atlantic migratory group Spanish mackerel possession limits;
- Changed commercial permit requirements to allow qualification in one of three preceding years;
- Discontinued the reversion of the bag limit to zero when the recreational quota is filled;
- Modified the recreational fishing year to the calendar year; and
- Changed the minimum size limit for king mackerel to 20 in FL, and changed all size limit measures to fork length only.

**Amendment 7**, with EA, implemented in November 1994, equally divided the Gulf commercial allocation in the Eastern Zone at the Dade-Monroe County line in Florida. The sub-allocation for the area from Monroe County through Western Florida is equally divided between commercial hook-and-line and net gear users.

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

- Clarified ambiguity about allowable gear specifications for the Gulf migratory group king mackerel fishery by allowing only hook-and-line and run-around gillnets. However, catch by permitted, multi-species vessels and bycatch allowances for purse seines were maintained;
- Established allowable gear in the South Atlantic and Mid-Atlantic areas as well as providing for the Regional Administrator (RA) to authorize the use of experimental gear;
- Established the Councils' intent to evaluate the impacts of permanent jurisdictional boundaries between the Gulf and South Atlantic Councils and development of separate FMPs for coastal pelagic species in these areas;
- 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;
- Legalized retention of up to five cut-off (damaged) king mackerel on vessels with commercial trip limits;
- Set an optimum yield (OY) target at 30% static spawning potential ratio (SPR) for the Gulf and 40% static SPR for the Atlantic;
- Provided the South Atlantic Council with authority to set vessel trip limits, closed seasons or areas, and gear restrictions for Gulf migratory group king mackerel in the North Area of the Eastern Zone (Dade/Monroe to Volusia/Flagler County lines);
- Established various data consideration and reporting requirements under the framework procedure;
- Modified the seasonal framework adjustment measures and specifications (see Appendix A);
- Expanded the management area for cobia through the Mid-Atlantic Council's area of jurisdiction (to New York).

**Amendment 9**, with EA, implemented in April 2000, made the following changes to the management regime:

- Reallocated the percentage of the commercial allocation of TAC for the North Area (Florida east coast) and South/West Area (Florida west coast) of the Eastern Zone to 46.15% North and 53.85% South/West and retained the recreational and commercial allocations of TAC at 68% recreational and 32% commercial;
- Subdivided the commercial hook-and-line king mackerel allocation for the Gulf migratory group, Eastern Zone, South/West Area (Florida west coast) by establishing two subzones with a dividing line between the two subzones at the Collier/Lee County line;
- Established regional allocations for the west coast of Florida based on the two subzones

with 7.5% of the Eastern Zone allocation of TAC being allowed from Subzone 2 and the remaining 92.5% being allocated as follows:

- 50% - Florida east coast
- 50% - Florida west coast that is further subdivided:
  - 50% - Net Fishery
  - 50% - Hook-and-Line Fishery
- Established a trip limit of 3,000 lb per vessel per trip for the Western Zone;
- Established a moratorium on the issuance of commercial king mackerel gillnet endorsements and allow re-issuance of gillnet endorsements to only those vessels that: 1) had a commercial mackerel permit with a gillnet endorsement on or before the moratorium control date of October 16, 1995 (Amendment 8), and 2) had landings of king mackerel using a gillnet in one of the two fishing years, 1995-1996 or 1996-1997, as verified by the NMFS or trip tickets from Florida; 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;
- Increased the minimum size limit for Gulf migratory group king mackerel from 20 in to 24 in FL
- Allowed the retention and sale of cut-off (damaged), legal-sized king and Spanish mackerel within established trip limits.

**Amendment 10**, with (Supplemental Environmental Impact Statement (SEIS), approved June 1999, incorporated essential fish habitat provisions for the South Atlantic.

**Amendment 11**, with SEIS, partially approved in December 1999, included proposals for mackerel in the South Atlantic Council's Comprehensive Amendment Addressing Sustainable Fishery Act Definitions and other Provisions in FMPs of the South Atlantic Region.

**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 13**, with SEIS, implemented August 19, 2002, established two marine reserves in the EEZ of the Gulf in the vicinity of the Dry Tortugas, Florida known as Tortugas North and Tortugas South in which fishing for coastal migratory pelagic species is prohibited. This action complements previous actions taken under the NOAA Sanctuaries Act.

**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. It also changed the fishing season to March 1 through February 28/29 for the Atlantic migratory groups of king and Spanish mackerel.

**Amendment 16**, was not developed.

**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. There will be a periodic review at least every 10 years on the effectiveness of the limited access system.

**Amendment 18**, with EA, implemented January 30, 2012, established annual catch limits and accountability measures for Gulf and Atlantic migratory groups for cobia, king mackerel, and Spanish mackerel. It also removed cero, little tunny, dolphin, and bluefish from the fishery management plan, revised the framework procedure, and separated cobia into Atlantic and Gulf migratory groups.

## CHAPTER 2. MANAGEMENT ALTERNATIVES

### 2.1 Action 1 – Modify Subzones and Allocation of Gulf Migratory Group Eastern Zone King Mackerel.

**Alternative 1:** No Action – Retain the existing Northern and Southern Subzones and retain the existing allocations for these areas.

**Alternative 2:** Eliminate the current Northern and Southern Subzones and add the assigned allocation to the combined eastern zone.

**Alternative 3:** Modify the Florida west coast subzones and reallocate quota

**Option a:** Retain the subzones but modify the boundary between the Northern and Southern Subzones to the Dixie/Levy County line and set allocation based on:

**Suboption i.** Reallocating x pounds from the Southern Subzone hook-and-line fishery to the Central Subzone.

**Suboption ii.** Reallocating 2% from the recreational sector allocation to the Central Subzone based on a temporary reallocation for the next 5 years. Monitor recreational catches annually and revert the 2% allocation back to the recreational sector if the recreational catch reaches 75%, 85%, or 90% of the recreational ACL.

**Option b:** Create a Central Subzone from the Collier/Lee County line to the Dixie/Levy County line with an allocation based on:

**Suboption i.** Reallocating x pounds from the Southern Subzone hook-and-line fishery to the Central Subzone.

**Suboption ii.** Reallocating 2% from the recreational sector allocation to the Central Subzone based on a temporary reallocation for the next 5 years. Monitor recreational catches annually and revert the 2% allocation back to the recreational sector if the recreational catch reaches 75%, 85%, or 90% of the recreational ACL.

**Option c:** Retain the subzones but increase the allocation to the Northern Subzone based on:

**Suboption i.** Reallocating x pounds from the Southern Subzone hook-and-line fishery to the Northern Subzone.

**Suboption ii.** Reallocating 2% from the recreational sector allocation to the Northern Subzone based on a temporary reallocation for the next 5 years. Monitor recreational catches annually and revert the 2% allocation back to the recreational sector if the recreational catch reaches 75%, 85%, or 90% of the recreational ACL.

**Note:** The Councils should determine a poundage level for Suboption i, and the appropriate percentage for Suboption ii.



Note: If the councils' preferred alternative is Alternative 1, this action should be moved to considered but rejected.

**Discussion:** In 2000, the Gulf of Mexico Fishery Management (Gulf Council) established two subzones off the west coast of Florida with the Northern Subzone extending from the Collier/Lee County line to the Alabama/Florida border and the Southern Subzone extending over Collier and Monroe Counties. This action was based on the king mackerel fishery in the panhandle area of Florida having significantly increased its catch in the few years prior to 1999. In establishing this Northern Subzone the Gulf and South Atlantic Councils agreed to allocate to this new subzone a small portion of the total allocation for the Eastern Zone (approximately 3.85% that amounted to approximately 168,500 lbs). Since the implementation of this action, the Northern Subzone has caught its allocation in seven of the twelve years. However, when the subzone has been closed, it has happened usually in the fall, before the fish have migrated south. The result is that fishermen along the peninsula of Florida do not have an opportunity to participate in the fishery during those years. **Alternative 1** would retain these existing boundaries and allocations.

Combining the Northern Subzone with the Southern Subzone, as with **Alternative 2**, reduces the number of quota areas for Gulf group king mackerel from three to two, thus it simplifies monitoring. It also provides for a larger potential share of TAC for fishermen over a broader area. However, it does not address the issue of the zone closing before fish have migrated south.

**Alternative 3, Option a** would move the boundary between the Northern and Southern Subzones from the Collier/Lee County line to the Dixie/Levy County line. This demarcation was considered with Amendment 9, but was not selected as the preferred alternative.

**Alternative 3, Option b** would establish a Central Subzone between the Collier/Lee County line and the Dixie/Levy County line. This alternative would ensure that this central area would have access to at least some of the migrating king mackerel stock, assuming that the current July through June commercial fishing season is maintained. With a July 1 opening date, many fish have already migrated to the northern Gulf. Additionally, when the existing Northern Subzone has closed, typically in October or November (Table 2.2.1), many of the migrating stock have not started their return to wintering grounds in southern Florida. Consequently, access to the stock along the middle coast of west Florida has at times been limited. **Alternative 3, Option c** would retain the existing boundary between the Northern and Southern Subzones but increase the allocation to the Northern Subzone. **Alternative 3, Options a, b, and c** have suboptions to reallocate a portion of the stock from either the Southern Subzone or from a small percentage of the recreational allocation. Because **Alternative 3, Option a** would only move the boundary between the Northern and Southern Subzones to the Dixie/Levy County line, thus expanding the Southern Subzone area, an additional suboption is added to maintain the existing allocations.

**Table 2.1.1.** Gulf of Mexico king mackerel landings for the Northern Subzone. Landings (pounds whole weight) and percent of total landings were calculated for two different areas by county of reported landing: Escambia to Dixie Counties and Levy to Lee Counties for the most recent fishing seasons.

Fishing year	Escambia to Dixie		Levy to Lee		Total pounds	Trip Limit Reduction Date	Fishery Closure Date
	Total	%	Total	%			
2004/2005	124,419	86.0	20,243	14.0	144,662	None	None
2005/2006	58,478	45.8	69,244	54.2	127,722	None	None
2006/2007	165,756	75.9	52,542	24.1	218,298	27-Nov-06	None
2007/2008	189,031	74.5	64,752	25.5	253,783	27-Dec-07	None
2008/2009	162,149	77.9	46,036	22.1	208,185	None	None
2009/2010	302,708	94.6	17,261	5.4	319,969	None	24-Oct-09
2010/2011	212,450	94.0	13,466	6.0	225,916	26-Oct-10	4-Apr-11

Source: Accumulated Landings System datafile (7/12/2012)

**Table 2.1.2.** Gulf of Mexico king mackerel landings for the Northern Subzone. Landings (pounds whole weight) and percent of total landings were calculated for two different areas by reported area fished: Escambia to Levy Counties (areas 70-109) and Citrus to northern Collier Counties (areas 40-69) for the most recent fishing seasons.

Fishing year	Areas 70-109* Escambia to Levy		Areas 40-60** Citrus to N. Collier		Total pounds	Trip Limit Reduction Date	Fishery Closure Date
	Total	%	Total	%			
2004/2005	118,858	86.0	19,339	14.0	138,197	None	None
2005/2006	65,830	49.0	68,412	51.0	134,242	None	None
2006/2007	204,079	89.9	22,986	10.1	227,065	27-Nov-06	None
2007/2008	231,976	75.8	73,931	24.2	305,907	27-Dec-07	None
2008/2009	195,353	82.0	42,844	18.0	238,197	None	None
2009/2010	360,005	86.0	58,428	14.0	418,433	None	24-Oct-09
2010/2011	247,988	92.8	19,311	7.2	267,299	26-Oct-10	4-Apr-11

\* Area 70 includes Levy County and area 109 includes the eastern coast of Alabama

\*\*Area 40 extends south into northern Collier County

Source: Accumulated Landings System datafile (7/12/2012)

### **Council Conclusions:**

## 2.2 Action 2 - Modify the Commercial Hook-and-Line Trip Limits for Gulf Migratory Group King Mackerel.

**Alternative 1:** No Action – Retain the existing commercial hook-and-line trip limits.

- a. Western Zone at 3,000 pounds
- b. Eastern Zone Northern Subzone at 1,250 pounds until 75% of the quota is taken, at which time the trip limit decreases to 500 pounds
- c. Eastern Zone Southern Subzone at 1,250 pounds until 75% of the quota is taken, at which time the trip limit decreases to 500 pounds

**Alternative 2:** Set the commercial hook-and-line trip limit at 1,500 pounds with no reduction.

- Option a: For the Western zone
- Option b: For the Eastern Zone Northern Subzone
- Option c: For the Eastern Zone Southern Subzone

**Alternative 3:** Set the commercial hook-and-line trip limit at 2,000 pounds with no reduction.

- Option a: For the Western zone
- Option b: For the Eastern Zone Northern Subzone
- Option c: For the Eastern Zone Southern Subzone

**Alternative 4:** Set the commercial hook-and-line trip limit at 2,500 pounds with no reduction.

- Option a: For the Western zone
- Option b: For the Eastern Zone Northern Subzone
- Option c: For the Eastern Zone Southern Subzone

**Alternative 5:** Set the commercial hook-and-line trip limit at 3,000 pounds with no reduction.

- Option a: For the Western zone
- Option b: For the Eastern Zone Northern Subzone
- Option c: For the Eastern Zone Southern Subzone

*The IPT requests the Councils consider if changes are needed for all zones/subzones.*

**Discussion:** During the 1996/1997-2000/2001 fishing years, the Western Zone opened July 1 and closed consistently in August. At the Gulf Council's request, NMFS implemented a 3,000-lb trip limit for the Western Zone in 1999 to lengthen the fishing season. This action appears to have been partly successful in that the season has stayed open until at least September and usually until October or November, with the exception of the most recent year (2012/2013) when the zone closed in August (Table 2.2.1). However, the Western Zone is still usually closed for more than half of the fishing year. Maintaining the existing trip limit at 3,000 pounds as with **Alternative 1, Option a**, will likely continue this closure pattern. Reducing the trip limit from 3,000 lbs as with **Alternatives 2, 3 and 4**, with **Option a** would likely extend the season. It may also deter some of the transient fishing that has occurred in the past when vessels from the east coast of Florida, in particular, have traveled to the Western Zone thereby increasing effort in this portion of the fishery. **Alternative 5, Option a** would be the same as **Alternative 1, Option a**.

The trip limits and trip limit reductions for the Northern and Southern Subzones of the Eastern Zone (**Alternative 1, Options b and c**) were also intended to extend the fishing season. Particularly in the Southern Subzone, fishermen at times travel long distances to reach the fishing grounds. A trip limit of 1,250 lbs may not allow enough income in a trip to cover expenses. This problem is exasperated when the trip limit is reduced to 500 lbs, leading to requests for removing the trip limit reduction as would occur with the choice of **Alternatives 2, 3, 4, or 5** with **Options b and c**. Additionally, in some years king mackerel have been caught at such a high rate that NMFS could not implement the reduction to 500 lbs before the zone needed to be closed (Table 2.2.1).

**Table 2.2.1.** Gulf Migratory Group King Mackerel Season Closure Dates. TLR=Trip limit reduction.

		00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13
<b>Western Zone</b>	Close	26-Aug	19-Nov	25-Oct	24-Sep	20-Oct	17-Nov	6-Oct	3-Nov	27-Mar	4-Sep	11-Feb	16-Sept	22-Aug
<b>West Coast FL North</b>	TLR	12-Nov	x	30-Nov	30-Oct	x	x	27-Nov	27-Dec	x	x	26-Oct	x	30-Aug
	Close	19-Nov	10-Nov	5-Dec	13-Nov	x	x	x	x	x	24-Oct	4-Apr	7-Oct	5-Oct
<b>West Coast FL South</b>	TLR	20-Feb	11-Mar	5-Mar	20-Mar	25-Feb	25-Feb	3-Mar	22-Mar	28-Feb	7-Feb	8-Mar	x	Open
	Close	2-Mar	23-Mar	x	9-Apr	x	12-Mar	10-Apr	x	x	15-Feb	23-Mar	26-Feb	Open

Note: The 10/11 fishing season was impacted by the Deepwater Horizon MC 252 oil spill.

Having a single trip limit for the entire Gulf area as with **Alternatives 2, 3, 4, or 5** would simplify enforcement. The current situation is that vessels fishing off Alabama, Mississippi, Louisiana, and Texas can land 3,000 lbs, whereas vessels fishing off Florida can only land 1,250 lbs. However, fishermen in different areas may prefer lower trip limits and longer seasons to higher trip limits and shorter seasons, so the Councils could set different trip limits for the three areas based on their choice of preferred alternatives and preferred options above.

### **Council Conclusions:**

## 2.3 Action 3 - Change the Fishing Season for Gulf Group King Mackerel for the Eastern and Western Zone.

**Alternative 1:** No Action - the fishing season remains July 1 – June 30.

**Alternative 2:** Change the fishing season for Gulf group king mackerel season to September 1 – August 31.

Option a: For the Western Zone

Option b: For the Eastern Zone

**Alternative 3:** Change the fishing season for Gulf group king mackerel season to October 1 – September 30.

Option a: For the Western Zone

Option b: For the Eastern Zone

**Alternative 4:** Change the fishing season for Gulf group king mackerel season to November 1 – October 31.

Option a: For the Western Zone

Option b: For the Eastern Zone

**Discussion:** Some fishers have indicated in the past that a later opening would allow them to harvest king mackerel from the Western Zone more efficiently because fish are present in larger numbers and closer to shore in the main fishing areas off south Louisiana in the fall as opposed to the summer. They also claim that fish can be kept in better condition due to the cooler weather. A later opening, possibly combined with a lower trip limit, might also discourage movement of fishers from the Atlantic coast of Florida to south Louisiana and into the Florida Panhandle as has been the case for several years. Such a change could extend the season.

**Alternative 1** would continue the current situation, where the Western Zone and the Northern Subzone generally close in the fall. For the Western Zone, the closures come right when the most and largest fish are in the area. However, the Western Zone quota is met each year generally within three to four months of the July 1 opening (Table 2.3.1); an opening during a time when more fish are available may result in a shorter fishing season if fishermen are not currently landing the maximum trip limit.

**Alternatives 2-4** would move the opening of the fishing year into the fall. However, if the season starts too late in the fall, fish may migrate south earlier in some years and may not be available. Also, weather conditions may make fishing more difficult and less safe if the season extends into winter months.

ACLs for both the recreational and commercial sectors are tracked by the commercial fishing season. Recreational data is available by two-month waves, starting with January. An October opening (**Alternative 3**) would complicate monitoring of the recreational ACL because the opening would fall in the middle of a wave.

**Table 2.3.1.** Gulf of Mexico king mackerel landings by region and month. Landings (pounds whole weight) were calculated for the two zones by county landed: E Gulf (Monroe\* - Escambia) and W Gulf (AL, MS, LA, TX) for the most recent fishing seasons.

Region	Fishing Year	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
E Gulf	2004-2005	27,617	8,200	4,344	26,386	46,625	43,382	155,204	295,371	92,601	8,330	12,078	5,859	725,997
	2005-2006	6,425	4,181	2,718	7,493	12,317	149,942	187,852	257,988	95,259	51,614	17,278	10,316	803,383
	2006-2007	18,755	11,473	7,748	44,859	71,236	55,780	180,168	199,732	136,223	12,093	6,743	13,761	758,571
	2007-2008	18,739	9,275	1,964	20,960	93,544	104,029	113,629	160,615	199,784	26,558	4,784	14,610	768,491
	2008-2009	16,493	2,726	14,117	48,754	77,729	141,248	263,300	253,174	27,745	17,542	26,322	24,747	913,897
	2009-2010	48,119	16,432	72,229	153,119	5,687	53,231	338,919	137,854	4,022	94,366	237	1,474	925,689
	2010-2011	16,910	17,482	44,204	121,627	23,367	17,533	180,111	295,612	144,604	2,850	119	7	864,426
W Gulf	2004-2005	501,571	244,049	79,459	175,347	0	0	30	32	0	83	0	235	1,000,806
	2005-2006	312,526	294,042	67,222	136,637	127,032	0	9	0	0	0	148	10,941	948,557
	2006-2007	358,757	346,873	249,701	61,047	0	0	0	0	0	0	0	361	1,016,739
	2007-2008	420,772	278,557	105,853	163,046	23,947	0	0	0	0	0	0	451	992,626
	2008-2009	267,623	171,136	64,587	197,220	166,728	3,671	6,507	12,196	21,692	0	202	170	911,732
	2009-2010	530,290	373,595	134,551	1,251	23	0	0	0	35	0	0	0	1,039,745
	2010-2011	58,129	101,710	42,499	222,334	329,332	71,245	119,994	24,718	0	93	0	0	970,054

\*Monroe County is only part of the Eastern Zone from November to March

Source: Accumulated Landings System datafile (7/12/2012)

**Table 2.3.2.** Gulf of Mexico king mackerel landings by region and month. Landings (pounds whole weight) were calculated for the two zones by reported area fished: E Gulf (areas 10-109\* and 7480-7489\*\*) and W Gulf (areas 110-219) for the most recent fishing seasons.

Region	Fishing Year	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
E Gulf	2004-2005	31,020	7,033	2,899	24,675	46,582	43,060	155,665	295,691	94,578	2,495	12,016	5,968	721,682
	2005-2006	8,929	9,211	2,590	6,936	11,658	150,750	187,567	255,920	93,783	50,919	17,367	11,212	806,842
	2006-2007	30,486	23,942	19,816	47,019	71,853	52,571	179,993	203,665	140,346	4,028	6,734	13,639	794,092
	2007-2008	42,750	25,148	4,720	21,588	93,690	104,464	114,036	161,206	199,267	8,050	4,738	14,484	794,141
	2008-2009	36,062	9,681	17,317	52,214	77,064	143,157	262,543	251,519	27,161	3,784	26,409	24,732	931,643
	2009-2010	79,614	38,043	75,634	154,229	5,270	52,430	352,255	139,206	2,298	47,289	237	1,474	947,979
	2010-2011	16,910	17,482	44,666	130,934	43,267	21,957	180,720	300,595	147,914	1,443	56	7	905,951
W Gulf	2004-2005	498,168	245,216	80,837	176,991	0	0	30	32	0	225	0	126	1,001,625
	2005-2006	310,022	288,998	67,350	137,194	127,569	0	9	0	0	0	44	145	931,331
	2006-2007	346,962	334,388	237,633	58,887	37	6	0	0	0	0	9	476	978,398
	2007-2008	396,750	262,641	103,089	162,418	24,046	96	0	0	5	0	46	568	949,659
	2008-2009	248,054	164,181	61,387	190,933	166,606	3,704	6,507	12,196	21,750	0	115	185	875,618
	2009-2010	498,792	351,984	131,146	29	23	0	0	0	35	0	0	0	982,009
	2010-2011	58,129	101,710	42,037	210,240	300,313	49,141	105,367	24,718	0	93	0	0	891,748

\* Area 109 includes the eastern coast of Alabama

\*\*Areas 10-39 and 7480-7489 are only part of the Eastern Zone from November to March

Source: Accumulated Landings System datafile (7/12/2012)

### **Council Conclusions:**



## 2.4 Action 4 – Establish Transit Provisions for Travel through Areas that are Closed to King Mackerel Fishing.

**Alternative 1:** No Action – do not establish a transit provision.

**Alternative 2:** Establish a provision allowing transit through the Florida west coast Northern and Southern Subzones when those zones are closed for vessels possessing Atlantic group king mackerel that were legally harvested in the EEZ off Monroe County.

**Alternative 3:** Establish a provision allowing transit through Collier County when the Florida west coast Southern Subzone is closed for vessels possessing Atlantic group king mackerel that were legally harvested in the EEZ off Monroe County.

**South Atlantic Preferred Alternative 4:** Establish a provision allowing transit through Collier County when the Florida west coast Southern Subzone is closed for vessels possessing Atlantic group king mackerel that were legally harvested in the EEZ off Monroe County only from April 1 – June 30

**IPT SUGGESTION Alternative 5:** Establish a provision allowing transit through areas closed to king mackerel fishing for vessels possessing king mackerel that were legally harvested in the EEZ off areas open to king mackerel fishing.

**IPT SUGGESTION Alternative 6:** Establish a provision allowing transit through the Florida west coast Northern Subzone when that area is closed for vessels possessing king mackerel that were legally harvested in the EEZ off Collier County.

*Note: For Alternatives 2-4, the following conditions apply:*

*Only from April 1 – June 30*

*For Alternatives 2-6, the following conditions apply:*

*Only for vessels in direct and continuous transit and with gear stowed*

*Only for fishermen holding a federal commercial king mackerel permit*

*Note: The IPT recommends removing Alternative 3 because it is very similar to Alternative 4. The IPT also recommends expanding the action to include other areas, and recommends potential new alternatives.*

**Discussion:** Current regulations prohibit fishing for or retaining king mackerel in or from a closed zone. Therefore, **Alternative 1** would not allow transit through any closed area even if the fish were harvested from an open area, because retention of king mackerel in a closed area is prohibited. Fishermen must either forgo fishing opportunities or expend extra time and fuel to land fish in the open zone.

Often the Florida west coast Southern Subzone, comprised of Collier and Monroe Counties, closes in early spring (see Table 2.2.1). Beginning April 1 of each year, Monroe County is considered to contain Atlantic migratory group king mackerel and the Southern Subzone is comprised of only Collier County. Some fishermen fish in the northern portion of Monroe



County, which is a sparsely populated area. To land those fish they must travel to the Florida Keys where dealers in Monroe County are located. This trip could be up to 100 miles.

**Alternative 2** would allow fishermen who legally harvest king mackerel from Monroe County after April 1 of each year to transport and land their catch in other areas of the Gulf that are closed to king mackerel fishing.

**Alternatives 3 and South Atlantic Preferred Alternative 4** would do the same as **Alternative 2**, but only allow landing in Collier County. The Florida Fish and Wildlife Conservation Commission recently changed their regulations to allow transit under these circumstances through Collier County. This alternative would reduce the potential for abuse and ease the enforcement burden. Because these alternatives are the same, one should be removed from the action.

**Alternative 5** would allow transit through any closed area in the Gulf or South Atlantic. Many fishermen live and work near a boundary between two zones, and may wish to fish in one zone but land in another. When the landing zone is closed, those fishermen are forced to land away from their homeport. **Alternative 5** would give them an option to transit the closed zone and land closer to home.

This situation is particularly problematic for fishermen who might fish in Collier County but homeport in Lee County. The Northern Subzone usually closes before the Southern Subzone, so transit into the Northern Subzone is not allowed. **Alternative 6** would allow transit through Lee County when the Northern Subzone is closed.

**Alternatives 2-6** would reduce the economic burden on fishermen by allowing them to return to their homeport after fishing. These alternatives would also promote safety at sea by reducing travel time.

Transit under Alternatives 2-6 would be allowed for vessels traveling through the closed area with fishing gear appropriately stowed. The term "transit" is defined as on a direct and continuous course through a closed area. The term "appropriately stowed" means:

- 1) A gillnet must be left on the drum. Any additional gillnets not attached to the drum must be stowed below deck.
- 2) A rod and reel must be removed from the rod holder and stowed securely on or below deck. Terminal gear (i.e., hook, leader, sinker, flasher, or bait) must be disconnected and stowed separately from the rod and reel. Sinkers must be disconnected from the down rigger and stowed separately.

### **Council Conclusions:**

## 2.5 Action 5 – Establish State Quotas for Atlantic Migratory Group King Mackerel and Spanish Mackerel for North Carolina.

**Alternative 1:** No Action - retain one commercial quota each for Atlantic migratory groups of king mackerel and Spanish mackerel

**Alternative 2:** Establish a separate commercial quota of Atlantic group king mackerel for North Carolina based on:

**Option a-** the average of the proportion of landings in North Carolina from 2006 through 2011.

**Option b-** the average of the proportion of landings in North Carolina from 2006 through 2011 plus the proportion of the unused quota equal to North Carolina's percentage of landings 2006-2011.

**Option c-** the average of the proportion of landings in North Carolina from 2001 through 2011.

**Option d-** the average of the proportion of landings in North Carolina from 2001 through 2011 plus the proportion of the unused quota equal to North Carolina's percentage of landings 2001-2011.

**Option e-** 50% based on the proportion of landings in North Carolina 2001-2011 and 50% based on the proportion of landings in North Carolina 2006-2011 (Boyles Law)

**Alternative 3:** Establish a separate commercial quota of Atlantic group Spanish mackerel for North Carolina based on:

**Option a-** the average of the proportion of landings in North Carolina from 2006 through 2011.

**Option b-** the average of the proportion of landings in North Carolina from 2006 through 2011 plus the proportion of the unused quota equal to North Carolina's percentage of landings 2006-2011.

**Option c-** the average of the proportion of landings in North Carolina from 2001 through 2011.

**Option d-** the average of the proportion of landings in North Carolina from 2001 through 2011 plus the proportion of the unused quota equal to North Carolina's percentage of landings 2001-2011.

**Option e-** 50% based on the proportion of landings in North Carolina 2001-2011 and 50% based on the proportion of landings in North Carolina 2006-2011 (Boyles Law).

*The IPT requests the Council reduce the number of options.*

**Discussion:** The South Atlantic Council is concerned that the commercial ACLs will be filled by fishermen in one state before fish are available to fishermen in other states (particularly North Carolina). This becomes more probable as the ACLs are lowered. Allocating by region would be similar to how commercial quotas are managed in the Mid-Atlantic and New England areas for some species. Fishermen and some state representatives have expressed a desire to move in this direction. North Carolina currently monitors quotas and reports catches to ACCSP and to NMFS, including state-by-state quotas of some Mid-Atlantic species.

### **Council Conclusions:**

## 2.6 Action 6 - Modify the Framework Procedure.

**Alternative 1:** No Action – Do not modify the framework procedure adopted through Amendment 18.

**Gulf Preferred Alternative 2:** Modify the framework procedure to include changes to ABCs, ABC/ACL control rules and, accountability measures (AMs) under the standard documentation process for open framework actions. Accountability measures that could be changed would include:

### Inseason AMs

- Closures and closure procedures
- Trip limit reductions or increases
- Designation of an IFQ program as the AM for species in the IFQ program
- Implementation of gear restrictions

### Postseason AMs

- Adjustment of season length
- Implementation of a closed season
- Adjustment or implementation of bag, trip, or possession limit
- Reduction of the ACL to account for the previous year overage
- Revoking a scheduled increase in the ACL if the ACL was exceeded in the previous year
- Implementation of gear restrictions
- Reporting and monitoring requirements

**Alternative 3:** Modify the framework procedure to include changes to accountability measures (AMs) under the standard documentation process for open framework actions. Accountability measures that could be changed would include:

### Inseason AMs

- Closure procedures
- Trip limit reductions or increases

### Postseason AMs

- Adjustment of season length
- Adjustment of bag, trip, or possession limit

**Gulf Preferred Alternative 4:** Modify the framework procedure to include designation of responsibility to each Council for setting regulations for the migratory groups of each species.

**Gulf Preferred Alternative 5.** Make editorial changes to the framework procedure to reflect changes to the Council advisory committees and panels.

**Discussion:** The Councils currently have three different regulatory vehicles for addressing fishery management issues. First, they may develop a fishery management plan or plan amendment to establish management measures. The amendment process can take one to three years depending on the analysis needed to support the amendment actions. Second, the Councils may vote to request an interim or emergency rule that could remain effective for 180 days with

the option to extend it for an additional 186 days. Interim and emergency rules are only meant as short-term management tools while permanent regulations are developed through an amendment. Third, the Councils may prepare a framework action based on a predetermined procedure that allows changes to specific management measures and parameters. Typically, framework actions take less than a year to implement, and, like plan amendments, are effective until amended. The current framework procedure was implemented through Amendment 18 (GMFMC and SAFMC 2011). The section below highlights the changes proposed in the alternatives to this action.

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### **Proposed Language for Updated Framework Procedure**

This framework procedure provides standardized procedures for implementing management changes pursuant to the provisions of the Coastal Migratory Pelagic Fishery Management Plan (FMP) managed jointly between the Gulf of Mexico and South Atlantic Fishery Management Councils (Councils). Two basic processes are included: the open framework process and the closed framework process. The open framework addresses issues where more policy discretion exists in selecting among various management options developed to address an identified management issue, such as changing a size limit to reduce harvest. The closed framework addresses much more specific factual circumstances, where the FMP and implementing regulations identify specific action to be taken in the event of specific facts occurring, such as closing a sector of a fishery when the quota is or is projected to be harvested.

#### **Open Framework:**

1. Situations under which this framework procedure may be used to implement management changes include the following:
  - a. A new stock assessment resulting in changes to the overfishing limit, acceptable biological catch, or other associated management parameters. In such instances the Councils may, as part of a proposed framework action, propose an annual catch limit (ACL) or series of ACLs and optionally an annual catch target (ACT) or series of ACTs, as well as any corresponding adjustments to MSY, OY, and related management parameters.
  - b. New information or circumstances. The Councils will, as part of a proposed framework action, identify the new information and provide rationale as to why this new information indicates that management measures should be changed.
  - c. Changes are required to comply with applicable law such as the Magnuson-Stevens Act, Endangered Species Act, Marine Mammal Protection Act, or are required as a result of a court order. In such instances the Regional Administrator (RA) will notify the Councils in writing of the issue and that action is required. If there is a legal deadline for taking action, the deadline will be included in the notification.
2. Open framework actions may be implemented in either of two ways, abbreviated documentation, or standard documentation process.
  - a. Abbreviated documentation process. Regulatory changes that may be categorized as a routine or insignificant may be proposed in the form of a letter or memo from the Councils to the RA containing the proposed action, and the relevant

biological, social and economic information to support the action. Either Council may initiate the letter or memo, but both Councils must approve it. If multiple actions are proposed, a finding that the actions are also routine or insignificant must also be included. If the RA concurs with the determination and approves the proposed action, the action will be implemented through publication of appropriate notification in the Federal Register. Changes that may be viewed as routine or insignificant include, among others:

- i. Reporting and monitoring requirements,
  - ii. Permitting requirements,
  - iii. Gear marking requirements,
  - iv. Vessel marking requirements,
  - v. Restrictions relating to maintaining fish in a specific condition (whole condition, filleting, use as bait, etc.),
  - vi. Bag and possession limit changes of not more than one fish,
  - vii. Size limit changes of not more than 10% of the prior size limit,
  - viii. Vessel trip limit changes of not more than 10% of the prior trip limit,
  - ix. Closed seasons of not more than 10% of the overall open fishing season,
  - x. Species complex composition,
  - xi. Restricted areas (seasonal or year-round) affecting no more than a total of 100 nautical square miles,
  - xii. Respecification of ACL, ACT or quotas that had been previously approved as part of a series of ACLs, ACTs or quotas,
  - xiii. Specification of MSY proxy, OY, and associated management parameters (such as overfished and overfishing definitions) where new values are calculated based on previously approved specifications,
  - xiv. Gear restrictions, except those that result significant changes in the fishery, such as complete prohibitions on gear types,
  - xv. Quota changes of not more than 10%, or retention of portion of an annual quota in anticipation of future regulatory changes during the same fishing year,
- b. Standard documentation process. Regulatory changes that do not qualify as a routine or insignificant may be proposed in the form of a framework document with supporting analyses. Non routine or significant actions that may be implemented under a framework action include:
- i. Specification of ACTs or sector ACTs,
  - ii. Specification of ABC and ABC/ACL control rules,
  - iii. Rebuilding plans and revisions to approved rebuilding plans,
  - iv. The addition of new species to existing limited access privilege programs (LAPP),
  - v. Changes specified in section 2(a) that exceed the established thresholds.
  - vi. Changes to accountability measures (AMs) including:
    1. Closures and closure procedures
    2. Trip limit reductions or increases
    3. Designation of an existing IFQ program as the AM for species in the IFQ program

4. Implementation of gear restrictions
- Postseason AMs
  5. Adjustment of season length
  6. Implementation of closed seasons/time periods
  7. Adjustment or implementation of bag, trip, or possession limit
  8. Reduction of the ACL/ACT to account for the previous year overage
  9. Revoking a scheduled increase in the ACL/ACT if the ACL was exceeded in the previous year
  10. Implementation of gear restrictions
  11. Reporting and monitoring requirements
3. Either Council may initiate the open framework process to inform the public of the issues and develop potential alternatives to address the issues. The framework process will include the development of documentation and public discussion during at least one meeting for each Council.
4. Prior to taking final action on the proposed framework action, each Council may convene their **advisory committees and panels**, as appropriate, to provide recommendations on the proposed actions.
5. For all framework actions, the initiating Council will provide the letter, memo, or the completed framework document along with proposed regulations to the RA in a timely manner following final action by both Councils.
6. For all framework action requests, the RA will review the Councils' recommendations and supporting information and notify the Councils of the determinations, in accordance with the Magnuson-Stevens Act (Section 304) and other applicable law.

#### Closed Framework:

Consistent with existing requirements in the FMP and implementing regulations, the RA is authorized to conduct the following framework actions through appropriate notification in the Federal Register:

- a. Close or adjust harvest any sector of the fishery for a species, sub-species, or species group that has a quota or sub-quota at such time as projected to be necessary to prevent the sector from exceeding its sector-quota for the remainder of the fishing year or sub-quota season,
- b. Reopen any sector of the fishery that had been prematurely closed,
- c. Implement an in-season AM for a sector that has reached or is projected to reach, or is approaching or is projected to approach its ACL, or implement a post-season AM for a sector that exceeded its ACL in the current year.

#### Responsibilities of Each Council:

1. Recommendations with respect to the Atlantic migratory groups of king mackerel, Spanish mackerel, and cobia will be the responsibility of the South Atlantic Council, and those for the Gulf migratory groups of king mackerel, Spanish mackerel, and cobia will

be the responsibility of the Gulf Council, with the following exceptions:

- a. The South Atlantic Council will have responsibility to set vessel trip limits, closed seasons or areas, or gear restrictions for (1) the Eastern Zone - East Coast Subzone for Gulf migratory group king mackerel and (2) the east coast of Florida including the Atlantic side of the Florida Keys for Gulf migratory group cobia.
2. For stocks where a stock assessment indicates a different boundary between the Gulf and Atlantic migratory groups than the management boundary, a portion of the ACL for one migratory group may be apportioned to the appropriate zone, but management measures for that zone will be the responsibility of the Council within whose management area that zone is located.
3. Both councils must concur on recommendations that affect both migratory groups.

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**Alternative 1** would retain the current CMP framework procedure without any changes. This framework procedure provides the Councils and NMFS the flexibility to respond quickly to changes in the CMP fishery. The framework has both open and closed components. The open components provide more policy discretion, whereas the closed components address more specific, factual circumstances. Measures that can be changed under the procedure are identified, as well as the appropriate process needed for each type of change.

**Gulf Preferred Alternative 2** and **Alternative 3** would allow changes to AMs under the standard documentation process of the open framework procedure (see highlighted portion of section 2b of the framework). Each alternative contains a list of the specific AMs that could be changed through the process. **Gulf Preferred Alternative 2** is a more comprehensive list that includes all AMs currently in place. **Alternative 3** would limit the types of AMs that could be changed through a framework action. Table 2.10.1 lists the types of AMs that would be included under these alternatives, and an example of a change to an AM that would be possible through the framework.

It is important to note that some items included in **Gulf Preferred Alternative 2** and **Alternative 3** are currently listed under the abbreviated process of the open framework procedure as management measures. Although similar, AMs differ from management measures in that they are tied in some way to the ACL. For example, through the abbreviated process, the Councils and NMFS may implement closed seasons of not more than 10% of the overall open fishing season. The reason for the closed season may be to protect spawning populations or to extend a fishing season later into the year. This is a management measure and would remain in effect until changed through another framework action. On the other hand, **Gulf Preferred Alternative 2** would allow the Councils and NMFS to implement a measure through the standard process whereby the Regional Administrator has the authority to set a closed season in the year following a year in which the ACL is exceeded. In this case, the reason for the closed season is to prevent another overage of the ACL. This is an AM and the closed season would only be in effect temporarily. Therefore, the current framework allows changes to management



measures, but the proposed alternatives would allow changes to AMs, including adding new AMs to the existing suite.

**Table 2.10.1.** Examples of proposed AMs that could be changed through a framework action, rather than a plan amendment.

AM type	Example
<b>In-season</b>	
Closure	Create an in-season closure when the ACL/ACT is reached or projected to be reached
Trip limit change	Implement or reduce a trip limit when landings reach 75% of the quota
LAPP	Allow an IFQ program to act as the commercial AM, and remove other AMs (as was done for grouper and tilefish)
Gear restrictions	Prohibit longlines when landings reach 75% of the quota
<b>Post-season AMs</b>	<b>In a year following a year with an overage of the ACL/ACT:</b>
Season length	Reduce the length of the season by the amount needed to prevent another overage
Closed season/time period	Prohibit fishing during a two-month closed season (as was done for greater amberjack) Prohibit fishing on weekends
Bag/trip/possession limit	Reduce the bag limit by the amount needed to prevent another overage
Reduction of ACL/ACT	Subtract the amount of the overage
Revoke an ACL/ACT increase	Freeze the ACL/ACT at the current level until overages cease
Gear restrictions	Prohibit use of longline gear shoreward of the 20 fathom contour
Reporting and monitoring	Require daily instead of weekly reporting to better track the ACL/ACT

Other items should also be added to the framework procedure to be consistent with the frameworks of other FMPs. These items include the allowable biological catch (ABC), the ABC and ACL control rules, and potentially other management parameters. Adding these items would expedite changes need after a new stock assessment.

A section outlining each Council's responsibilities was in the previous CMP framework, but was inadvertently omitted when the new framework was developed in Amendment 18 (GMFMC and SAFMC 2011). **Gulf Preferred Alternative 4** would reinstate that language in addition to expanding the responsibilities to include those for Spanish mackerel and cobia. Section 1 (highlighted in the framework above) allows each Council to set regulations for the respective migratory groups of each species. An exception is included for east coast zones of king mackerel and cobia, which are considered to contain Gulf migratory group fish, but are located within the South Atlantic Council's jurisdiction. Section 2 (highlighted in the framework above) allows similar exceptions if future stock assessments set biological boundaries different from management boundaries. Section 3 (highlighted in the framework above) ensures both Councils



are involved when actions would affect fish in both areas. The Councils could choose this alternative in addition to either **Gulf Preferred Alternative 2** or **Alternative 3**.

**Gulf Preferred Alternative 5** would fix language in the framework that refers to the Socioeconomic Panel (SEP), which no longer exists under that name due to reorganization of the Statistical and Scientific Committee (SSC). The more general proposed language would accommodate future changes (see highlighted portion of section 4 of the framework). The Councils could choose this alternative in addition to any of the other alternatives.

No direct physical, biological, or ecological effects would be expected from modifications of the framework procedure. However, if modifications increase the ease with which regulations can be implemented as needed, long-term biological benefits would increase, such as increased stock size. Framework changes may also result in a faster implementation of measures beneficial to fishery participants. Indirect positive economic effects are expected to result from these potential benefits to the stocks or to fishery participants. Further, timeliness in the regulatory process removes uncertainty with regard to changes in management while protecting the stock.

#### **Council Conclusions:**

## Action 7. Modify the Gulf and Atlantic Migratory Group Cobia Annual Catch Limits (ACLs) and Annual Catch Targets (ACTs).

*The IPT suggests adding this action back into the amendment. Results of SEDAR 28 will be available before the June meeting.*

**Alternative 1:** No Action. The entire Gulf migratory group cobia ACL applies to the Gulf Council jurisdictional area and the entire South Atlantic migratory group cobia ACL applies to the South Atlantic jurisdictional area. The ACLs and ACTs that were established by Amendment 18 are as follows:

Gulf	South Atlantic
ACL = 1,460,000 lbs	ACL = ABC = OY = 1,571,399 lb Commercial ACL (8% ACL) = 125,712 lb Recreational ACL (92% ACL) = 1,445,687 lb
Stock ACT = 1,310,000 lbs	Recreational ACT = 1,184,688 lb

**Alternative 2:** The ACL = ABC as determined by the SSC for each migratory group. The entire Gulf migratory group cobia ACL applies to the Gulf Council jurisdictional area and the entire South Atlantic migratory group cobia ACL applies to the South Atlantic jurisdictional area. The ACLs and ACTs would be as follows:

Gulf	South Atlantic
ACL = x lbs	ACL = ABC = OY = x lb Commercial ACL (8% ACL) = x lb Recreational ACL (92% ACL) = x lb
Stock ACT = 90% ACL = x lbs	Recreational ACT = ACL [(1-PSE) or 0.5, whichever is greater] = x lb

**Alternative 3:** The ACL = ABC for each migratory group. The ACL for each jurisdictional area would be determined as follows:

- The Gulf migratory group cobia ACL (based on the ABC as determined by the SSC) would be divided into a Gulf jurisdictional ACL and an east coast of Florida ACL based on the options below.
  - Option a: Use 2002-2011 landings to establish the percentage split for the Gulf ACL.
  - Option b: Use 2007-2011 landings to establish the percentage split for the Gulf ACL.
  - Option c: Use Boyles law (which years?) 50% of landings from 2002-2011 + 50% of landings from 2009-2011?
- The South Atlantic jurisdictional area ACL would be the ACL for the Atlantic migratory group cobia (based on the ABC as determined by the SSC) plus the portion of the Gulf migratory group ACL for the east coast of Florida.

The ACLs and ACTs would be as follows:

Gulf	South Atlantic
ACL = x lbs	ACL = ABC = OY = x lb Commercial ACL (8% ACL) = x lb Recreational ACL (92% ACL) = x lb
Stock ACT = 90% ACL = x lbs	Recreational ACT = ACL [(1-PSE) or 0.5, whichever is greater] = x lb

**Discussion:** Amendment 18 (GMFMC/SAFMC 2011) established ABC control rules for Gulf and Atlantic migratory groups of cobia. Section 600.310(b)(B) of the National Standard 1 guidelines state that “each SSC shall provide its Regional Fishery Management Council recommendations for ABC as well as other scientific advice, as described in Magnuson-Stevens Act section 302(g)(1)(B).” The Councils’ SSCs recommended the previous ABCs for the both migratory groups of cobia based on the Gulf Council’s control rule for stocks for which landings data exist and expert opinion indicates that landings are a small portion of the stock biomass (Tier 3a).

After reviewing the SEDAR 28 stock assessment, the Gulf and South Atlantic SSCs recommended new ABCs to their respective Councils.

In Amendment 18 (GMFMC/SAFMC 2011), the Councils established the ABCs and ACLs for the separate migratory groups of cobia using the Council boundary in Monroe County. However the determination in SEDAR 28 was that the biological boundary should be at the Florida/Georgia Line. The stock assessment results define Georgia north through the Mid-Atlantic area for the Atlantic migratory group, and the entire east coast of Florida through Texas for the Gulf migratory group (Figure x). To adjust for this difference between the Councils’ jurisdictional areas and the areas used by the stock assessment, the portion of the Gulf migratory group ACL attributable to the east coast of Florida and Atlantic side of the Florida Keys (i.e., the area within the South Atlantic Council’s jurisdiction) would need to be reassigned to the Atlantic Council. Action 5 adjusts the framework to allow the South Atlantic Council to create regulations for this area, even though the stock assessment considers those fish part of the Gulf migratory group, similar to the East Coast Subzone for king mackerel.

ACLs and ACTs for Gulf and Atlantic migratory groups of cobia were also designated in Amendment 18 (GMFMC/SAFMC 2011). These harvest limits and targets would remain in effect with **Alternative 1** for each action, and they would not be updated according to the SSC’s new ABC recommendation based on the 2012 stock assessment (SEDAR 28). The actions in Amendment 18 actually provided definitions for these levels, creating de facto control rules for their establishment. For both migratory groups, ACL was defined as equal to ABC. For the Atlantic migratory group, sector ACLs were defined as the ACL times the sector allocation, and the recreational ACT was defined as the ACL times [(1-PSE) or 0.5, whichever is greater]. For

the Gulf migratory group, the stock ACT was defined as 90% of the ACL. Thus the numerical values associated with the ACLs and ACTs are dependent on the ABC. Therefore a change in the ABC should result in a change in the ACLs and ACTs. By keeping the numerical values currently specified, the Council would be changing the intent of the ACL and ACT definitions, and removing the associations with the ABC.

#### Is the new ABC lower than the old one?

**Alternatives 2 and 3** for each action would maintain the definitions established in Amendment 18 (GMFMC/SAFMC 2011). When the SSC recommends an ABC for a species, they systematically take into account uncertainty, which establishes a buffer between the ABC and OFL. With those factors built into the primary harvest limit from which the other limits are tiered, the risk of overfishing is significantly reduced regardless of how close the ACL and OY are set to the ABC. For Gulf migratory group cobia the ABC is 7% of the OFL, but for Atlantic migratory group cobia an OFL was not established. Amendment 18 set the cobia ACLs equal to the ABCs, with no buffers, because: 1) There was no indication either stock was overfished or undergoing overfishing; 2) AMs implemented through Amendment 18 are in place to correct for any ACL overages should they occur.

#### Add results of stock assessment re overfished/overfishing

Sector AMs were implemented in Amendment 18 (GMFMC/SAFMC 2011) for Atlantic migratory group cobia. For the commercial sector, if the commercial ACL is met or projected to be met, all harvest, possession, and retention is prohibited. For the recreational sector, if the stock ACL is exceeded, the Regional Administrator will publish a notice to reduce the length of the fishing season by the amount necessary to ensure landings do not exceed the recreational ACT in the following year. In addition, if the stock is overfished and either sector ACL is exceeded, the ACL (and ACT) for that sector will be reduced in the following year by the amount of the overage. Amendment 18 established only a stock ACL and ACT for Gulf migratory group cobia, rather than sector ACLs and ACTs. Therefore, the AMs also apply to the stock rather than each sector. If the stock ACT is reached or projected to be reached, both sectors will be closed for the remainder of the fishing year.

#### **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, Spanish mackerel, and cobia. 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 Headboat Survey (HBS), and the Texas Parks and Wildlife Department (TPWD). All landings are in whole weight.

#### 3.1.1 Description of the Fishery

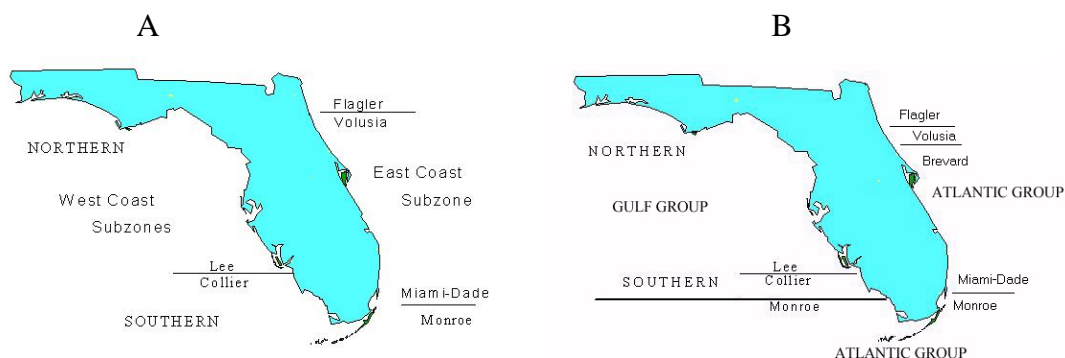
A detailed description of the coastal migratory pelagic (CMP) fishery was included in Amendment 18 to the Fishery Management Plan for Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region (GMFMC and SAFMC 2011) and is incorporated here by reference. Amendment 18 can be found at <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 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 previous three calendar years. As of July 23, 2012, there were 1,495 valid or renewable federal 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 regions at the Lee/Collier County line. The fishing year for the hook-and-line sector in both subzones 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 quota for the Gulf increased until 1997-1998 when the quota was set at 3.39 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 x 1,000)	
	Gulf	Atlantic
1997-1998	3,412	3,002
1998-1999	3,906	2,675
1999-2000	3,072	2,225
2000-2001	3,079	2,150
2001-2002	2,933	1,935
2002-2003	3,228	1,689
2003-2004	3,183	1,861
2004-2005	3,229	2,778
2005-2006	3,021	3,118
2006-2007	3,232	3,810
2007-2008	3,489	3,413
2008-2009	3,855	3,715
2009-2010	3,399	3,513

Source: SEFSC, ALS database

Note: 2009-2010 data as of June 25, 2010, and may not be fully complete.

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 x 1,000)	
	Gulf	Atlantic
2000-2001	3,617	5,474
2001-2002	4,197	4,404
2002-2003	4,554	2,761
2003-2004	3,881	4,192
2004-2005	3,213	4,613
2005-2006	3,944	3,485
2006-2007	4,459	4,054
2007-2008	3,471	6,080
2008-2009	3,146	3,487
2009-2010	2,391	3,885

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 July 23, 2012, there were 1,808 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 SEDAR 28 divide the two migratory groups at the Council boundary, 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 x 1,000)	
	Gulf	Atlantic
2000-2001	1,053	2,794
2001-2002	809	3,036
2002-2003	1,729	3,207
2003-2004	899	3,740
2004-2005	1,981	3,677
2005-2006	1,124	4,041
2006-2007	1,479	4,038
2007-2008	869	3,500
2008-2009	2,284	3,511
2009-2010	842	4,038

Source: Vondruska, 2010; ALS 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 x 1,000)	
	Gulf	Atlantic
2000-2001	2,782	2,280
2001-2002	3,553	2,034
2002-2003	3,172	1,605
2003-2004	2,738	1,846
2004-2005	2,663	1,365
2005-2006	1,589	1,649
2006-2007	2,837	1,653
2007-2008	2,717	1,711
2008-2009	2,529	2,047
2009-2010	1,890	2,108

Source: SEFSC, September 2010 ACL data sets; MRFSS, HBS, TPWD

### **Cobia**

Currently, no commercial vessel permit is required for cobia. Charter/headboats must have a charter/headboat CMP permit to land cobia. The regulations in the FMP also apply to cobia in the Mid-Atlantic region. Two migratory groups of cobia were created through Amendment 18 (GMFMC and SAFMC 2011), with the division occurring at the Council boundary in Monroe County, Florida. However, the data workshop for SEDAR 28 determined the division between migratory groups should be at the Florida/Georgia state line. The landings tables below use the SEDAR division; Action 6 in CMP 20 addresses this difference in terms of the ACL.

Commercial landings have declined since the highest landings in 1996 (Vondruska 2010), with a steeper decline between 2004 and 2005, especially in the Gulf (Table 3.1.1.5). Recreational cobia landings have fluctuated during the past 10 years (Table 3.1.1.6).

**Table 3.1.1.5.** Annual commercial landings of cobia.

Fishing Year	Landings (lbs)	
	Gulf	Atlantic
2000	212,009	43,532
2001	177,866	40,791
2002	183,531	42,236
2003	194,832	35,305
2004	179,290	32,650
2005	136,851	28,675
2006	151,045	33,785
2007	147,188	31,576
2008	139,414	33,783
2009	137,304	42,278
2010	194,933	56,544

Source: SEDAR 28; ALS data

**Table 3.1.1.6.** Annual recreational landings of cobia.

Fishing Year	Landings (lbs)	
	Gulf	Atlantic
2000	1,508,490	464,236
2001	1,555,655	483,926
2002	1,227,709	381,849
2003	2,060,423	615,522
2004	2,090,424	1,028,231
2005	1,461,040	815,600
2006	1,572,637	1,231,415
2007	1,685,402	776,180
2008	1,312,126	546,297
2009	996,103	711,821
2010	1,317,728	876,505

Source: SEDAR 28; MRFSS, HBS, and TPWD databases

### 3.1.2 Status of Stocks

Spanish mackerel and cobia benchmark assessments are ongoing (SEDAR 28) and are scheduled to be completed by the end of 2012. A king mackerel benchmark assessment is scheduled for 2013 (SEDAR 39).

#### **King Mackerel**

Both the Gulf and Atlantic migratory groups of king mackerel were assessed by SEDAR in 2008 (SEDAR 16). 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  $F_{\text{current}}/F_{\text{MSY}}$  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**

The latest assessment for Gulf migratory group Spanish mackerel was conducted in 2003, and for Atlantic migratory group Spanish mackerel in 2008 (SEDAR 17). In the Atlantic, estimates of stock biomass have more than doubled since 1995. In the Gulf of Mexico, biomass has also continued to increase. MSAP (2003) determined that Gulf migratory group Spanish mackerel were not overfished or undergoing overfishing with only a 9% chance that overfishing was occurring and only a 3% chance that the stock was overfished. SEDAR 17 determined Atlantic migratory group Spanish mackerel was not undergoing overfishing, but the overfished status could not be determined.

#### **Cobia**

Cobia in the Atlantic have never been assessed; the status of Gulf cobia was assessed in 2001 (Williams 2001). The Gulf assessment was inconclusive in determining the status of the Gulf cobia stock; however Williams (2001) stated that “fishing mortality in the last few years has decreased slightly with all the point estimates of  $F_{2000}/F_{\text{MSY}}$  falling below 1.0.” Although the mackerel stock assessment panel (MSAP 2001) concluded that the Gulf cobia stock was undergoing overfishing, this conclusion was based on the assumption of a natural mortality value of 0.3 and a percentage probability of  $F_{2000} > F_{\text{MSY}}$  of no more than 30%. The natural mortality rate for cobia is unknown, and the choice of natural mortality rate greatly affected the outcome of the assessment (Williams 2001 assessed values of 0.2, 0.3, and 0.4). Also the Gulf Council’s approved definition of overfishing is a probability that  $F_{\text{current}}/F_{\text{MSY}}$  is greater than 50%. Consequently, the most likely conclusion is that the stock is not undergoing overfishing.

The 2001 Gulf cobia assessment was able to conclude with some certainty that the cobia population had increased in abundance since the 1980s (Williams 2001). Furthermore, the MSAP (2001) noted that there was only a 30% probability that  $B_{2000} < B_{\text{MSY}}$ . Consequently, the most likely conclusion is that the stock is not overfished.

## 3.2 Description of the Physical Environment

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

### 3.2.1 Gulf of Mexico

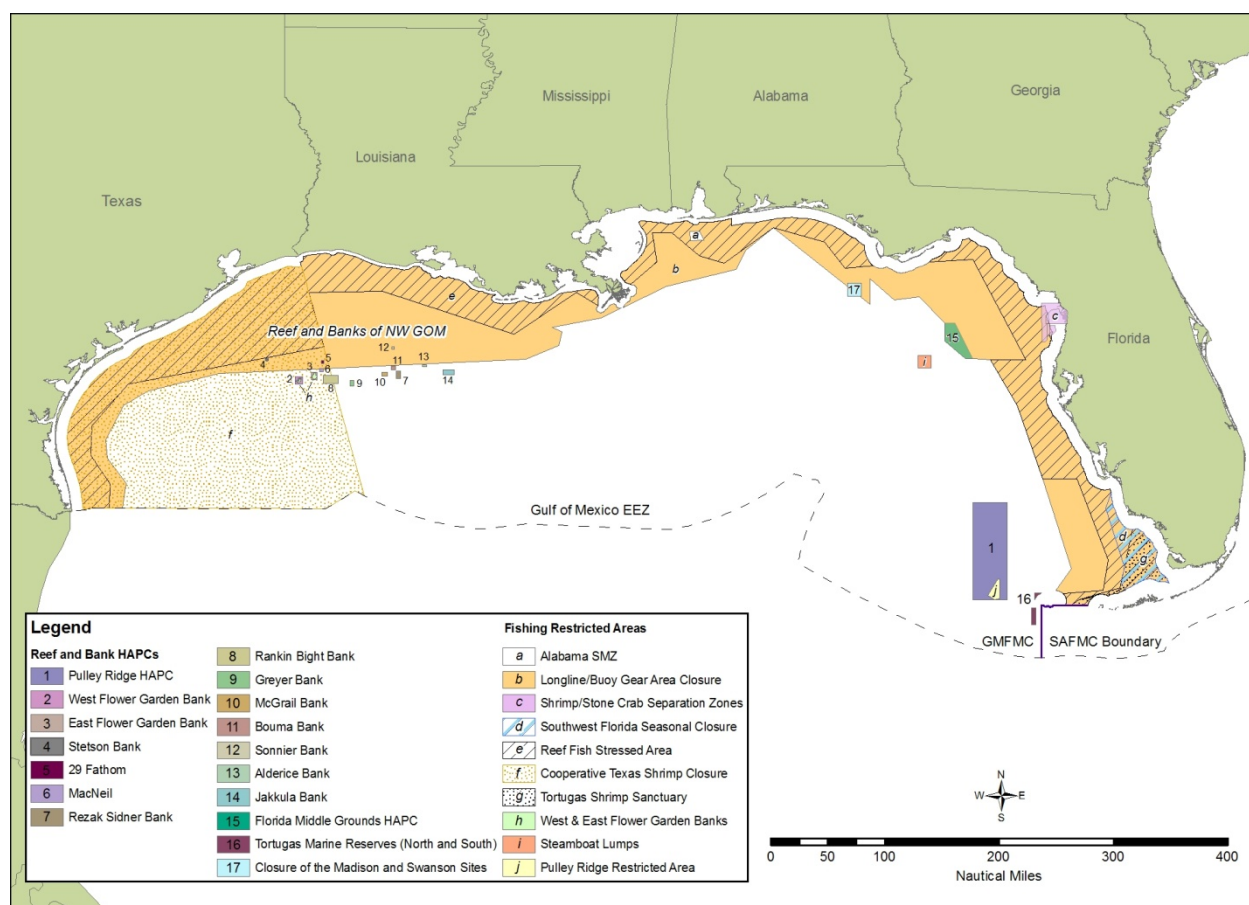
The Gulf of Mexico (Gulf) has a total area of approximately 600,000 square miles (1.5 million km<sup>2</sup>), including state waters (Gore 1992). It is a semi-enclosed, oceanic basin connected to the Atlantic Ocean by the Straits of Florida and to the Caribbean Sea by the Yucatan Channel. Oceanic conditions 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 12° C to 29° C (54° F to 84° 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 the 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, Stone Crab, 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 Southeast Data, Assessment, and Review (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 of Mexico 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 of Mexico 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 of Mexico 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.

### **Cobia**

The cobia is a member of the family Rachycentridae but is managed in the Fishery Management Plan for CMP Resources in the Gulf of Mexico and Atlantic because of its migratory behavior. The cobia is distributed worldwide in tropical, subtropical and warm-temperate waters. In the western Atlantic Ocean it occurs from Nova Scotia, Canada, south to Argentina, including the Caribbean Sea. It is abundant in warm waters off the coast of the U.S. from the Chesapeake Bay south and throughout the Gulf of Mexico. Cobia prefer water temperatures between 68°-86°F. Seeking shelter in harbors and around wrecks and reefs, the cobia is often found off south Florida and the Florida Keys. As a pelagic fish, cobia are found over the continental shelf as well as around offshore reefs. It prefers to reside near any structure that interrupts the open water such as pilings, buoys, platforms, anchored boats, and flotsam. The cobia is also found inshore inhabiting bays, inlets, and mangroves.



### 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 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 years. 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 the king mackerel have been found in waters with temperatures between 26-31° C (79-88° F). This developmental and 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 to about 84 meters, but are most common in < 50 meters.

#### **Cobia**

Cobia form large aggregations, spawning during daylight hours between June and August in the Atlantic Ocean near the Chesapeake Bay, off North Carolina in May and June, and in the Gulf of Mexico during April through September. Spawning frequency is once every 9-12 days, spawning 15-20 times during the season. During spawning, cobia undergo changes in body coloration from brown to a light horizontal-striped pattern, releasing eggs and sperm into offshore open water. Cobia have also been observed to spawn in estuaries and shallow bays with the young heading offshore soon after hatching. Cobia eggs are spherical, averaging 1.24mm in diameter. Larvae are released approximately 24-36 hours after fertilization.

### 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 Fishery Management Plan for CMP Resources in the Atlantic and Gulf of Mexico recognizes two migratory groups (Gulf and Atlantic). Typically, adult king mackerel are found in the southern climates (south Florida and extreme south Texas/Mexico) in the 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 longevity 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  $>25^{\circ}\text{C}$  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).

### **Cobia**

Newly hatched larvae are 2.5 mm long and lack pigmentation. Five days after hatching, the mouth and eyes develop, allowing for active feeding. A pale yellow streak is visible, extending the length of the body. By day 30, the juvenile takes on the appearance of the adult cobia with two color bands running from the head to the posterior end of the juvenile.

Weighing up to a record 61 kg (135 lbs), cobia are more common at weights of up to 23 kg (50 lbs). They reach lengths of 50-120 cm (20-47 in), with a maximum of 200 cm (79 in). Cobia grow quickly and have a moderately long life span. Maximum ages observed for cobia in the Gulf of Mexico were 9 and 11 years for males and females respectively while off the North Carolina coast maximum ages were 14 and 13 years. Females reach sexual maturity at 3 years of age and males at 2 years in the Chesapeake Bay region. During autumn and winter months, cobia migrate south and offshore to warmer waters. In early spring, migration occurs northward along the Atlantic coast.

## **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<sup>1</sup> 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.

Column 1 - Species	Vessels	Ex-vessel Value <sup>2</sup> Species from Column 1 (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
Cobia (whole Southeast)	689	\$0.27	\$56.20	\$81,700

<sup>1</sup>Fishing-year (2004/2005, 2005/2006,..., 2008/2009) for king and Spanish mackerel and calendar year (2005-2009) for cobia.

<sup>2</sup>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.

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.

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

Species	Average Ex-vessel Value <sup>1</sup> (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 <sup>2</sup>	\$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
Cobia (All Southeast)	\$0.27	50	6	\$3.53	\$1.50
- All Species	\$56.20	10,560	1,355	\$741.68	\$314.28

<sup>1</sup>2008 dollars.<sup>2</sup>Includes ex-vessel revenues and economic activity associated with the average annual harvests of all species harvested by vessels that harvested the subject CMP species.

### Permits

The numbers of commercial permits associated with the CMP fishery on 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 <sup>1</sup>	Valid or Renewable
King Mackerel	1,452	1,530
King Mackerel Gillnet	21	23
Spanish Mackerel	1,704	Not applicable

<sup>1</sup>Non-expired. Expired permits may be renewed within one year of expiration.

## 3.4.2 Economic Description of the Recreational Fishery

The recreational fishery is comprised of the private sector and for-hire sector. The private sector includes anglers fishing from shore (all land-based structures) and private/rental boats. The for-hire sector is composed of the charterboat and headboat (also called partyboat) sectors. Charterboats 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 1.7.

## **Effort**

Recreational effort derived from the MRFSS database 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 intercepted 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, 2005-2009, for the CMP species addressed in this amendment are provided in Table 3.4.2.1. 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 or catch success. The estimates were evaluated by calendar year and not fishing year. As a result, while the results may not be fully reflective of effort associated with specific stocks (e.g., Gulf migratory group versus Atlantic migratory group for king or Spanish mackerel), the results are consistent with fishing activity based on area fished.

Among the three species examined, Spanish mackerel is subject to more target and catch effort than the other two species 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 king mackerel than catch the species.

The effort situation is somewhat different for the South Atlantic states (Table 3.4.2.2). While Spanish mackerel still records the highest average number of catch trips per year, the difference over king mackerel is not as pronounced as in the Gulf. Further, more trips target king mackerel than Spanish mackerel (and cobia). Further, both species, as well as cobia, are subject to more target effort than catch effort. West Florida dominates for all three 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 and cobia (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, across all modes, 2005-2009.

	Target Trips					
Species	Alabama	W Florida	Louisiana	Mississippi	Total	All Trips
King Mackerel	50	425	2	3	480	23,288
Spanish Mackerel	48	753	0	0	801	
Cobia	9	177	13	10	210	
	Catch Trips					
King Mackerel	49	270	7	3	329	23,288
Spanish Mackerel	63	1,011	30	11	1,115	
Cobia	7	72	19	3	101	

Source: MRFSS, NOAA Fisheries, NMFS, SERO.

**Table 3.4.2.2.** Average annual (calendar year) recreational effort (thousand trips) in the South Atlantic, across all modes, 2005-2009.

	Target Trips					
	E Florida	Georgia	North Carolina	South Carolina	Total	All Trips
King Mackerel	423	11	214	100	748	22,419
Spanish Mackerel	189	6	254	63	512	
Cobia	96	3	53	18	171	
	Catch Trips					
King Mackerel	333	7	99	24	462	22,419
Spanish Mackerel	255	9	192	50	507	
Cobia	30	2	15	5	53	

Source: MRFSS, NOAA Fisheries, NMFS, SERO.

**Table 3.4.2.3.** Average annual (calendar year) recreational effort (thousand trips) in the Gulf of Mexico, across all states, 2005-2009.

	Target Trips				
	Shore	Charter	Private	Total	All Trips
King Mackerel	191	31	257	480	23,288
Spanish Mackerel	500	12	288	801	
Cobia	88	9	112	210	
	Catch Trips				
King Mackerel	56	106	167	329	23,288
Spanish Mackerel	489	44	581	1,115	
Cobia	10	14	76	101	

Source: MRFSS, NOAA Fisheries, NMFS, SERO.

**Table 3.4.2.4.** Average annual (calendar year) recreational effort (thousand trips) in the South Atlantic, across all states, 2005-2009.

	Target Trips				
	Shore	Charter	Private	Total	All Trips
King Mackerel	109	34	605	748	22,419
Spanish Mackerel	229	6	277	512	
Cobia	32	3	136	171	
	Catch Trips				
King Mackerel	12	73	376	462	22,419
Spanish Mackerel	178	18	311	507	
Cobia	6	5	42	53	

Source: MRFSS, NOAA Fisheries, NMFS, SERO.

Tables 3.4.2.5-12 contain estimates of the average annual (2005-2009) 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, 2005-2009.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	7	2	3	10	40	37	50	49
Spanish Mackerel	21	17	1	5	26	41	48	63
Cobia	0	0	1	0	9	7	9	7

Source: MRFSS, NOAA Fisheries, NMFS, SERO.

**Table 3.4.2.6.** Average annual (calendar year) recreational effort (thousand trips), West Florida, 2005-2009.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	184	55	28	92	213	124	425	270
Spanish Mackerel	479	465	11	32	262	513	753	1,011
Cobia	88	10	4	7	86	56	177	72

Source: MRFSS, NOAA Fisheries, NMFS, SERO.

**Table 3.4.2.7.** Average annual (calendar year) recreational effort (thousand trips), Louisiana, 2005-2009.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	0	0	0	3	1	4	2	7
Spanish Mackerel	0	7	0	2	0	22	0	30
Cobia	0	0	5	7	8	11	13	19

Source: MRFSS, NOAA Fisheries, NMFS, SERO.

**Table 3.4.2.8.** Average annual (calendar year) recreational effort (thousand trips), Mississippi, 2005-2009.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	0	0	0	1	3	2	3	3
Spanish Mackerel	0	0	0	5	0	6	0	11
Cobia	0	0	0	0	10	2	10	3

Source: MRFSS, NOAA Fisheries, NMFS, SERO.

**Table 3.4.2.9.** Average annual (calendar year) recreational effort (thousand trips), East Florida, 2005-2009.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	21	11	26	52	377	270	423	333
Spanish Mackerel	124	118	1	2	64	134	189	255
Cobia	9	2	2	4	86	25	96	30

Source: MRFSS, NOAA Fisheries, NMFS, SERO.

**Table 3.4.2.10.** Average annual (calendar year) recreational effort (thousand trips), Georgia, 2005-2009.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	0	0	0	1	11	6	11	7
Spanish Mackerel	2	2	0	1	4	6	6	9
Cobia	0	0	0	0	3	2	3	2

Source: MRFSS, NOAA Fisheries, NMFS, SERO.

**Table 3.4.2.11.** Average annual (calendar year) recreational effort (thousand trips), North Carolina, 2005-2009.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	45	1	3	16	165	82	214	99
Spanish Mackerel	64	34	2	10	187	148	254	192
Cobia	23	4	1	1	30	10	53	15

Source: MRFSS, NOAA Fisheries, NMFS, SERO.

**Table 3.4.2.12.** Average annual (calendar year) recreational effort (thousand trips), South Carolina, 2005-2009.

	Shore		Charter		Private		Total	
	Target	Catch	Target	Catch	Target	Catch	Target	Catch
King Mackerel	43	1	5	5	53	18	100	24
Spanish Mackerel	39	23	2	5	21	22	63	50
Cobia	1	0	0	0	17	5	18	5

Source: MRFSS, NOAA Fisheries, NMFS, 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.

The average annual (2005-2009) 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, while the total (across all states) average number of headboat angler days has been more stable from 2005-2009 in the Gulf, more headboat effort normally occurs in the South Atlantic.

**Table 3.4.2.13.** Southeast headboat angler days, 2005-2009.

	Gulf of Mexico			
	Louisiana	Texas	W Florida/ Alabama	Total
2005	0	59,857	130,233	190,090
2006	5,005	70,789	124,049	199,843
2007	2,522	63,764	136,880	203,166
2008	2,945	41,188	130,176	174,309
2009	3,268	50,737	142,438	196,443
Average	2,748	57,267	132,755	192,770
	South Atlantic			
	E Florida/ Georgia	North Carolina	South Carolina	Total
2005	171,078	31,573	34,036	236,687
2006	175,522	25,736	56,074	257,332
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
Average	152,858	24,552	47,809	225,219

Source: The Headboat Survey, NOAA Fisheries, SEFSC, Beaufort Lab.

### Permits

The numbers of pelagic for-hire (charter or headboat) permits on January 21, 2011, are provided in Table 3.4.2.14. There are no specific 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 or headboat) permits.

	Valid <sup>1</sup>	Valid or Renewable
Gulf of Mexico	1,260	1,377
Gulf Historical Captain	36	44
South Atlantic	1,467	Not applicable

<sup>1</sup>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 or cobia.

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., 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 charterboats. 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.

Estimates of the economic activity (impacts) associated with the recreational fishery for king mackerel, Spanish mackerel, and cobia 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 (2005-2009) 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 (2005-2009) 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 (27,535 trips) was only approximately 13% of the number of private trips (213,641), whereas the estimated output (sales) impacts by the charter anglers

(approximately \$8.6 million) was approximately 89% of the output impacts of the private trips (approximately \$9.7 million).

**Table 3.4.2.15.** Summary of king mackerel target trips (2005-2009 average) and associated economic activity (2008 dollars), Gulf states. Output and value added impacts are not additive.

	Alabama	W Florida	Louisiana	Mississippi	Texas
	Shore Mode				
Target Trips	6,972	184,444	0	0	Unknown
Output Impact	\$510,060	\$12,499,596	\$0	\$0	
Value Added Impact	\$274,383	\$7,261,856	\$0	\$0	
Jobs	6	133	0	0	
	Private Mode				
Target Trips	39,581	213,461	1,312	2,608	Unknown
Output Impact	\$2,302,878	\$9,691,420	\$106,992	\$74,376	
Value Added Impact	\$1,260,774	\$5,762,882	\$52,622	\$35,646	
Jobs	24	97	1	1	
	Charter Mode				
Target Trips	3,336	27,535	457	122	Unknown
Output Impact	\$1,736,893	\$8,646,173	\$217,556	\$37,906	
Value Added Impact	\$956,101	\$5,126,290	\$123,528	\$21,360	
Jobs	23	89	2	0	
	All Modes				
Target Trips	49,889	425,440	1,769	2,730	Unknown
Output Impact	\$4,549,831	\$30,837,189	\$324,547	\$112,282	
Value Added Impact	\$2,491,258	\$18,151,028	\$176,150	\$57,006	
Jobs	54	318	3	1	

Source: effort data from the MRFSS, 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 (2005-2009 average) and associated economic activity (2008 dollars), South Atlantic states. Output and value added impacts are not additive.

	North Carolina	South Carolina	Georgia	E Florida
	Shore Mode			
Target Trips	45,057	43,054	0	20,543
Output Impact	\$11,285,263	\$4,384,103	\$0	\$586,864
Value Added Impact	\$6,284,247	\$2,441,172	\$0	\$340,707
Jobs	136	54	0	6
	Private Mode			
Target Trips	165,432	52,675	10,542	376,517
Output Impact	\$9,029,852	\$2,317,598	\$164,705	\$14,238,046
Value Added Impact	\$5,091,654	\$1,352,287	\$99,907	\$8,507,989
Jobs	97	26	1	150
	Charter Mode			
Target Trips	3,297	4,597	262	25,958
Output Impact	\$1,283,468	\$1,550,235	\$16,470	\$10,172,982
Value Added Impact	\$720,285	\$875,819	\$9,613	\$5,989,121
Jobs	16	20	0	105
	All Modes			
Target Trips	213,786	100,326	10,804	423,018
Output Impact	\$21,598,582	\$8,251,936	\$181,176	\$24,997,893
Value Added Impact	\$12,096,185	\$4,669,279	\$109,520	\$14,837,816
Jobs	250	100	2	261

Source: effort data from the MRFSS, 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 (2005-2009 average) and associated economic activity (2008 dollars), Gulf states. Output and value added impacts are not additive.

	Alabama	W Florida	Louisiana	Mississippi	Texas
	Shore Mode				
Target Trips	20,894	478,844	0	0	Unknown
Output Impact	\$1,528,570	\$32,450,807	\$0	\$0	
Value Added Impact	\$822,282	\$18,852,855	\$0	\$0	
Jobs	19	344	0	0	
	Private Mode				
Target Trips	25,808	262,403	0	115	Unknown
Output Impact	\$1,501,546	\$11,913,453	\$0	\$3,280	
Value Added Impact	\$822,062	\$7,084,186	\$0	\$1,572	
Jobs	16	119	0	0	
	Charter Mode				
Target Trips	1,166	11,324	0	0	Unknown
Output Impact	\$607,079	\$3,555,811	\$0	\$0	
Value Added Impact	\$334,177	\$2,108,230	\$0	\$0	
Jobs	8	37	0	0	
	All Modes				
Target Trips	47,868	752,571	0	115	Unknown
Output Impact	\$3,637,196	\$47,920,072	\$0	\$3,280	
Value Added Impact	\$1,978,521	\$28,045,271	\$0	\$1,572	
Jobs	43	500	0	0	

Source: effort data from the MRFSS, 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 (2005-2009 average) and associated economic activity (2008 dollars), South Atlantic states. Output and value added impacts are not additive.

	North Carolina	South Carolina	Georgia	E Florida
	Shore Mode			
Target Trips	64,374	39,137	1,739	124,223
Output Impact	\$16,123,521	\$3,985,242	\$28,012	\$3,548,752
Value Added Impact	\$8,978,452	\$2,219,077	\$16,796	\$2,060,245
Jobs	195	49	0	38
	Private Mode			
Target Trips	187,064	21,322	3,705	64,414
Output Impact	\$10,210,602	\$938,127	\$57,886	\$2,435,825
Value Added Impact	\$5,757,442	\$547,384	\$35,113	\$1,455,535
Jobs	110	11	1	26
	Charter Mode			
Target Trips	2,445	2,478	237	527
Output Impact	\$951,798	\$835,650	\$14,899	\$206,532
Value Added Impact	\$534,151	\$472,108	\$8,695	\$121,591
Jobs	12	11	0	2
	All Modes			
Target Trips	253,883	62,937	5,681	189,164
Output Impact	\$27,285,921	\$5,759,019	\$100,796	\$6,191,109
Value Added Impact	\$15,270,045	\$3,238,570	\$60,605	\$3,637,372
Jobs	316	70	1	65

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

**Table 3.4.2.19.** Summary of cobia target trips (2005-2009 average) and associated economic activity (2008 dollars), Gulf states. Output and value added impacts are not additive.

	Alabama	W Florida	Louisiana	Mississippi	Texas
	Shore Mode				
Target Trips	0	87,863	0	0	Unknown
Output Impact	\$0	\$5,954,393	\$0	\$0	
Value Added Impact	\$0	\$3,459,307	\$0	\$0	
Jobs	0	63	0	0	
	Private Mode				
Target Trips	8,689	85,502	8,017	10,150	Unknown
Output Impact	\$505,538	\$3,881,907	\$653,775	\$289,461	
Value Added Impact	\$276,771	\$2,308,328	\$321,549	\$138,730	
Jobs	5	39	6	3	
	Charter Mode				
Target Trips	799	3,909	4,587	0	Unknown
Output Impact	\$416,000	\$1,227,452	\$2,183,650	\$0	
Value Added Impact	\$228,994	\$727,753	\$1,239,872	\$0	
Jobs	6	13	23	0	
	All Modes				
Target Trips	9,488	177,274	12,604	10,150	Unknown
Output Impact	\$921,539	\$11,063,752	\$2,837,425	\$289,461	
Value Added Impact	\$505,765	\$6,495,387	\$1,561,422	\$138,730	
Jobs	11	115	29	3	

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



**Table 3.4.2.20.** Summary of cobia target trips (2005-2009 average) and associated economic activity (2008 dollars), South Atlantic states. Output and value added impacts are not additive.

	North Carolina	South Carolina	Georgia	E Florida
Shore Mode				
Target Trips	22,566	731	0	8,524
Output Impact	\$5,652,024	\$74,436	\$0	\$243,510
Value Added Impact	\$3,147,354	\$41,448	\$0	\$141,371
Jobs	68	1	0	3
Private Mode				
Target Trips	29,623	17,238	2,961	85,694
Output Impact	\$1,616,926	\$758,439	\$46,262	\$3,240,531
Value Added Impact	\$911,735	\$442,539	\$28,062	\$1,936,390
Jobs	17	9	0	34
Charter Mode				
Target Trips	856	488	34	1,813
Output Impact	\$333,227	\$164,567	\$2,137	\$710,518
Value Added Impact	\$187,007	\$92,974	\$1,247	\$418,302
Jobs	4	2	0	7
All Modes				
Target Trips	53,045	18,457	2,995	96,031
Output Impact	\$7,602,176	\$997,442	\$48,399	\$4,194,559
Value Added Impact	\$4,246,096	\$576,960	\$29,309	\$2,496,062
Jobs	90	12	0	44

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

As previously noted, the values provided in Tables 3.4.2.15-20 only reflect effort derived from the MRFSS. Because the headboat sector in the Southeast Region is not covered by the MRFSS, the results in Tables 3.4.2.15-20 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, 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 South Atlantic has been updated using 2010 ALS data, the most recent year available. Because of the Deepwater Horizon MC252 oil spill, 2010 data may not provide representative results of communities substantially involved in fishing for coastal migratory pelagic species. This section will be updated once 2011 data becomes available.

### **3.5.2 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 Secondly Involved;

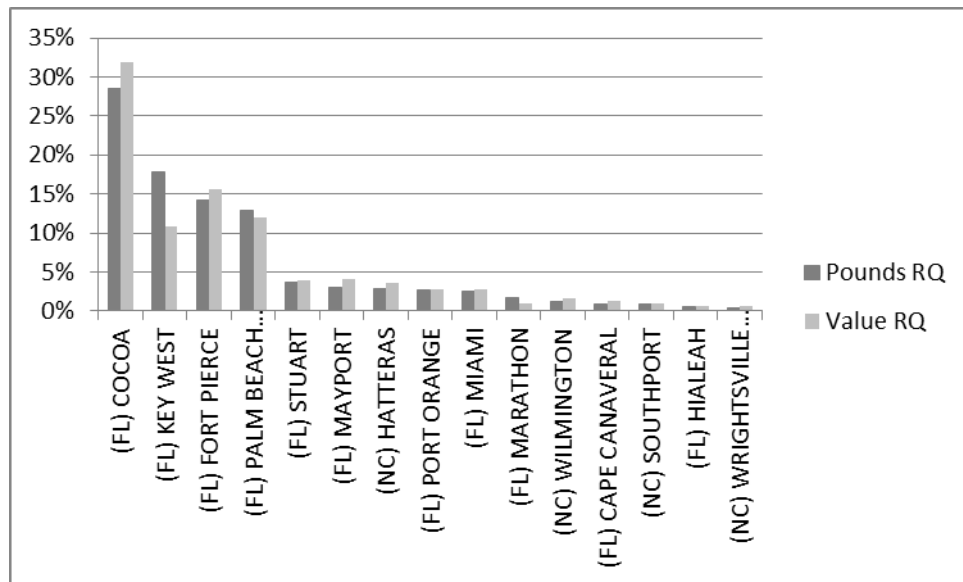
and the third classified as being Tangentially Involved. The communities included within the maps below were only those communities that were categorized as primarily or secondarily involved. This breakdown of fisheries involvement is similar to the how communities were categorized in the community profiling 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.

### **3.5.3 Coastal Pelagic Fishing Communities**

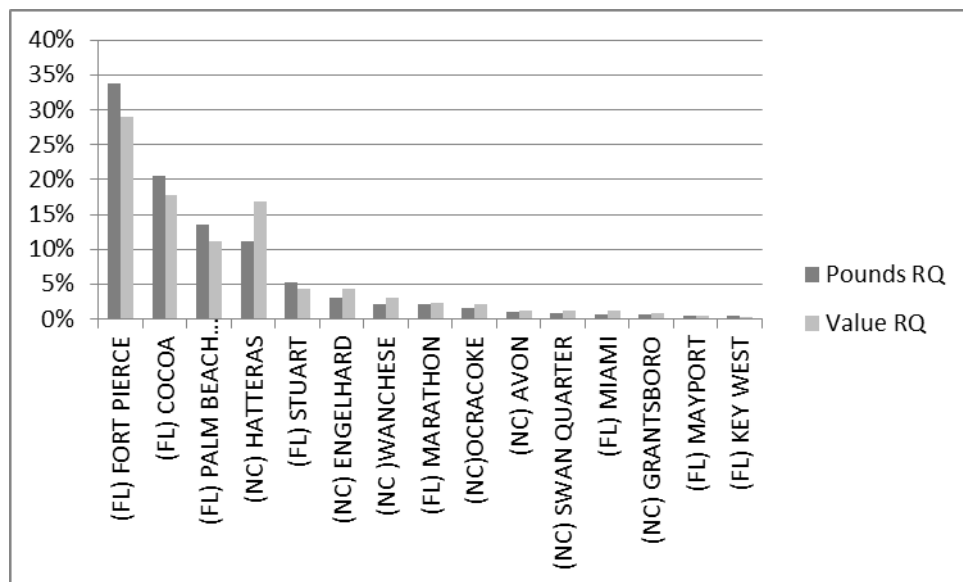
The figures below present the top fifteen communities based upon a regional quotient of commercial landings and value for coastal migratory pelagic species (Figures 3.5.3.1 – 3.5.3.3). The regional quotient is the proportion of landings and value out of the total landings and value of that species for that region. The Keys communities are included in both South Atlantic and Gulf communities to allow comparison within each region. In Figure 3.5.3.1, 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.

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.



**Figure 3.5.3.1.** Top Fifteen South Atlantic Communities Ranked by Pounds and Value Regional Quotient of King Mackerel. Source: ALS 2010

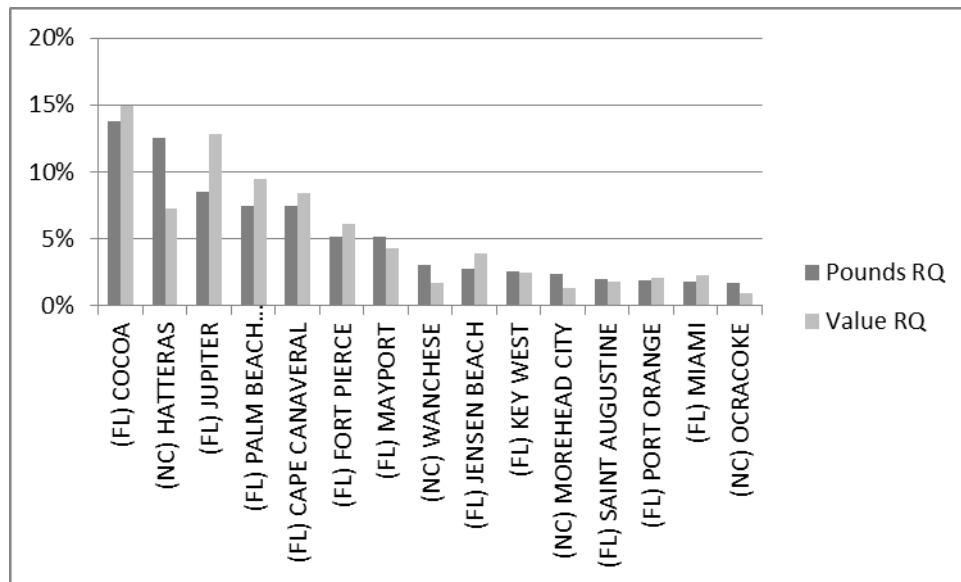
For Spanish mackerel in the Atlantic (Figure 3.5.3.2), Fort Pierce has almost 35% of the landings and just almost 30% of the value. Cocoa is second with just over 20% of landings and about 17% of value. Although Hatteras, North Carolina ranked third for value, the community had lower landings than Palm Beach Gardens, Florida. No South Carolina or Georgia communities are included in the top fifteen for Spanish mackerel.



**Figure 3.5.3.2.** Top Fifteen South Atlantic Communities Ranked by Pounds and Value of Regional Quotient of Spanish Mackerel. Source: ALS 2010

Cocoa, Florida was also tops in pounds and value for cobia landed in the South Atlantic with 15% of the value and almost 15% of the landings (Figure 3.5.3.3). Although Hatteras, North

Carolina has higher landings than Jupiter, Florida, Hatteras value is significantly lower than Jupiter. Three additional North Carolina communities are included in the top fifteen, and no South Carolina or Georgia communities are included.



**Figure 3.5.3.3.** Top Fifteen South Atlantic Communities Ranked by Pounds and Value Regional Quotient (rq) of Cobia. Source ALS 2010.

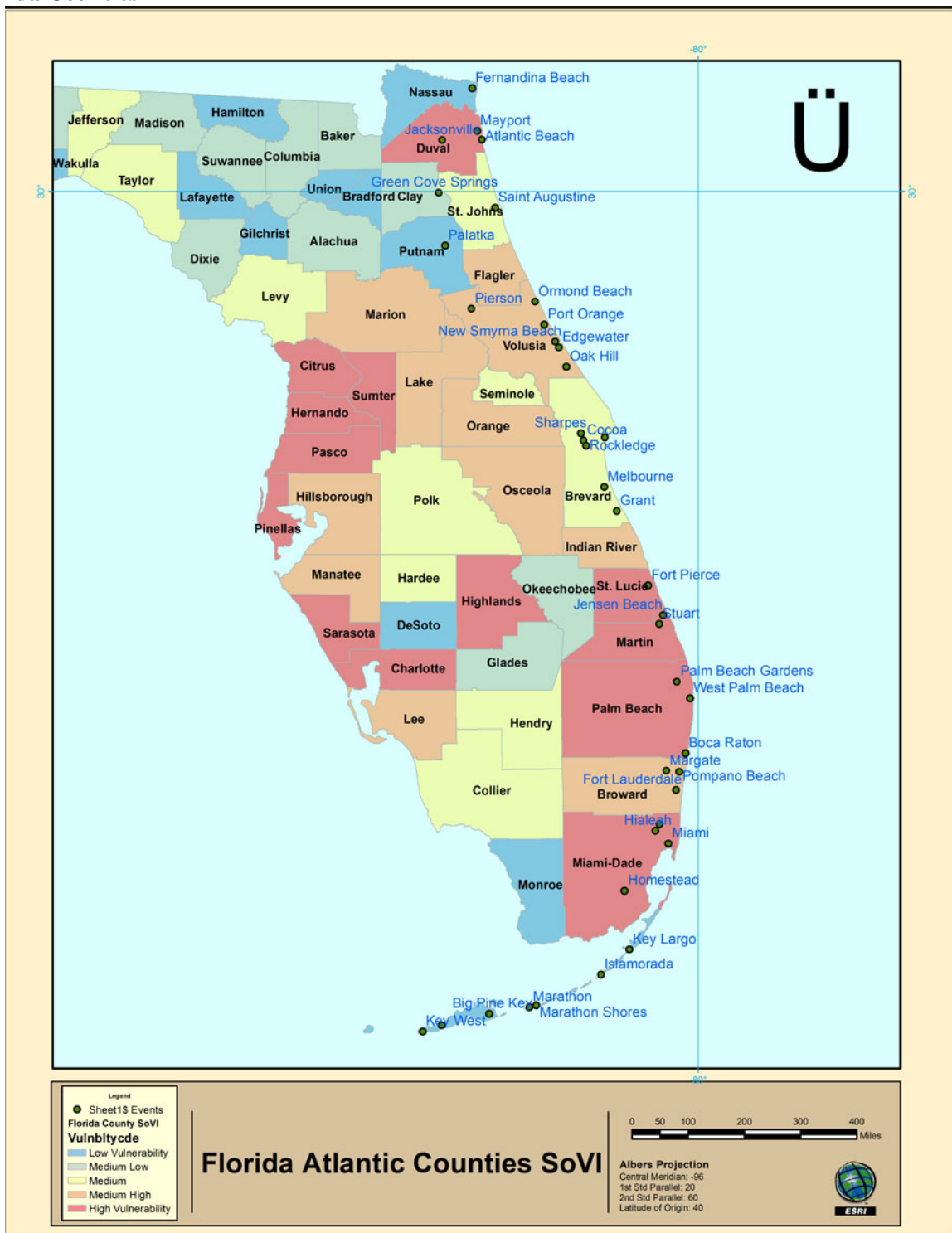
### Recreational Fishing Communities

Recreational fishing communities in the South Atlantic are listed in Table 3.5.3.1. 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 3.5.3.1.** South Atlantic Recreational Fishing Communities.

<b>Community</b>	<b>State</b>	<b>Community</b>	<b>State</b>
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



**Figure 3.5.3.4.** The Social Vulnerability Index applied to South Atlantic Florida Counties.

A good portion of Florida's east coast (Figure 3.5.3.4) 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.

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 3.5.3.2). 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.

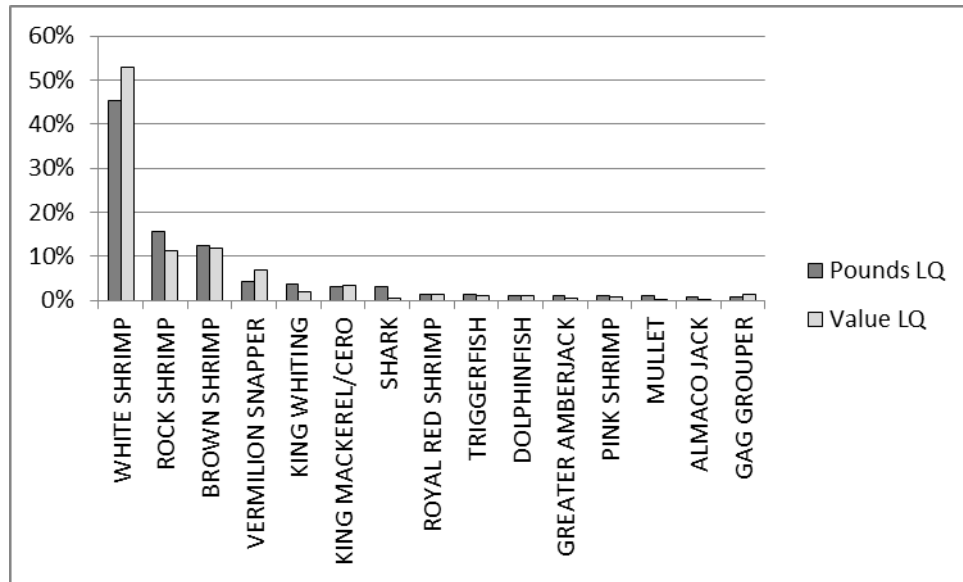
**Table 3.5.3.2.** Number of CMP permits in Florida counties (2012).

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

\*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 3.5.3.5 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.

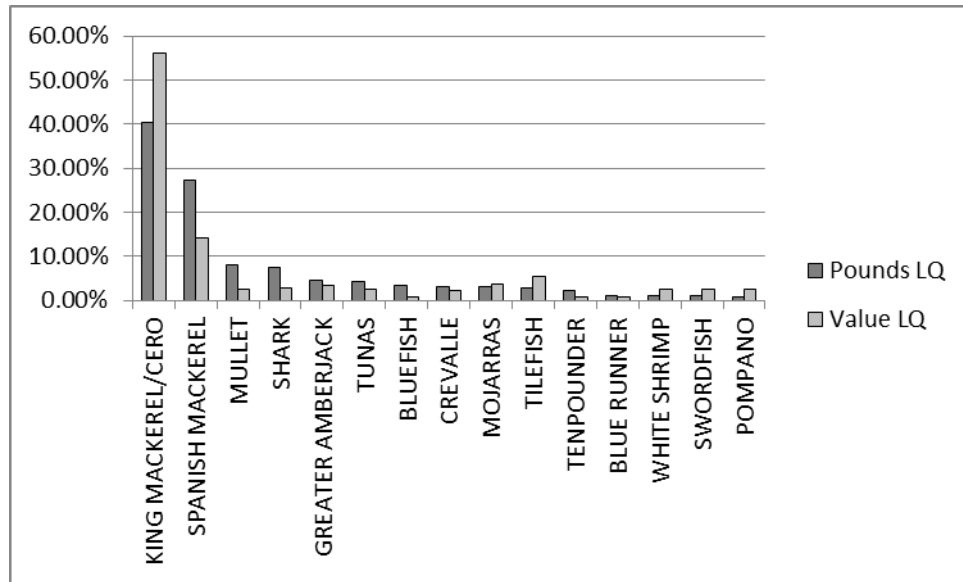


**Figure 3.5.3.5.** The top fifteen species in terms of proportion (lq) of total landings and value for Mayport, Florida. Source: ALS 2010

### Brevard County

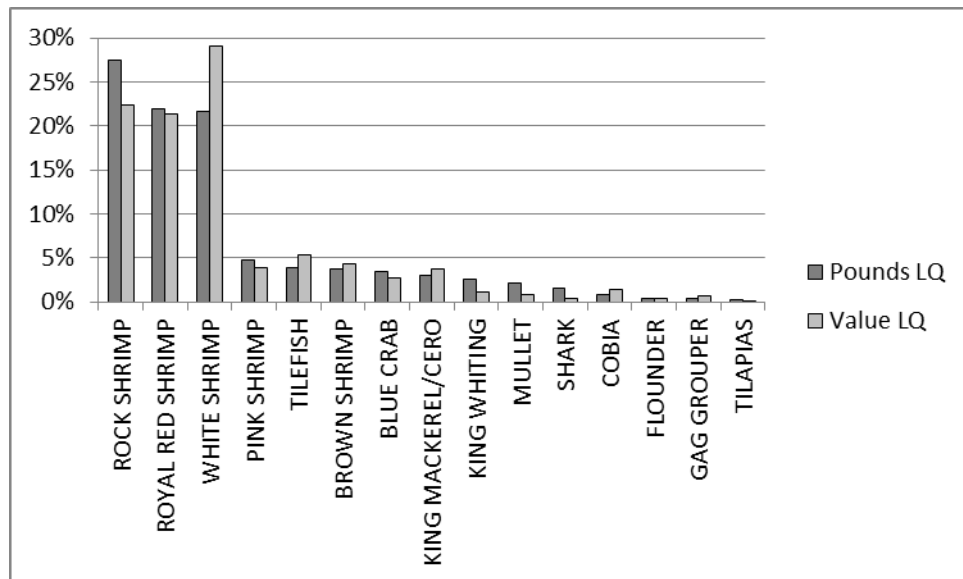
Detailed demographic information about Brevard County can be found in Amendment 18 (GMFMC and SAFMC 2011). The primary fishing communities are Cape Canaveral, Cocoa, Melbourne, and Titusville. Brevard County is also home to a large cruise terminal and the Kennedy Space Center in Cape Canaveral. Both 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 3.5.3.6).



**Figure 3.5.3.6.** 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.

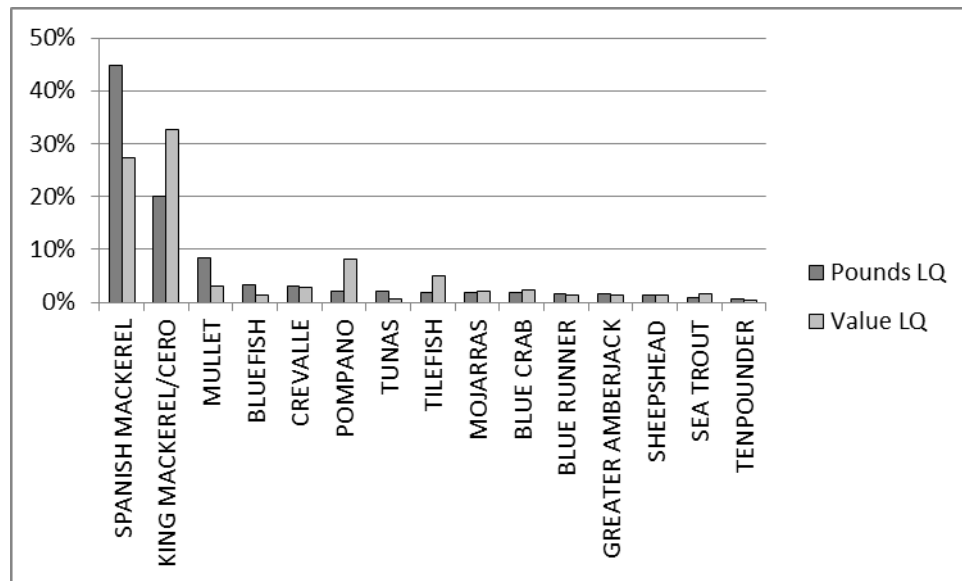


**Figure 3.5.3.7.** The top fifteen species in terms of proportion (lq) of total landings and value for Cape Canaveral, Florida. Source: ALS 2010

## 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 3.5.3.8. Spanish mackerel and king mackerel make up more than 60% of all commercial landings and commercial value.

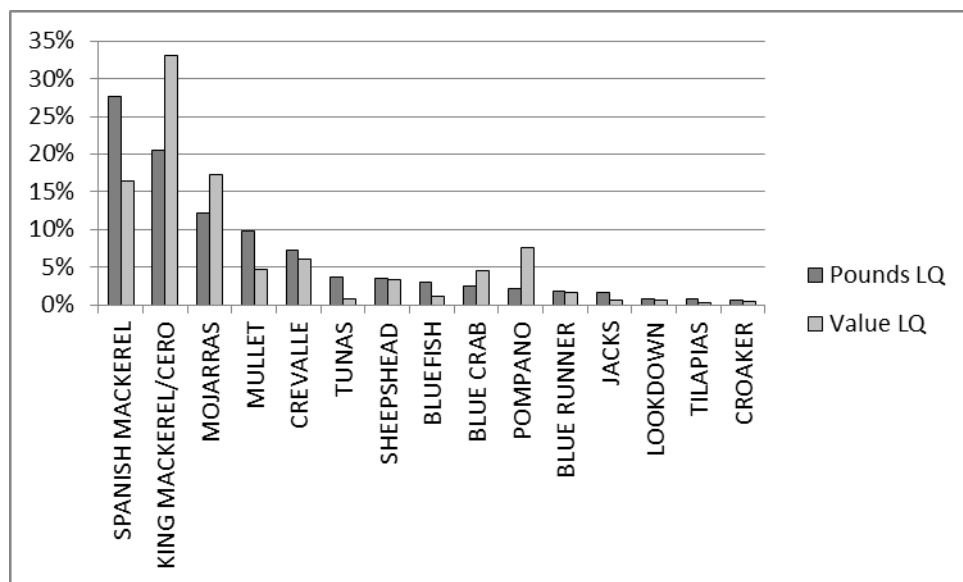


**Figure 3.5.3.8.** The top fifteen species in terms of proportion (lq) of total landings and value for Fort Pierce, Florida.

Source: ALS 2010

### Martin County

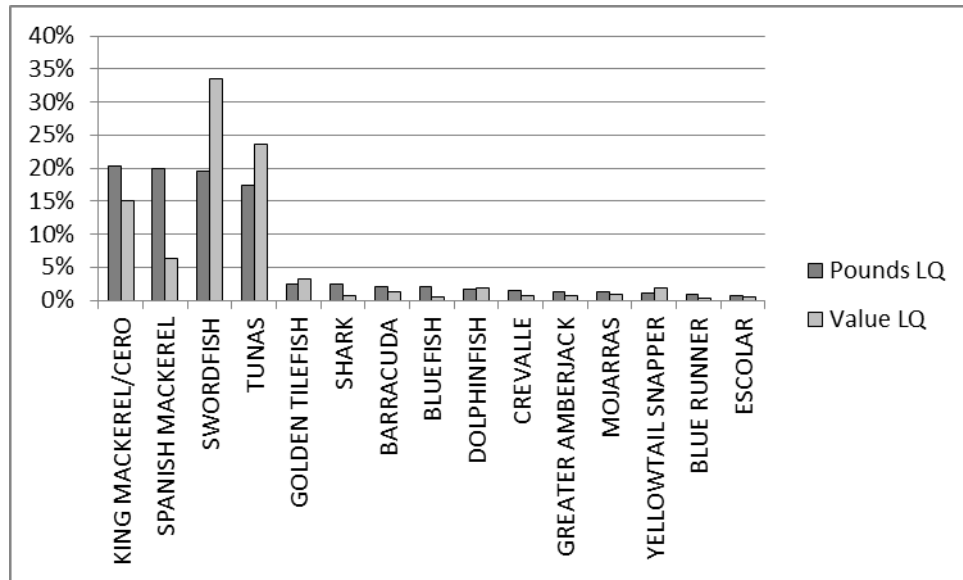
Detailed demographic information about Martin County can be found in Amendment 18 (GMFMC and SAFMC 2011). The primary fishing communities are Stuart, Port Salerno, Jensen Beach, and Hobe Sound. Stuart is one of the top fifteen communities in the South Atlantic for CMP species. Spanish mackerel and king mackerel make up about 45% of commercial landings in Stuart and almost 50% of commercial fishing value (Figure 3.5.3.9).



**Figure 3.5.3.9.** The top fifteen species in terms of proportion (lq) of total landings and value for Stuart, Florida. Source: ALS 2010

### Palm Beach County

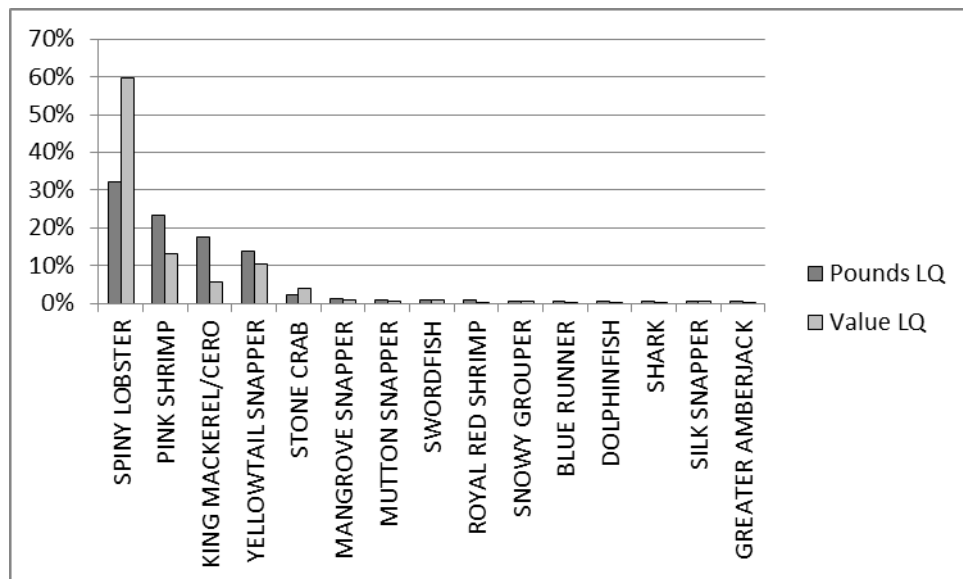
Detailed demographic information about Palm Beach County can be found in Amendment 18 (GMFMC and SAFMC 2011). The primary fishing communities are Atlantic Beach, Boynton Beach, Delray Beach, Jupiter, Lake Worth, Palm Beach, and Palm Beach Gardens. Palm Beach Gardens is one of the top fifteen South Atlantic 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 3.5.3.10). 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 3.5.3.10.** The top fifteen species in terms of proportion (lq) of total landings and value for Palm Beach Gardens, Florida. Source: ALS 2010

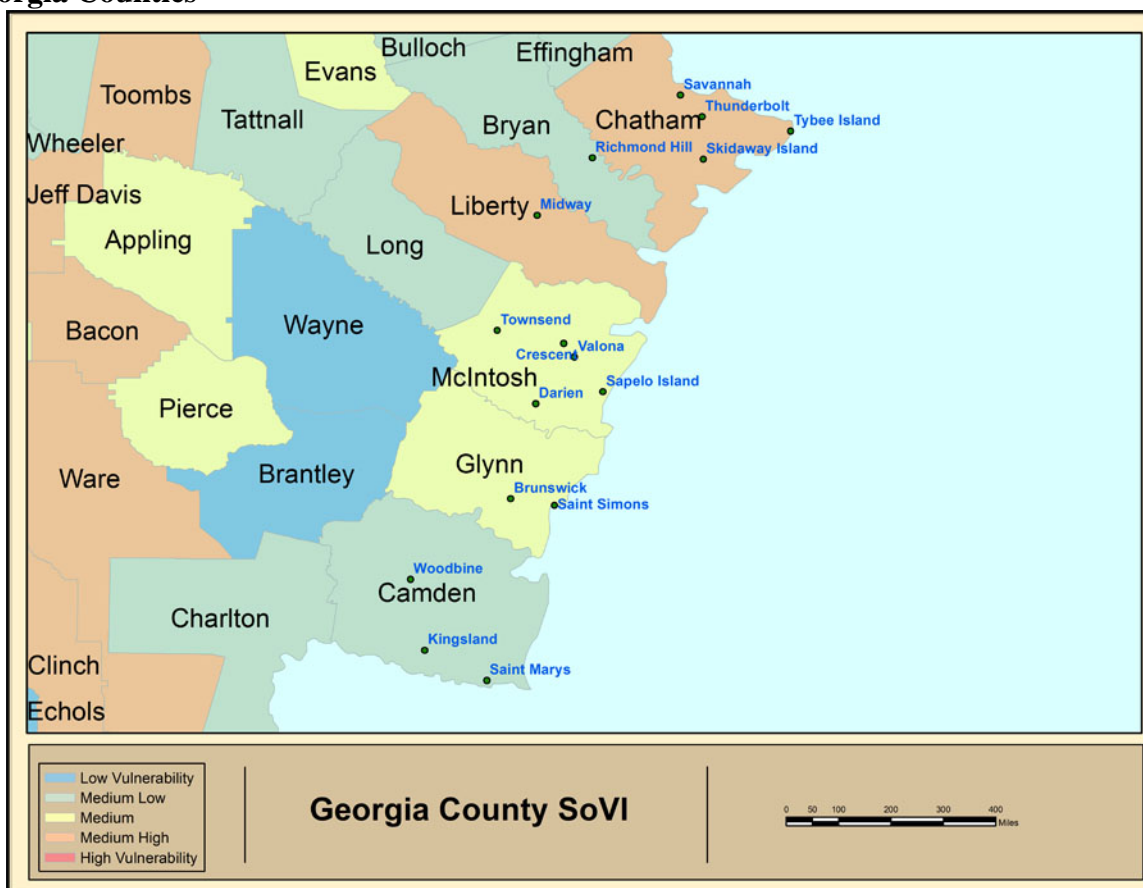
### Monroe County

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 3.5.3.11), with king mackerel making up almost 20% of local landings.



**Figure 3.5.3.11.** The top fifteen species in terms of proportion (lq) of total landings and value for Key West, Florida. Source: ALS 2010

## Georgia Counties



**Figure 3.5.3.12.** The Social Vulnerability Index applied to Georgia Coastal Counties.

There were two counties in Georgia with medium high vulnerability and those were Liberty and Chatham (Figure 3.5.3.12). 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 3.5.3.3).

**Table 3.5.3.3.** 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
<b>Total</b>	<b>11</b>	<b>7</b>	<b>18</b>

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

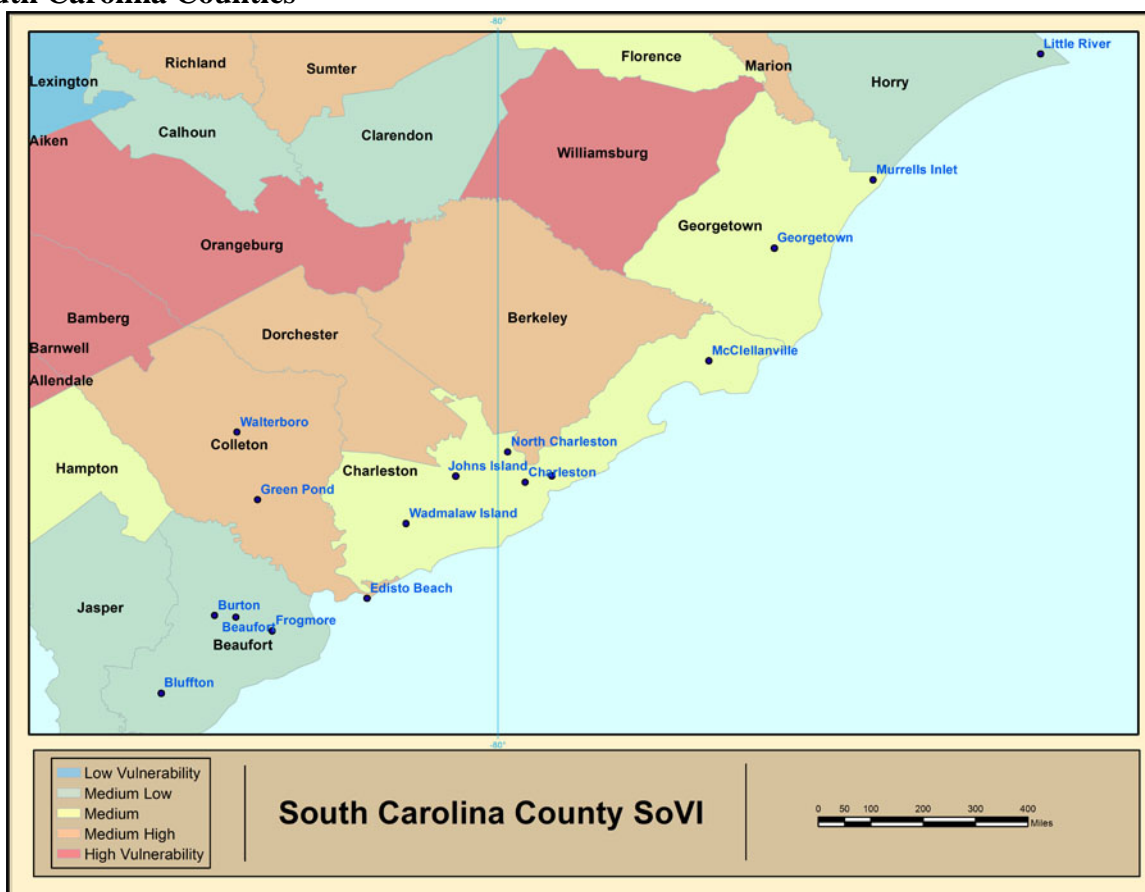


Georgia had no communities with landings or value over 3% for any coastal pelagic. While there were no substantial commercial landings within the state, the recreational fishery may be important. However, it is unfeasible to place recreational landings at the community level. Recreational fishing communities in the state are listed above in Table 3.5.3.1.

### South Carolina Counties

Coastal South Carolina had no counties that were either medium or highly vulnerable (Figure 3.5.3.13). 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 3.5.3.1.

### South Carolina Counties



**Figure 3.5.3.13.** 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 3.5.3.3).

**Table 3.5.3.3.** Number of CMP permits in South Carolina counties (2012).

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

\*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 3.5.3.14). 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.

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.

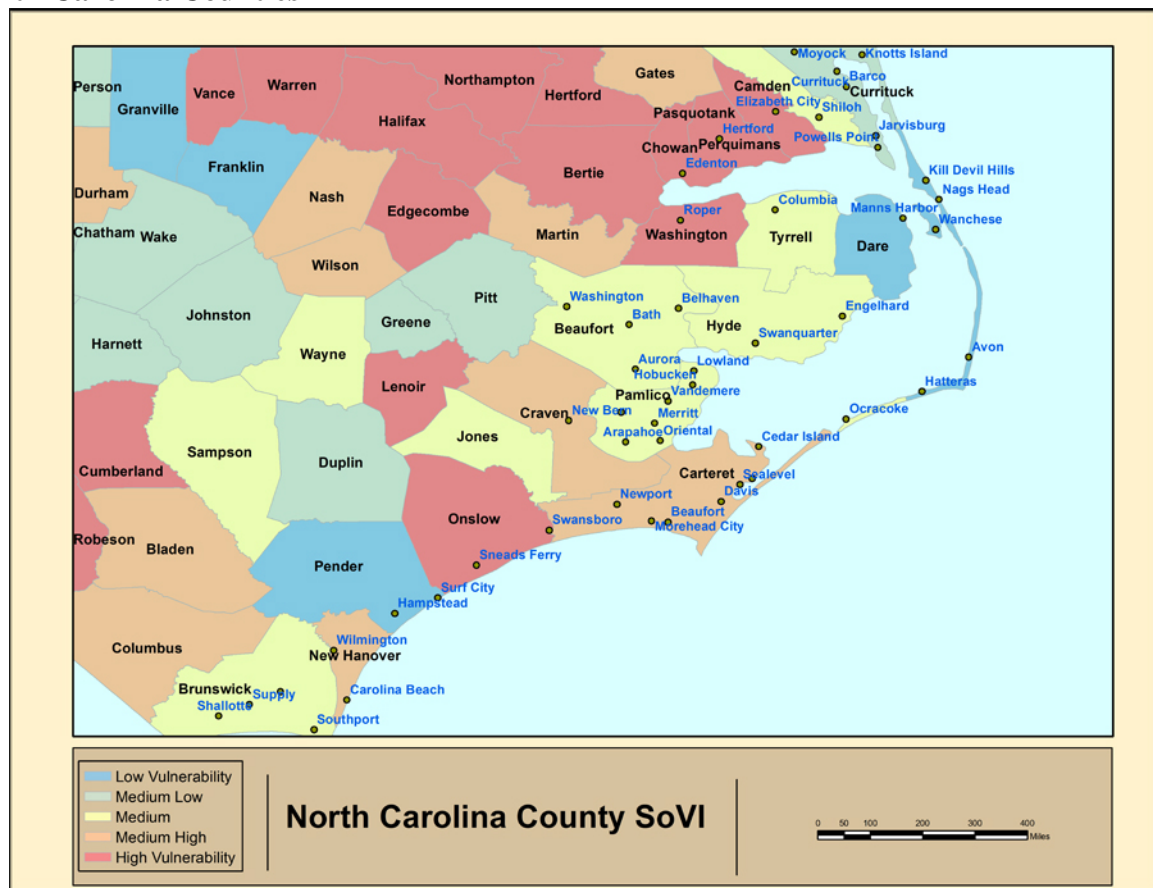
**Table 3.5.3.4.** Number of CMP permits in North Carolina counties (2012).

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

\*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.

## North Carolina Counties



**Figure 3.5.3.14.** The Social Vulnerability Index applied to North Carolina Coastal Counties.

### 3.5.4 Environmental Justice Considerations

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

To evaluate EJ considerations for the proposed actions, information on poverty and minority rates is examined at the county level. Information on the race and income status for groups at the different participation levels (vessel owners, crew, dealers, processors, employees, employees of associated support industries, etc.) is not available. Because the proposed actions would be expected to affect fishermen and associated industries in several communities along the 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 3.5.4.1; note that only communities that exceed the minority threshold and/or the poverty threshold are included in the table.

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

**Table 3.5.4.1.** 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*
<b>Florida</b>		<b>47.4</b>	<b>56.88</b>	<b>13.18</b>	<b>15.81</b>
	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
<b>Georgia</b>		<b>50.0</b>	<b>60.0</b>	<b>15.0</b>	<b>18.0</b>
	Liberty	53.2	-3.2	17.5	0.5
<b>South Carolina</b>		<b>41.9</b>	<b>50.28</b>	<b>15.82</b>	<b>18.98</b>
	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
<b>North Carolina</b>		<b>39.1</b>	<b>46.92</b>	<b>15.07</b>	<b>18.08</b>
	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.

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. Cobia has less importance commercially but is an extremely important recreational species, particularly in the Carolinas and for the for-hire sector on the Florida panhandle. 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: Modify Subzones and Allocation of Gulf Group Eastern Zone King Mackerel.**

#### **4.1.1 Direct and Indirect Effects on the Physical Environment**

#### **4.1.2 Direct and Indirect Effects on the Biological/Ecological Environment**

#### **4.1.3 Direct and Indirect Effects on the Economic Environment**

#### **4.1.4 Direct and Indirect Effects on the Social Environment**

#### **4.1.5 Direct and Indirect Effects on the Administrative Environment**

### **4.2 Action 2: Modify the Commercial Hood-and-Line Trip Limits for gulf Group King Mackerel.**

#### **4.2.1 Direct and Indirect Effects on the Physical Environment**

#### **4.2.2 Direct and Indirect Effects on the Biological/Ecological Environment**

#### **4.2.3 Direct and Indirect Effects on the Economic Environment**

#### **4.2.4 Direct and Indirect Effects on the Social Environment**

#### **4.2.5 Direct and Indirect Effects on the Administrative Environment**

### **4.3 Action 3: Change the Fishing Season for Gulf Group King Mackerel for the Eastern and Western Zone.**

#### **4.3.1 Direct and Indirect Effects on the Physical Environment**

#### **4.3.2 Direct and Indirect Effects on the Biological/Ecological Environment**

#### **4.3.3 Direct and Indirect Effects on the Economic Environment**

#### **4.3.4 Direct and Indirect Effects on the Social Environment**

#### **4.3.5 Direct and Indirect Effects on the Administrative Environment**

### **4.4 Action 4: Establish Transit Provisions for Travel through Areas that are Closed to King Mackerel Fishing.**

#### **4.4.1 Direct and Indirect Effects on the Physical Environment**

#### **4.4.2 Direct and Indirect Effects on the Biological/Ecological Environment**

#### **4.4.3 Direct and Indirect Effects on the Economic Environment**

#### **4.4.4 Direct and Indirect Effects on the Social Environment**

#### **4.4.5 Direct and Indirect Effects on the Administrative Environment**

### **4.5 Action 5: Establish State Quotas for Atlantic Migratory Group King Mackerel and Spanish Mackerel for North Carolina.**

#### **4.5.1 Direct and Indirect Effects on the Physical Environment**

#### **4.5.2 Direct and Indirect Effects on the Biological/Ecological Environment**

#### **4.5.3 Direct and Indirect Effects on the Economic Environment**

#### **4.5.4 Direct and Indirect Effects on the Social Environment**

#### **4.5.5 Direct and Indirect Effects on the Administrative Environment**

### **4.6 Action 6: Modify the Framework Procedure.**

#### **4.6.1 Direct and Indirect Effects on the Physical Environment**

#### **4.6.2 Direct and Indirect Effects on the Biological/Ecological Environment**

#### **4.6.3 Direct and Indirect Effects on the Economic Environment**

#### **4.6.4 Direct and Indirect Effects on the Social Environment**

#### **4.6.5 Direct and Indirect Effects on the Administrative Environment**

### **4.7 Action 7: Modify the Gulf and Atlantic Migratory Group Cobia Annual Catch Limits (ACLs) and Annual Catch Targets (ACTs).**

#### **4.7.1 Direct and Indirect Effects on the Physical Environment**

#### **4.7.2 Direct and Indirect Effects on the Biological/Ecological Environment**

#### **4.7.3 Direct and Indirect Effects on the Economic Environment**

#### **4.7.4 Direct and Indirect Effects on the Social Environment**

#### **4.7.5 Direct and Indirect Effects on the Administrative Environment**

### **4.11 Cumulative Effects Analysis**

### **4.12 Other Effects**

(Discuss unavoidable adverse effects; relationship between short-term uses and long-term productivity; mitigation, monitoring, and enforcement measures; and irreversible and irretrievable commitments of resources)

## 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



## **CHAPTER 9. LIST OF AGENCIES, ORGANIZATIONS AND PERSONS CONSULTED**

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## APPENDIX A. ALTERNATIVES CONSIDERED BUT REJECTED

**Consider modifications to the existing commercial fishery boundary line between the Gulf group king mackerel eastern zone and western zone (currently set at the Alabama - Florida border [87°31'06'']).**

**Alternative 1:** No Action - Retain the current boundary between the eastern and western zones at the Alabama/Florida border

**Alternative 2:** Move the current boundary line between the eastern zone and western zone from the Alabama/Florida border to Cape San Blas, Florida (85°30' w. longitude).

**Alternative 3:** Move the current boundary line between the eastern zone and western zone from the Alabama/Florida border to 89°30' w. longitude near the mouth of the Mississippi river.

### **Discussion:**

The current boundary between the eastern and western zones at the Alabama/Florida border was set in 1985 with the implementation of Amendment 1 to the Coastal Migratory Pelagics Fishery Management Plan (Figure 2.1.1). This line was chosen because existing scientific information at that time recognized a western migratory group of king mackerel that moved northward up the Texas and Louisiana coasts in spring and summer and southward in fall and winter. Another migratory group moved northward from the Florida Keys area to the Panhandle area of Florida in the spring and summer and back southward in fall and winter. Although these groups were known to mix, such mixing was believed to be small, and the Mississippi River outfall appeared to be somewhat of a barrier. In considering the boundary, the Councils also took into consideration the need to allow all areas of the Gulf some degree of access to the stock. The stock is managed under a commercial allocation of total allowable catch (TAC), and the TAC was very low at that time (only approximately 2.9 mp as compared to 10.2 mp over the past few years). With a set season and TAC, it was believed that without a zone/separate TAC allocation, the entire TAC would be taken before fish migrated into some areas. The Councils also considered that there was very little participation in the commercial fishery from Alabama and Mississippi, thus the dividing line at the Florida/Alabama border and a July 1 season opening were considered the least disruptive measures to participants. These decisions were based on known elements of the fishery from the mid to late 1970s. A review of the current and more recent past data may provide additional information.

## 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