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AMENDMENT 18
TO THE COASTAL MIGRATORY
PELAGICS FISHERY MANAGEMENT PLAN

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ABBREVIATIONS USED IN THE DOCUMENT

ABC	Acceptable Biological Catch
ACCSP	Atlantic Coast Cooperative Statistics Program
ACL	Annual Catch Limits
ACT	Annual Catch Targets
AM	Accountability Measures
B_{MSY}	Stock biomass level capable of producing an equilibrium yield of MSY
CMP	Coastal Migratory Pelagics
EEZ	Exclusive Economic Zone
ENGO	Environmental Nongovernment Organization
F	Instantaneous rate of fishing mortality
FDEP	Florida Department of Environmental Protection
F_{MSY}	Fishing mortality rate corresponding to an equilibrium yield of MSY
F_{OY}	Fishing mortality rate corresponding to an equilibrium yield of OY
FMP	Fishery Management Plan
GMFMC	Gulf of Mexico Fishery Management Council
MAFMC	Mid-Atlantic Fishery Management Council
MFMT	Maximum Fishing Mortality Threshold
MSAP	Mackerel Stock Assessment Panel
MRFSS	Marine Recreational Fisheries Survey and Statistics
M-SFCMA	Magnuson-Stevens Fishery Conservation and Management Act
MSST	Minimum Stock Size Threshold
MSY	Maximum Sustainable Yield
NMFS	NOAA's National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OFL	Over Fishing Limit
OY	Optimum Yield
RA	Regional Administrator
SAFMC	South Atlantic Fishery Management Council
SEDAR	Southeast Data, Assessment and Review
SEFSC	Southeast Fisheries Science Center
SSC	Scientific and Statistical Committee
SSB	Spawning Stock Biomass
SPR	Spawning Potential Ratio
TAC	Total Allowable Catch

1.0 INTRODUCTION

The Magnuson-Stevens Reauthorization Act (MSRA) of 2006 established new requirements to end and prevent overfishing through the use of annual catch limits (ACLs) and accountability measures (AMs). Implementation of ACL/AM provisions must begin in 2010 or earlier for stocks subject to overfishing, and in 2011 or earlier for all other stocks under federal management. The final rule to amend the National Standard 1 Guidelines for setting ACLs and AMs also indicates that for species not undergoing overfishing, the mechanisms and values for ACLs and AMs must be specified in FMPs, FMP amendments, implementing regulations, or annual specifications beginning in fishing year 2011 (see Section(2)(A) in the center column on page 3211).

The Gulf of Mexico Fishery Management Council (GMFMC), the South Atlantic Fishery Management Council (SAFMC), and the Mid-Atlantic Fishery Management Council (MAFMC) are preparing to amend the Coastal Migratory Pelagics Fishery Management Plan (CMP FMP) by consideration of actions as stated and discussed below. The primary action under consideration in Amendment 18 would establish annual catch limits (ACL) and accountability measures (AM) for the following managed species:

King mackerel, *Scomberomorus cavalla*
Spanish mackerel, *Scomberomorus maculatus*
Cobia, *Rachycentron canadum*

Amendment 18 also considers removal or a change in status of the following species that are currently included in the CMP FMP for data collection purposes:

Bluefish, *Pomatomus saltatrix* (Gulf of Mexico only)
Cero, *Scomberomorus regalis*
Little tunny, *Euthynnus alleteratus*
Dolphin*, *Coryphaena hippurus* (Gulf of Mexico only)

*Note: Dolphin in the South Atlantic, Mid-Atlantic, and New England Fishery Management Council's jurisdictions are managed under the Dolphin and Wahoo Fishery Management Plan with the southern boundary at the border between the Gulf and South Atlantic Councils.

In addition to setting ACLs and AMs, Amendment 18 contains alternatives to modify the framework procedure to incorporate the Southeast Data Assessment and Review process (SEDAR); allow for adjustments of the overfishing level (OFL), ACLs, AMs, and possibly annual catch targets (ACTs); remove language that indicates cobia are a unit stock in the Gulf and Atlantic; and to make other adjustments to bring the CMP FMP into full compliance with the Magnuson-Stevens Fishery Conservation and Management Act (M-SFCMA) and be consistent with best available science and current management practices.

1.1 Background

In 2006 the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) was re-authorized and included a number of changes to improve conservation of managed fishery resources. The goals require that conservation and management measures "shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry". Included in these changes are requirements that the Regional Councils must establish both a mechanism for specifying annual catch limits at a level such that overfishing does not occur in the fishery and accountability measures to correct if overages occur. Accountability measures are management controls to prevent the annual catch limits from being exceeded and to correct by either in-season or post-season measures if they do occur.

The annual catch limit is set by the Council, but begins with specifying an overfishing limit, which is the yield, above which overfishing occurs. Once an overfishing limit is specified, an acceptable biological catch level is recommended by the Council's Scientific and Statistical Committee. The acceptable biological catch is based on the overfishing limit and takes into consideration scientific uncertainty. The overfishing limit and acceptable biological catch are set by scientists, whereas the next two reference points, annual catch limit and annual catch target are set by managers. The annual catch target is not required to be specified, but if used should be set at a level that takes into account management uncertainty and provides a low probability of the annual catch limit being exceeded. These measures must be implemented by 2010 for all stocks experiencing overfishing and 2011 for all others.

There are some exceptions for the development of annual catch limits; for example, when a species can be considered an ecosystem component species and species with annual life cycles. Stocks listed in the Fishery Management Unit are classified as either ''in the fishery'' or as an ''ecosystem component''. By default, stocks are considered to be "in the fishery" unless declared ecosystem component species. Ecosystem component species are exempt from the requirement for annual catch limits. In addition, ecosystem component species may, but are not required to be included in a Fishery Management Plan for any of the following reasons: data collection purposes; ecosystem considerations related to specification of optimum yield for the associated fishery; as considerations in the development of conservation and management measures for the associated fishery; and/or to address other ecosystem issues.

To be considered for possible classification as an ecosystem component species, the species should:

(A) Be a non-target species or non-target stock;
(B) Not subject to overfishing, approaching overfished, or overfished;
(C) Not likely to become subject to overfishing or overfished, according to the best available information, in the absence of conservation and management measures; and
(D) Not generally be retained for sale or personal use.

An annual catch limit for a given stock or migratory group can be established in several ways. It can be a single annual catch limit; it can be divided by sectors based on allocations (i.e., recreational and commercial sectors); or it can be divided by sector and gear types (i.e., recreational, commercial hook-and-line, and commercial gill net. In any of these cases, the sum of the annual catch limits cannot exceed the acceptable biological catch.

1.2 Distribution and Habitat Information

1.3 Purpose and Need

Revisions to the M-SFCMA in 2006 require establishment of a mechanism for specifying ACLs at levels that prevent overfishing and do not exceed the recommendations of the respective Council's Scientific and Statistical Committee (SSC) or other established peer review processes for all managed species. It also requires setting measures to ensure accountability. The AMs are management controls that ensure that the ACLs are not exceeded; or if the ACL is exceeded corrective measures are taken to prevent overfishing. Since none of the managed species under the CMP FMP are considered to be undergoing overfishing or are designated as overfished, the councils have until the 2011 fishing year to implement ACLs and AMs.

The current framework procedure is out-of-date in that it contains procedures and reviews that are no longer being conducted in the manner described, i.e., stock assessments. It also includes a species group that is currently managed by an FMP other than the Coastal Migratory Pelagics FMP, i.e., dolphin. Additionally, it indicates that cobia are a unit stock that should be managed throughout its range in the Gulf and Atlantic; however, best available science supports separate management in the Gulf and Atlantic. Other changes are needed to fully comply with the Sustainable Fisheries Act of 1996 and the Magnuson-Stevens Reauthorization Action of 2006. By being able to modify these parameters through framework actions, the Councils can more expeditiously respond to changing scientific advice as may be dictated by future stock assessments.

1.4 History of Management

The CMP 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 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 that 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 inches fork length (FL) or 14 inches total length (TL) and for cobia at 33 inches FL or 37 inches TL.

Amendment 2, with environmental assessment (EA), implemented in July of 1987, revised Spanish mackerel MSY downward, recognized two migratory groups, established allocations of TAC for the commercial and recreational sectors, and set commercial quotas and bag limits. Charterboat permits were required, and it was clarified that TAC must be set below the upper range of acceptable biological catch (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 gill nets for coastal pelagics and purse seines for the overfished groups of mackerels.

Amendment 4, with EA, implemented in October 1989, reallocated Atlantic 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 groups of mackerels through the MAFMC'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 SAFMC will be responsible for pre-season adjustments of TACs and bag limits for the Atlantic migratory groups of mackerels while the GMFMC 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 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 group king mackerel may be taken only by hook-and-line and run-around gill nets;
- Imposed a bag and possession limit of two cobia per person per day;
- Established a minimum size of 12 inches (30.5 cm) FL or 14 inches (35.6 cm) 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 king mackerel stock identification and allocation when appropriate;
- Provided for commercial Atlantic 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 inches 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 suballocation 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 group king mackerel fishery by allowing only hook-and-line and run-around gill nets. However, catch by permitted, multi-species vessels and bycatch allowances for purse seines were maintained;
- Established allowable gear in the SAFMC and MAFMC areas as well as providing for the RA to authorize the use of experimental gear;
- Established the Councils' intent to evaluate the impacts of permanent jurisdictional boundaries between the GMFMC and SAFMC and development of separate FMPs for coastal pelagics 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 1 of the 3 previous calendar years, but allowed for a 1-year grace period to qualify under permits that are transferred;
- Legalized retention of up to 5 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 SAFMC with authority to set vessel trip limits, closed seasons or areas, and gear restrictions for Gulf 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 MAFMC's area of jurisdiction (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 group, Eastern Zone, South/West Area (Florida west coast) by establishing 2 subzones with a dividing line between the 2 subzones at the Collier/Lee County line;
- Established regional allocations for the west coast of Florida based on the 2 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 pounds per vessel per trip for the Western Zone;
- Established a moratorium on the issuance of commercial king mackerel gill-net endorsements and allow re-issuance of gill-net endorsements to only those vessels that: (1) had a commercial mackerel permit with a gill-net endorsement on or before the moratorium control date of October 16, 1995 (Amendment 8), and (2) had landings of king mackerel using a gill net in one of the two fishing years 1995-96 or 1996-97 as verified by the National Marine Fisheries Service (NMFS) or trip tickets from the FDEP; allowed transfer of gill-net endorsements to immediate family members (son, daughter, father, mother, or spouse) only; and prohibited the use of gill nets or any other net gear for the harvest of Gulf group king mackerel north of an east/west line at the Collier/Lee County line;
- Increased the minimum size limit for Gulf group king mackerel from 20 inches to 24 inches 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 (EFH) provisions for the SAFMC.

Amendment 11, with SEIS, partially approved in December 1999, included proposals for mackerel in the SAFMC's Comprehensive Amendment Addressing Sustainable Fishery Act Definitions and other Provisions in Fishery Management Plans 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 National Marine Sanctuaries Act.

Amendment 14, with EA, implemented July 29, 2002, established a 3-year moratorium on the issuance of charter vessel and head boat Gulf 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 other 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 exclusive economic zone under the jurisdiction of the Gulf of Mexico, South Atlantic, and Mid-Atlantic Fishery Management Councils. It also changed the fishing season to March 1 through February 28/29 for the Atlantic 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.

1.5 Description of the Fishery

Gulf of Mexico

King mackerel and Spanish mackerel are important target species of commercial, recreational, and for-hire fishermen throughout the Gulf and South Atlantic regions, particularly in South Florida. King mackerel are particularly important to the charterboat and offshore private boat fleets.

Most of the commercial fishery for king mackerel occurs in Florida, and most fish are taken in south Florida from November through March. A winter troll fishery takes place along the east and south coast, and a run-around gill net fishery occurs in the Florida Keys (Monroe County) during January. To address the potential for derby fishing, Florida attempted to allocate king mackerel catches among fishermen in different geographic areas by subquotas and landings (trip) limits. The Florida trip limit regulations were overturned in December 1992, by a federal court ruling, and the commercial quota was quickly taken in the Florida Keys with 900,000 pounds being landed there during a 10-day period in January, 1993.

A commercial hook-and-line fishery for king mackerel developed off Louisiana in the winter of the 1982-83 fishing season. This trolled-handline fishery was similar to the Florida hook-and-line fishery and was centered in the Grand Isle, Louisiana area. Due primarily to increased effort in the Western Zone, this winter fishery has not been operative since about 1990 because this area's allocation of TAC has typically been taken by the end of October. Additionally, this winter fishery included many catches of larger fish that in recent years have become less desirable or marketable. The current commercial fishery operates as both hook-and-line and gill net components off the west coast of Florida and hook-and-line only off Alabama, Mississippi, Louisiana, and Texas. In the Gulf region, as a whole, handline gear has been the predominant gear in the king mackerel fishery since 1993. In 2003, handline gear accounted for 1.64 out of 2.38 million pounds (MP) landed, followed by run-around gill nets at 0.39 million pounds. Run-

around gill nets, however, accounted for more of the Gulf total than handlines from the late 1950s through 1982 and in 1986 and 1993 (Vondruska, 2000).

The gill-net fishery for king mackerel has a long history in south Florida, particularly the Florida Keys. However, the use of this gear has been restricted under state and federal regulations (see Section 4.4.1) and Amendment 9 to the CMP FMP (April 2000) greatly restricted the ability to participate in the quota-based fishery for Gulf group king mackerel. Compared with 100 vessels in 1998, 27 vessels were permitted to participate in this fishery in 2004. Gill-net vessels tend to be 40-65 feet in length. Although the vessels have the capacity to land more, they are restricted by a 25,000 pound trip limit. Only 10% of the logbook-reported gill-net trips during 2000-2003 landed more than 7,000 to 20,000 pounds of king mackerel.

Gill nets used for king mackerel have nylon mesh with a center band of monofilament mesh. The most common mesh size used is 4-3/4 inches stretched, which is also the minimum size allowed. Nets range from 400 to 700 yards in length with an average of about 500 to 550 yards. Nets can fish effectively in waters 55 to 60 feet in depth. Gill-net vessels use power rollers for net retrieval, and aircraft are used to spot schools of king mackerel before the nets are struck or set. The nets are set encircling the school, or a part of the school, and then closed causing the fish to become entangled in the mesh.

The gill-net fishery is restricted to Monroe and Collier counties, and the fishing season opens in January on the Tuesday following the Martin Luther King, Jr. federal holiday. The fishery is open during the first weekend thereafter, but closed on subsequent weekends, until the quota is met and the fishery is closed for the year. The current quota of approximately 520,000 pounds is typically taken in a few weeks. For the first time, in 2003/2004, no in-season closure occurred for this fishery; turbid water caused difficulties in being able to spot schools of fish from the spotter planes.

King mackerel have been a popular target for recreational fishermen, throughout the Gulf, for many years. Total recreational catches were relatively stable from about 1992 to 1997 at between 6.0 and 7.5 MP; however, catches in the last 3 years (1999/00 through 2001/02) have dropped to around 4.0 to 5.2 MP (Ortiz 2004). Recreational fishing for king mackerel is an important component of the coastal economies in many areas, and it includes both direct and support industries.

Spanish mackerel have also historically been a popular commercially and recreationally targeted species, although not as important as king mackerel. Historically, the major harvest came from the commercial sector using gill nets in state waters off the east coast of Florida. From fishing years 1987/88 through 1994/95 commercial landings of Gulf group Spanish mackerel ranged from approximately 1.1 to 4.2 MP (MSAP 2003); however, following the passage of a constitutional amendment banning gill nets and certain other net gear in Florida state waters in 1995, catches declined significantly. Catches in the last 3 years (2001/02 through 2003/04) ranged from approximately 0.6 to 1.6 MP (NMFS unpublished data1). In the Gulf of Mexico, runaround gill nets are still the primary gear used to harvest Spanish mackerel, followed distantly by handlines and cast nets.

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 actions by the Council that increased the bag limit from 3 fish in 1987 to 10 fish in 1992 and to 15 fish in 2000 (SFD 2003). This lack of change is primarily due to the lower popularity of Spanish mackerel as compared with king mackerel and other offshore stocks. Primarily because of the significant decrease in commercial catches, approximately two-thirds of the total catch has come from the recreational sector in recent years.

Atlantic

King and Spanish mackerel are major target species of commercial fisheries in Florida and North Carolina, as well as major target species for the private boat and charter boat recreational fishery throughout the South Atlantic region. Small amounts of king and Spanish mackerel are caught as an incidental catch or supplemental commercial target species off Georgia and South Carolina. Commercial landings of Atlantic group king mackerel have been relatively stable at approximately 1.7 to 2.0 MP for the last 3 years (2001/02 through 2003/04) and well below the quota allocation of 3.7 MP (SFD 2003;NMFS unpublished data).

Recreational users in general have increased in numbers over time; however, catches of Atlantic group king mackerel have remained relatively stable at slightly over 4.0 MP during most years since the early 1990's through 2002 (SEDAR 5 2004a). Increased income and the growth in coastal populations are probably the main factors responsible for the increase in recreational fishing effort in the South Atlantic region during the 1980s and 1990s. Substantial numbers of recreational participants are visitors to coastal states in the management area.

In the South Atlantic region, runaround gill nets are an important gear for Spanish mackerel, but other kinds of gill nets, cast nets, and handline gear now account for the majority of the landings. Though the effect of the State of Florida's 1995 probibition on the use of various net gear had more of an impact on the Florida west coast (state waters extend to 9 nautical miles from shore), it did reduce landings on the Florida east coast (state waters extend to 3 nautical miles from shore). Reportedly, Spanish mackerel were concentrated more in state rather than federal waters off the Florida east coast in 2001-2003 than in 1995-2000, and cast nets may be used in state waters. Therefore, cast nets became an increasingly important gear and accounted for 1.88 out of 3.20 MP in 2003, or approximately 59% of total South Atlantic Spanish mackerel harvest. Cast nets were followed by "other" gill nets (0.44 MP), run-around gill nets (0.35 MP) and handlines (0.32 MP).

Various federal and state regulations greatly reduced the use of gill nets for king mackerel, and most are caught with handline gear. Compared with 1966-1988 when gill nets were the predominant gear for the king mackerel fishery in the South Atlantic region, king mackerel are now caught predominantly by various handline gear, which accounted for 2.78 MP out of 2.84 MP for the South Atlantic region in 2003.

Gill nets are not authorized gear for the directed commercial harvest of king mackerel, little tunny, and cobia south of Cape Lookout, North Carolina (34□ 37.3'North Latitude). Off North Carolina, the majority of gill-net effort occurs within state waters. During the period between 1999 and 2003, 90% of gill-net trips targeting king mackerel were conducted south of Hatteras within 3 miles from shore using sink gill nets. In federal waters, fishermen also used sink gill

nets though a small proportion (0.2%) used runaround gill nets.

The peak fishing months for king mackerel are September through November. For king mackerel, the minimum mesh size averages 5" to 6" (12.7 to15.24 cm). Typically, not more than 15 boats participate in this fishery though the number can fluctuate. Fishermen usually fish 5 or 6 nets (400 yards in length or 365.76 m) working from one net to another throughout the day. They generally fish the gear within a couple of hours, depending on the catch. As mentioned above, this fishery is not allowed below Cape Lookout, North Carolina and is rarely prosecuted above Oregon Inlet, North Carolina.

Between 1999 and 2003, over 100 gill-net trips for Spanish mackerel were conducted per month (May through October) with effort being greatest during October (over 300 trips). Trips occurred mainly south of Hatteras (90%) of which 96% occurred within state waters. Sink gill nets are the primary gill-net gear used on Spanish mackerel trips (over 99%) with a small proportion of runaround gill nets (0.3%) and float gill nets (0.5%). The summer fishery typically involves 10 to 14 boats, and the fall fishery usually includes another 10 to 12 boats with catches generally higher after the first of September. Fishermen usually fish 3.5 inches (8.9 cm) stretched-mesh nets, the minimum mesh size allowed.

Off the east coast of Florida, cast nets have accounted for more of the landings of Spanish mackerel in recent years than gill nets, and the main season occurs in October-March, compared with May-October farther north (Figure 15). Spanish mackerel is the primary species targeted by gill nets off the Florida east coast, and the main season for this activity is September through December. Beginning in January, many of the fishermen using gill nets switch to shark fishing or they will participate in the cast net fishery that occurs in state waters. The Spanish mackerel gill-net fishery mainly occurs between Fort Pierce to just north of Cape Canaveral. Less than 30 vessels are active in the fishery with many being outfitted to use either round-around gill nets or stab nets. Vessels fishing for Spanish mackerel in the South Atlantic EEZ off Florida north of the line directly east from the Miami-Dade/Monroe County, Florida boundary (25□20.4' N. lat.) may not have a float line longer than 800 yds (732 m), set more than one at any one time, or soak for more than 1 hour.

Bycatch data in the CMP fishery is collected via the supplementary discard program, which was implemented in August 2001. A stratified, random sample (20 percent coverage) of commercial permit holders was selected each year and required to record their discards for each trip they made. For the first survey period (8/01-7/02), 15 vessels with gill-net gear were selected to fill out discard report forms. For the second survey period (8/02 to 7/03), 14 vessels with gill-net gear were selected to report. Overall, menhaden, smooth dogfish sharks, and spiny dogfish sharks were the three most frequently discarded species. There were no interactions of sea turtles or marine mammals reported (Poffenberger 2004).

Note: A more detailed description of the economic and social aspects of the commercial fishery is provided in Section 4.0 herein.

2.0 MANAGEMENT ALTERNATIVES

2.1 ACTION 1: Modifications to the Fishery Management Unit

Alternative 1. Status quo - retain only Gulf and Atlantic group king and Spanish mackerel and cobia in the management unit for management purposes and clarify that the other species are included in the management unit of the CMP FMP for data collection purposes only.

Alternative 2. Retain only Gulf and Atlantic group king and Spanish mackerel and cobia in the management unit and designate all other species as ecosystem component species.

Alternative 3. Retain only Gulf and Atlantic group king and Spanish mackerel and cobia in the management unit, remove dolphin in the Atlantic, and designate all other species in the CMP FMP management plan as ecosystem component species.

Alternative 4. Remove all species other than king mackerel, Spanish mackerel, and cobia from the CMP FMP.

Discussion: The councils have never managed bluefish, cero, little tunny, or dolphin under the CMP FMP; however, they were originally included for data collection purposes in order to determine whether future management was warranted. After over 20 years, the councils have not seen the need to add these stocks to the management unit; however, the SAFMC elected to manage dolphin and wahoo in the Atlantic via a separate FMP. Consequently, the councils do not see the need to set ACLs and AMs for these stocks.

2.2 ACTION 2: Modify the Framework Procedure

Alternative 1. No Action – Do not modify the framework procedure.

Alternative 2. Modify the framework procedure as shown in Appendix A.

Alternative 3. Modify the framework procedure as shown in Appendix B.

Alternative 4. Modify the framework procedure as shown in Appendix C.

Alternative 5. Modify the framework procedure as shown in Appendix D.

Discussion: In 2002 the Councils adopted the Southeast Data Assessment and Review (SEDAR) as its preferred method of assessing the status of stocks and determining allowable catch levels. Benchmark assessments under SEDAR are completed using a series of workshops: Data Workshop, Assessment webinars and possibly meetings, and Review workshop. In the Data Workshop scientists from the states, the National Marine Fisheries Service (NMFS), and academia along with constituents and environmental nongovernment organization (ENGO) representatives meet to select the appropriate data and assessment techniques that will be used to

assess a particular stock/migratory group or group of stocks. In the Assessment process mostly scientists (and some lay representation) with familiarity with stock assessments develop the stock assessment in conjunction with scientists from the Southeast Fisheries Science Center (SEFSC). Finally, the Review Workshop is a peer review process where SSC members and outside experts review and critique the assessment and develop a consensus report with their findings.

Update assessments are also conducted under SEDAR. Assessment updates typically use the same data sets and assessment techniques used in an earlier benchmark assessment with succeeding year's data being added. Assessment updates typically include mostly SSC members.

Prior to 2002, the SEFSC developed stock assessments that were in turn reviewed by the Councils' stock assessment panels for the various species or species groups being assessed. The current language in the Framework Procedure describes this outdated process. Consequently, the Councils are considering modified language to incorporate the SEDAR process (Appendix A). The Council is also considering alternatives that incorporate the SEDAR process as well as provide a more generic framework procedure (Appendices B, C, and D). Generic frameworks as described in Appendices B, C, and D have both open and closed components. The open components provide more policy discretion, whereas the closed components address more specific, factual circumstances. Appendices C and D differ in that Appendix C has a broad focus, whereas Appendix D has a narrow focus.

2.3 ACTION 3: Establish Separate Atlantic and Gulf Migratory Groups of Cobia

Alternative 1. No action - Maintain one group of cobia.

Alternative 2. Separate the two migratory groups at the Miami-Dade/Monroe County line.

Alternative 3. Separate the two migratory groups at the SAFMC/GMFMC boundary.

Discussion: Currently, the CMP FMP considers that there is only one stock of cobia that includes the Gulf and Atlantic. A 2001 assessment was done for the Gulf component with a split at the Miami-Dade/Monroe County line. The best available science supports a separation of Atlantic and Gulf components/groups. Alternative 2 would separate the migratory groups at the assessed Miami-Dade/Monroe County line and Alternative 3 would separate the groups at the jurisdictional boundary between the Gulf and South Atlantic councils.

2.4 ACTION 4: Set ACL for Gulf Group Cobia

Alternative 1. No action – do not set ACL for Gulf group cobia

Alternative 2. Set ACL = MSY at 1.5 MP for Gulf group cobia

Option a. Set a single ACL

Option b. Set separate commercial and recreational ACLs based on current average percent of catches for the period 1999 through 2009

Option c. Set separate commercial and recreational ACLs based on current average percent of catches for the period 1986 through 2009

Alternative 3. Set ACL = ABC (yield corresponding 0.75*FMSY when the stock is at equilibrium [currently estimated at 1.45 MP] for Gulf group cobia)

Option a. Set a single ACL

Option b. Set separate commercial and recreational ACLs based on current average percent of catches for the period 1999 through 2009

Option c. Set separate commercial and recreational ACLs based on current average percent of catches for the period 1986 through 2009

Discussion: Gulf group cobia have not been assessed since 2000; however this stock is managed by a 2-fish per person per day bag limit for the commercial and recreational fisheries. Consequently, approximately 90% of the landings are recreational. Additionally, there was only a 30% chance that the stock was overfished and only a 40% chance of overfishing occurring in 2000.

2.5 ACTION 5: Set ACT for Gulf Group Cobia

Alternative 1. No action – do not set ACT for Gulf group cobia

Alternative 2. Set ACT = ACL = MSY = 1.5 MP for Gulf group cobia

Option a. Set a single ACT

Option b. Set separate commercial and recreational ACTs based on current average percent of catches for the period 1999 through 2009

Option c. Set separate commercial and recreational ACTs based on current average percent of catches for the period 1986 through 2009

Alternative 3. Set ACT = ABC (yield corresponding 0.75*FMSY when the stock is at equilibrium [currently estimated at 1.45 MP] for Gulf group cobia)

Option a. Set a single ACT

Option b. Set separate commercial and recreational ACTs based on current average percent of catches for the period 1999 through 2009

Option c. Set separate commercial and recreational ACTs based on current average percent of catches for the period 1986 through 2009

Alternative 4. Set ACT at 0.90*ABC (yield corresponding 0.75*FMSY when the stock is at equilibrium [currently estimated at 1.45 MP] for Gulf group cobia) which is 1.23 MP

Option a. Set a single ACT

Option b. Set separate commercial and recreational ACTs based on current average percent of catches for the period 1999 through 2009

Option c. Set separate commercial and recreational ACTs based on current average percent of catches for the period 1986 through 2009

2.6 ACTION 6: Set AMs for Gulf Group Cobia

Alternative 1. No Action – Retain current in-season accountability measures (AMs) for Gulf group cobia.

Option a. Commercial bag limit of 2 per person per day
Option b. Recreational bag limit of 2 per person per day

Alternative 2. Change in-season AMs
Option a. Commercial
Suboption i. Closure when commercial/stock ACL/ACT reached
Suboption ii. Trip limit implemented when x% of stock/commercial ACL/ACT reached
Option b. Recreational
Suboption i. Closure when stock/recreational ACL/ACT reached
Suboption ii. Bag limit reduced when x% of stock/recreational ACL/ACT reached

Alternative 3. Set post-season AMs
Option a. Commercial
Suboption i. Payback of overage from quota in the following year
Suboption ii. Implement trip limit in the following year
Option b. Recreational
Suboption i. Payback of overage from quota in the following year
Suboption ii. Reduce bag limit in the following year
Suboption iii. Shorten season in the following year

Note: The Council may choose more than one preferred alternative.

Discussion: Current regulations for cobia include bag limits that apply to both the commercial and recreational sectors.

In-season commercial closures could be applied if a commercial quota is set based on the ACL or ACT. If **Alternative 2aii** is chosen, a trip limit would need to be determined because one currently does not exist. In-season recreational AMs are more difficult to implement because they require in-season tracking of the recreational catch.

Post-season AMs do not currently exist for either sector. Paybacks of overages reduce the next year's quota by the amount of the current year's overage. For the commercial sector (**Alternative 3ai**), this quota reduction could result in early closures. For the recreational sector (**Alternative 3bi**), paybacks would necessitate either a reduction in the bag limit (**Alternative 3bii**) or season (**Alternative 3biii**) to constrain harvest within a lower quota. However, even without payback of an overage, reductions of the bag limit or season could be applied to constrain harvest within the current quota.

2.7 ACTION 7: Set ACL for Gulf Migratory Group King Mackerel

Alternative 1. Status Quo – Set ACL for Gulf group king mackerel at 10.2 MP

Alternative 2. Set ACL = ABC (13.215 MP) for Gulf group king mackerel
Option a. Set a single ACL
Option b. Set separate commercial and recreational ACLs based on current allocations
Option c. For the commercial sector, set separate ACLs for hook-and-line and run-around

gillnets

Alternative 3. Set ACL = 0.90* ABC (11.894 MP) for Gulf group king mackerel

Option a. Set a single ACL

Option b. Set separate commercial and recreational ACLs based on current allocations

Option c. For the commercial sector, set separate ACLs for hook-and-line and run-around gillnets

2.8 ACTION 8: Set ACT for Gulf Migratory Group King Mackerel

Alternative 1. No action – do not set ACT for Gulf group king mackerel

Alternative 2. Status Quo – Set ACT = current TAC (10.2 MP)

Alternative 3. Set ACT = ACL = ABC (13.215 MP) for Gulf group king mackerel

Option a. Set a single ACT

Option b. Set separate commercial and recreational ACTs based on current allocations

Option c. For the commercial sector, set separate ACTs for hook-and-line and run-around gillnets

Alternative 4. Set ACT = 0.90* ABC (11.894 MP) for Gulf group king mackerel

Option a. Set a single ACT

Option b. Set separate commercial and recreational ACTs based on current allocations

Option c. For the commercial sector, set separate ACTs for hook-and-line and run-around gillnets

2.9 ACTION 9: Set AMs for Gulf Migratory Group King Mackerel

Alternative 1. Status Quo – Retain current in-season accountability measures (AMs) for Gulf group king mackerel.

Option a. Commercial

Supoption i. Quota closures by zone, subzone, and gear (see Table 1)

Suboption ii. Trip limits and trip limit triggers (see Table 2)

Option b. Recreational bag limit of 2 per person, including captain and crew of for-hire vessels with authority of Regional Administrator to revert bag limit to zero

Alternative 2. Change in-season AMs

Option a. Commercial

Suboption i. Closure when stock/commercial ACL/ACT reached

Suboption ii. Trip limit(s) reduced when x% of stock/commercial ACL/ACT reached

Option b. Recreational

Suboption i. Closure when stock/recreational ACL/ACT reached

Suboption ii. Bag limit reduced to one when x% of stock/recreational ACL/ACT reached

Alternative 3. Set post-season AMs for Gulf group king mackerel

Option a. Commercial

Suboption i. Payback of overage from quota in the following year

Suboption ii. Reduce trip limit in the following year

Option b. Recreational

Suboption i. Payback of overage from quota in the following year

Suboption ii. Reduce bag limit in the following year

Suboption iii. Shorten season in the following year

Note: The Council may choose more than one preferred alternative.

Discussion: AMs are management controls that ensure ACLs are not exceeded or provide corrective measures if overages occur. According to NS1 guidance, AMs can be in-season actions that prevent overages during the current fishing season, or post-season actions that "correct the operational issue that caused the ACL overage, as well as any biological consequences to the stock or stock complex resulting from the overage."

Current regulations include in-season closures for the commercial sector when the quota for each zone, subzone, or gear is projected to be reached. Table 1 shows the quota for each area and the date when a closure occurred since the 2001-2002 fishing season. Each zone, subzone, and gear also has separate trip limits and some areas have triggers to adjust the trip limits (Table 2). The recreational bag limit is the same in all areas.

In-season commercial AMs could be applied to each zone, subzone, or gear as they currently are, or they could be applied according to how the ACLs and ACTs are set in Action 1. Choosing Alternative 2ai would effectively eliminate the individual quotas for each area. If Alternative 2aii were chosen, separate trip limits could still exist for each area, but triggers for trip limit reductions would all be the same and occur at the same point. In-season recreational AMs are more difficult to implement because they require in-season tracking of the recreational catch. However, it has been done; in 1988, 1989, 1990, and 1992, the recreational bag limit was reduced to zero during the fishing year.

2.10 ACTION 10: Set ACL for Gulf Migratory Group Spanish Mackerel

Alternative 1. Status Quo – Set ACL for Gulf group Spanish mackerel equal to current TAC of 9.1 MP

Alternative 2. Set ACL = yield when fishing at F30% SPR = MSY = 9.0 MP for Gulf group Spanish mackerel

Option a. Set a single ACL

Option b. Set separate commercial and recreational ACLs based on current allocations (57% commercial, 43% recreational)

Option c. Set separate commercial and recreational ACLs based on recent landings

Alternative 3. Set ACL = ABC = yield corresponding to a fishing mortality rate (FOY)

defined as: FOY=0.75*FMSY when the stock is at equilibrium (currently estimated at 8.3 MP) for Gulf group Spanish mackerel

Option a. Set a single ACL

Option b. Set separate commercial and recreational ACLs based on current allocations (57% commercial, 43% recreational)

Option c. Set separate commercial and recreational ACLs based on recent landings

Discussion: Gulf group Spanish mackerel have not been assessed since 2003. At that time catch from the 2001/2002 fishing year was approximately 3.8 million pounds and TAC was set at 9.1 million pounds. Additionally, there was only a 3% chance that SSB2003<MSST and only a 9% chance that F2003>MFMT. Consequently, the stock was neither overfishing nor overfished.

In 2003 the SSC accepted the 2003 Mackerel Stock Assessment Report as the best available science, and this report included a range of ABC between 9.0 MP and 6.3 MP based on fishing at F_{msy} and F_{oy}, respectively. However, the MSAP used a F_{oy} proxy of $F_{40\%SPR}$, as opposed to the approved definition of F_{oy} equal to 0.75%*F_{msy} when the stock is at equilibrium which would provide an F_{oy} equal to 8.3 MP. Nevertheless, the fishery has never landed 6.3 MP since the 1987/88 fishing year

2.11 Action 11: Set ACT for Gulf Migratory Group Spanish Mackerel

Alternative 1. No action – do not set ACT for Gulf group Spanish mackerel

Alternative 2. Status quo – set ACT equal to current TAC for Gulf group Spanish mackerel at 9.1 MP

Option a. Set a single ACT

Option b. Set separate commercial and recreational ACTs based on current allocations (57% commercial, 43% recreational)

Option c. Set separate commercial and recreational ACLs based on recent landings

Alternative 3. Set ACT = yield when fishing at F30% SPR = MSY = 8.7 MP for Gulf group Spanish mackerel

Option a. Set a single ACT

Option b. Set separate commercial and recreational ACTs based on current allocations (57% commercial, 43% recreational)

Option c. Set separate commercial and recreational ACLs based on recent landings

Alternative 4. Set ACT = ABC = ACL = yield corresponding to a fishing mortality rate (FOY) defined as: FOY=0.75*FMSY when the stock is at equilibrium (currently estimated at 8.3 MP) for Gulf group Spanish mackerel

Option a. Set a single ACT

Option b. Set separate commercial and recreational ACTs based on current allocations (57% commercial, 43% recreational)

Option c. Set separate commercial and recreational ACLs based on recent landings

Alternative 5. Set ACT = 0.90*yield corresponding to a fishing mortality rate (FOY)

defined as: FOY=0.75*FMSY when the stock is at equilibrium (currently estimated at 8.3 MP) for Gulf group Spanish mackerel. ACT=7.47 MP

Option a. Set a single ACT

Option b. Set separate commercial and recreational ACTs based on current allocations (57% commercial, 43% recreational)

Option c. Set separate commercial and recreational ACLs based on recent landings

Discussion: None of the choices for ACT are likely to be met since catches have never exceeded 6.2 MP.

2.12 ACTION 12: Set AMs for Gulf Migratory Group Spanish Mackerel

Alternative 1. Status Quo – Retain current in-season accountability measures (AMs) for Gulf group Spanish mackerel.

Option a. Commercial quota closure

Option b. Recreational bag limit of 15 per person per day

Alternative 2. Change in-season AMs

Option a. Commercial

Suboption i. Closure when stock ACL/ACT reached

Suboption ii. Trip limit implemented when x% of stock/commercial ACL/ACT reached

Option b. Recreational

Suboption i. Closure when stock/recreational ACL/ACT reached

Suboption ii. Bag limit reduced when x% of stock/recreational ACL/ACT reached

Alternative 3. Set post-season AMs

Option a. Commercial

Suboption i. Payback of overage from quota in the following year

Suboption ii. Implement trip limit in the following year

Option b. Recreational

Suboption i. Payback of overage from quota in the following year

Suboption ii. Reduce bag limit in the following year

Suboption iii. Shorten season in the following year

Note: The Council may choose more than one preferred alternative.

Discussion: Current regulations for Spanish mackerel include in-season closures for the commercial sector when the 5.187 million-pound quota is projected to be reached. However, the fishery has not been closed since the 1988-1989 fishing season, and commercial landings have decreased since 1991/1992 even as the quota increased.

In-season commercial closures could be applied when the commercial quota is reached as they currently are, or they could be applied when the stock ACL or ACT is reached. Any choice of a commercial ACL or ACT is not likely to invoke AMs of any kind because historical catches have been well below these limits/targets. Choosing Alternative 2ai would effectively eliminate the commercial quota. If Alternative 2aii is chosen, a trip limit would need to be determined

because one does not currently exist. In-season recreational AMs are more difficult to implement because they require in-season tracking of the recreational catch.

Post-season AMs do not currently exist for either sector. Paybacks of overages reduce the next year's quota by the amount of the current year's overage. For the commercial sector (Alternative 3ai), this quota reduction could result in earlier closures. For the recreational sector (Alternative 3bi), paybacks would necessitate either a reduction in the bag limit (Alternative 3bii) or season (Alternative 3biii) to constrain harvest within a lower quota. However, even without payback of an overage, reductions of the bag limit or season could be applied to constrain harvest within the current quota.

2.13 ACTION 13: Specify MSY, MSST, MFMT/OFL, ABC, OY, ACL, & ACT for Atlantic Migratory Group King Mackerel

2.13.1 MSY, MSST & MFMT for Atlantic Migratory Group King Mackerel

2.13.2 Overfishing Level (OFL) for for Atlantic Migratory Group King Mackerel

2.13.3 ABC Control Rule and ABC for Atlantic Migratory Group King Mackerel

2.13.4 Optimum Yield for Atlantic Migratory Group King Mackerel

2.13.5 Annual Catch Limit (ACL) for Atlantic Migratory Group King Mackerel

2.13.6 Annual Catch Target (ACT) for Atlantic Migratory Group King Mackerel

2.13.7 Accountability Measures (AMs) for Atlantic Migratory Group King Mackerel

(this is the same heading as the next item)

2.14 ACTION 14: Set AMs for Atlantic Migratory Group King Mackerel

(This is the same heading as the above item)

2.15 ACTION 15: Specify MSY, MSST, MFMT/OFL, ABC, OY, ACL, & ACT for Atlantic Migratory Group Spanish Mackerel

2.15.1 MSY, MSST & MFMT for Atlantic Migratory Group Spanish Mackerel

2.15.2 Overfishing Level (OFL) for for Atlantic Migratory Group Spanish Mackerel

2.15.3 ABC Control Rule and ABC for Atlantic Migratory Group Spanish Mackerel

2.15.4 Optimum Yield for Atlantic Migratory Group Spanish Mackerel

2.15.5 Annual Catch Limit (ACL) for Atlantic Migratory Group Spanish Mackerel

2.15.6 Annual Catch Target (ACT) for Atlantic Migratory Group Spanish Mackerel

2.15.7 Accountability Measures (AMs) for Atlantic Migratory Group Spanish Mackerel
(this is the same heading as the next item)

2.16 ACTION 16: Set AMs for Atlantic Migratory Group Spanish Mackerel
(This is the same heading as the above item)

2.17 ACTION 17: Specify MSY, MSST, MFMT/OFL, ABC, OY, ACL, & ACT for Atlantic Migratory Group Cobia

2.17.1 MSY, MSST & MFMT for Atlantic Migratory Group Cobia

2.17.2 Overfishing Level (OFL) for for Atlantic Migratory Group Cobia

2.17.3 ABC Control Rule and ABC for Atlantic Migratory Group Cobia

2.17.4 Optimum Yield for Atlantic Migratory Group Cobia

2.17.5 Allocation by Sector for Atlantic Migratory Group Cobia

2.17.6 Annual Catch Limit (ACL) for Atlantic Migratory Group Cobia

2.17.7 Annual Catch Target (ACT) for Atlantic Migratory Group Cobia

2.17.8 Accountability Measures (AMs) for Atlantic Migratory Group Cobia
(this is the same heading as the next item)

2.18 ACTION 18: Set AMs for Atlantic Migratory Group Cobia
(This is the same heading as the above item)

3.0 AFFECTED ENVIRONMENT

3.1 Physical Environment

3.2 Biological Environment

3.3 Social Environment

3.4 Economic Environment

3.5 Administrative Environment

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Action 1. Modifications to the Fishery Management Unit

4.2 Action 2. Modify the Framework Procedure

4.3 Action 3. Establish Separate Atlantic and Gulf Migratory Groups of Cobia

4.4 Action 4. Set ACL for Gulf Group Cobia

4.5 Action 5. Set ACT for Gulf Group Cobia

4.6 Action 6. Set AMs for Gulf Group Cobia

4.7 Action 7. Set ACL for Gulf Migratory Group King Mackerel

4.8 Action 8. Set ACT for Gulf Migratory Group King Mackerel

4.9 Action 9. Consider allowing the public to remove reminants of traps

4.10 Action 10. Set ACL for Gulf Migratory Group Spanish Mackerel

4.11 Action 11. Set ACT for Gulf Migratory Group Spanish Mackerel

4.12 Action 12. Set AMs for Gulf Migratory Group Spanish Mackerel

4.13 Action 13. Specify MSY, MSST, MFMT/OFL, ABC, OY, ACL & ACT for Atlantic Migratory Group King Mackerel

4.13.1 MSY, MSST & MFMT for Atlantic Migratory Group King Mackerel

4.13.2 Overfishing Level (OFL) for Atlantic Migratory Group King Mackerel

4.13.3 ABC Control Rule and ABC for Atlantic Migratory Group King Mackerel

4.13.4 Optimum Yield (OY) for Atlantic Migratory Group King Mackerel

4.13.5 Annual Catch Limit (ACL) for Atlantic Migratory Group King Mackerel

4.13.6 Annual Catch Target (ACT) for Atlantic Migratory Group King Mackerel

4.13.7 Accountability Measures (AMs) for Atlantic Migratory Group King Mackerel

4.14 Action 14. Set AMs for Atlantic Migratory Group King Mackerel

4.15 Action 15. Specify MSY, MSST, MFMT/OFL, ABC, OY, ACL & ACT for Atlantic Migratory Group Spanish Mackerel

4.15.1 MSY, MSST & MFMT for Atlantic Migratory Group Spanish Mackerel

4.15.2 Overfishing Level (OFL) for Atlantic Migratory Group Spanish Mackerel

4.15.3 ABC Control Rule and ABC for Atlantic Migratory Group Spanish Mackerel

4.15.4 Optimum Yield (OY) for Atlantic Migratory Group Spanish Mackerel

4.15.5 Annual Catch Limit (ACL) for Atlantic Migratory Group Spanish Mackerel

4.15.6 Annual Catch Target (ACT) for Atlantic Migratory Group Spanish Mackerel

4.15.7 Accountability Measures (AMs) for Atlantic Migratory Group Spanish Mackerel

4.16 Action 16. Set AMs for Atlantic Migratory Group Spanish Mackerel

4.17 Action 17. Specify MSY, MSST, MFMT/OFL, ABC, OY, ACL & ACT for Atlantic Migratory Group Cobia

4.17.1 MSY, MSST & MFMT for Atlantic Migratory Group Cobia

4.17.2 Overfishing Level (OFL) for Atlantic Migratory Group Cobia

4.17.3 ABC Control Rule and ABC for Atlantic Migratory Group Cobia

4.17.4 Optimum Yield (OY) for Atlantic Migratory Group Cobia

4.17.5 Allocation by Sector for Atlantic Migratory Group Cobia

4.17.6 Annual Catch Limit (ACL) for Atlantic Migratory Group Cobia

4.17.7 Annual Catch Target (ACT) for Atlantic Migratory Group Cobia

4.17.8 Accountability Measures (AMs) for Atlantic Migratory Group Cobia

4.18 Action 18. Set AMs for Atlantic Migratory Group Cobia

5.0 LIST OF PREPARERS

6.0 LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS WHO RECEIVED COPIES

7.0 REFERENCES

8.0 INDEX

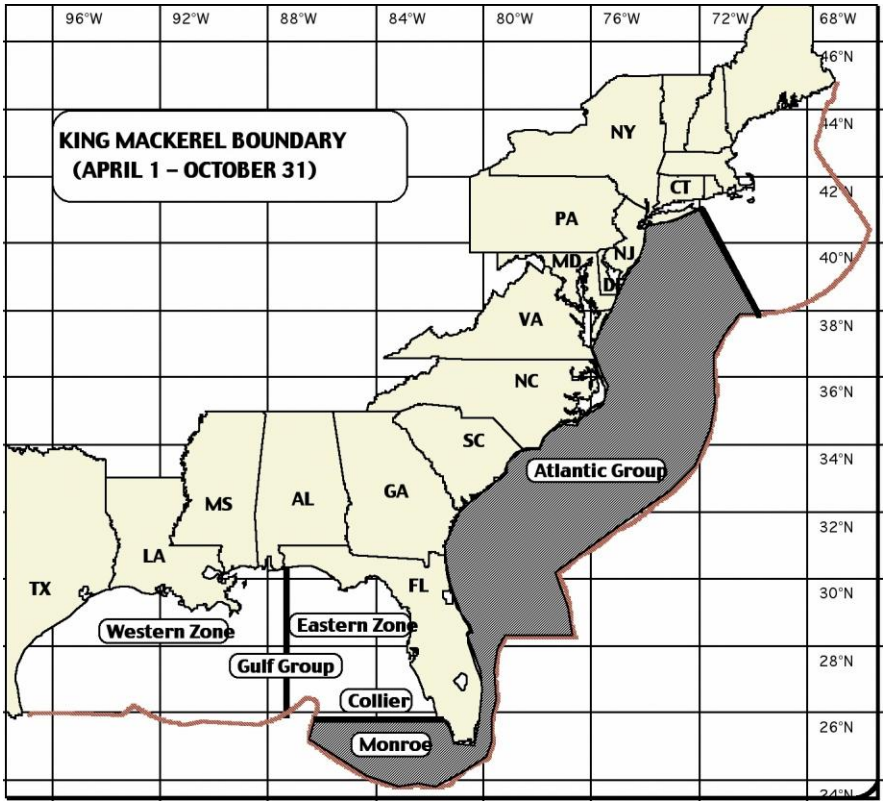

Figure 1

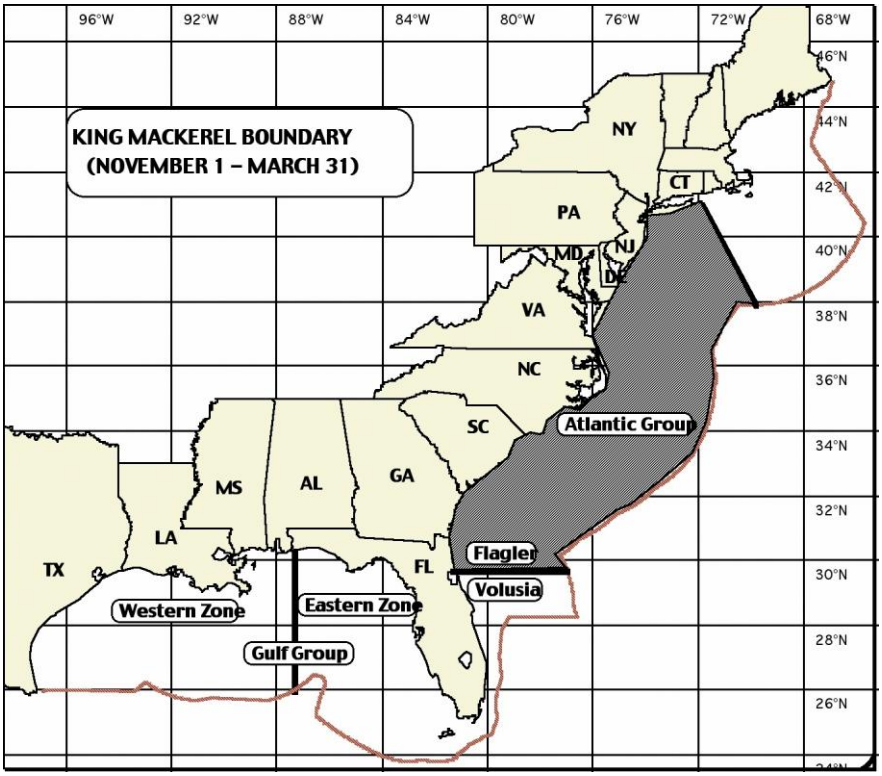

Figure 2

APPENDIX A – MODIFICATIONS TO FRAMEWORK

Section 12.6.1 Mechanism for Determination of Framework Adjustments, as modified by this and previous amendments is as follows:

Section 12.6.1.1:

A. ~~An assessment panel (Panel) appointed by the Councils will normally reassess the condition of each stock or migratory group of Spanish and Spanish mackerel and cobia in alternate (even numbered) years and other stocks when data allows for the purpose of providing for any needed preseason adjustment of TAC and other framework measures. However, in the event of changes in the stocks or fisheries~~, **T**he Councils may request ~~additional~~ assessments as may be needed. The Councils, however, may make annual seasonal adjustments based on the most recent assessment. ~~The Panel shall be composed of NMFS scientists, Council staff, Scientific and Statistical Committee members, and other state, university, and private scientists as deemed appropriate by the Councils.~~

Each stock assessment ~~The Panel~~ **should** ~~will~~ address the following **and perhaps other** items for each stock:

1. Stock identity and distribution. This should include situations where there are groups of fish within a stock which are sufficiently different that they should be managed as separate units. If several possible stock divisions exist, ~~the Panel~~ **they** should describe the likely alternatives.

2. MSY and/or B_{MSY} (or appropriate proxies) for each identified stock. If more than one possible stock division exists, MSY and/or B_{MSY} for each possible combination should be estimated.

3. Condition of the stock(s) or groups of fish within each stock which could be managed separately. For each stock, this should include but not be limited to:

   a. Fishing mortality rate**s** relative to F_{MSY} and $F_{0.1}$ as well as $F_{30\ percentSPR,}$ and $F_{40\ percentSPR,}$ **OFL, or other limits as deemed appropriate.**

   b. Spawning potential ratio**s** (SPR).

   c. Abundance relative to **biomass at MSY and MSST** ~~an adequate spawning biomass.~~

   d. Trends in recruitment.

   e. Acceptable Biological Catch (ABC) **estimates** which will result in long-term yield as near MSY as possible **based on the level of scientific uncertainty.**

   f. Calculation of catch ratios based on catch statistics using procedures defined in the FMP as modified.

   g. Estimate of current mix of Atlantic and Gulf migratory group Spanish mackerel in the mixing zone for use in tracSpanish quotas.

4. **Overfished and** Overfishing:

a. **Gulf group Spanish mackerel stocks in the Gulf of Mexico will be considered overfished if the probability that $B_{current}$ is less than MSST is greater than 50%. The minimum stock size threshold (MSST) is defined as (1-M)*B_{MSY} or 80% of B_{MSY}. Gulf group Spanish mackerel stocks and cobia stocks in the Gulf of Mexico will be considered overfished if the probability that $B_{current}$ is less than MSST is greater than 50%. The minimum stock size threshold (MSST) is defined as (1-M)*B_{MSY} or 70% of B_{MSY}.** ~~A mackerel stock or migratory group is considered to be overfished when the biomass is reduced below the MSST.~~

b. The South Atlantic Council's target level or OY is 40 percent static SPR. The Gulf Council's target level or optimum yield (OY) is **the yield corresponding to a fishing mortality rate (F_{OY}) defined as: F_{OY}=0.85*F_{MSY} when the stock is at equilibrium for Gulf group Spanish mackerel and the yield corresponding to a fishing mortality rate (F_{OY}) defined as: F_{OY}=0.75*F_{MSY} when the stock is at equilibrium for Gulf group Spanish mackerel and cobia** ~~30 percent static SPR.~~ ABC is calculated based on **both MSY (defined for Gulf group Spanish and Spanish mackerel as the yield associated with $F_{30\% SPR}$ when the stock is at equilibrium and the yield associated with F_{MSY} when the stock is at equilibrium for cobia) and OY as well as the consideration of scientific uncertainty.** ~~the target level or optimum yield (SAFMC = 40 percent static SPR and GMFMC = 30 percent static SPR).~~

c. When a stock or migratory group is overfished (biomass is below MSST), a rebuilding program that makes consistent progress towards restoring stock condition must be implemented and continued until the stock is restored to **B_{MSY}** ~~MSY~~. The rebuilding program must be designed to achieve recovery within an acceptable time frame consistent with the National Standard Guidelines, and as specified by the Councils. The Councils will continue to rebuild the stock above MSY until the stock is restored to the management target (OY) if different from MSY.

d. ~~When a stock or migratory group is not overfished,~~ **T**he act of overfishing is defined as **MFMT = F_{MSY} and OFL is the yield associated with this level of fishing mortality. The Gulf group Spanish mackerel, Gulf group Spanish mackerel and Gulf group cobia stocks would be considered undergoing overfishing if the probability that $F_{current}$ is larger than F_{MSY} is greater than 50%.** ~~a static SPR that exceeds the threshold of 30 percent (i.e., $F_{30\ percent}$ or MFMT).~~ If fishing mortality rates that exceed the level associated with **these thresholds** ~~the static SPR threshold~~ are maintained, the stock**s** may become overfished. Therefore, if overfishing is occurring, a program to reduce fishing mortality rates toward management target levels (OY) will be implemented, even if the stock or migratory group is not in an overfished condition.

e. **The stock assessment process should** ~~The Councils have requested the Mackerel Stock Assessment Panel (MSAP)~~ provide a range of possibilities and options for specifying B_{MSY} and the MSST.

f. For species when there is insufficient information to determine whether the stock or migratory group is overfished, overfishing is defined as a fishing mortality rate in excess of the fishing mortality rate corresponding to a default threshold static SPR of 30 percent, which is the MFMT. If overfishing is occurring, a program to reduce fishing mortality rates to at least the level corresponding to management target levels will be implemented.

5. Management options. If recreational or commercial fishermen have achieved or are expected to achieve their allocations, the **stock assessment** ~~Panel~~ may **include** ~~delineate~~ possible options for non-quota restrictions on harvest, including effective levels for such actions as:

a. Bag limits.
b. Size limits.
c. Gear restrictions.
d. Vessel trip limits.
e. Closed season or areas, and
f. Other options as requested by the Councils.

6. **The stock assessment process may also evaluate and provide recommendations for** ~~The Panels may also recommend~~ more appropriate levels or statements for the MSY (or proxy), OY, MFMT, ~~and~~ MSST**, OFL and ABC** for any stock, including ~~their~~ rationale for the proposed change**s**.

7. Other biological questions, as appropriate, **may also be addressed through the stock assessment process**.

B. **The stock assessment process** ~~The Panel~~ will **develop** ~~prepare~~ a written report with ~~its~~ recommendations for submission to the councils **and their SSCs** ~~each year (even years - full assessment, odd years - mini assessments)~~ by such date as may be specified by the councils **in coordination with NMFS**. The report will contain the scientific basis for ~~their~~ recommendations and indicate the degree of reliability **and uncertainty** which the Council should place on the recommended stock divisions, levels of catch, ~~and~~ options for non-quota controls of the catch**, and any other recommendations**.

C. The Councils may take action based on the ~~panel~~ report or may take action based on issues/information that surface separate from the **report** ~~assessment group~~. The steps are as follows:

1. **The stock assessment process** ~~Assessment panel~~ report: The councils **and their SSCs** will consider the report and recommendations ~~of the Panel~~ and such public comments as are relevant to the ~~Panel's~~ report. Public hearings will be held at the time and place where the councils consider the ~~Panel's~~ report. The councils will consult their Advisory Panels and Scientific and Statistical Committees to review the report and provide advice prior to taSpanish final action. After receiving public input, the councils will make findings on the need for changes.

2. Information separate from **the stock assessment process** ~~assessment panel~~ report: The Councils will consider information that surfaces separate from **the stock**

assessment process ~~the assessment group~~. **The** Councils' staff will compile the information and analyze the impacts of likely alternatives to address the particular situation. The councils' staff report will be presented to the councils. A public hearing will be held at the time and place where councils consider the Councils' staff report. The council**s will** consult their Advisory Panels and Scientific and Statistical Committees to review the report and provide advice prior to taSpanish final action. After receiving public input, the councils will make findings on the need for changes.

D. If changes are needed in the following, the councils will advise the Regional Administrator (RA) of the Southeast Region of the National Marine Fisheries Service in writing of their recommendations, accompanied by the **stock assessment process report, staff reports,** ~~assessment panel's report~~, relevant background material, and public comments, **as appropriate**:

a. MSY or B_{MSY} (or proxies),
b. overfishing levels (MFMT) and overfished levels (MSST),
c. TACs and OY statements,
d. OFL, ABC, ACL, and possibly ACT
e~~d~~. quotas (including zero quotas),
f~~e~~. trip limits,
g~~f~~. bag limits (including zero bag limits),
h~~g~~. minimum sizes,
~~**i**~~**h**. reallocation of Atlantic group Spanish mackerel,
~~**j**~~**i**. gear restriction (ranging from modifying current regulations to a complete prohibition),
~~**k**~~**j**. permit requirements, or
~~**l**~~**k**. season/area closure and reopening (including spawning closure).
m. zones, subzones, and migratory group boundaries
n. allocations

Recommendations with respect to the Atlantic migratory groups of Spanish and Spanish mackerel **and cobia** will be the responsibility of the South Atlantic Council, and those for the Gulf migratory groups of Spanish and Spanish mackerel **and cobia** will be the responsibility of the Gulf Council. Except that the SAFMC will have responsibility to set vessel trip limits, closed seasons or areas, or gear restrictions for the northern area of the Eastern Zone (Dade through Volusia Counties, Florida) for the commercial fishery for Gulf group Spanish mackerel. ~~This report shall be submitted by such data as may be specified by the Councils.~~

For stocks~~, such as cobia,~~ where scientific information indicates it is a common stock that migrates through the Gulf and South Atlantic jurisdictions, both councils must concur on the recommendations. For other stocks~~, such as bluefish, cero, and little tunny, there is no scientific information that shows they are common stocks, and~~ each council will separately make management recommendations for these stocks in their jurisdictions.

E. The RA will review the councils' recommendations, supporting rationale, public comments and other relevant information, and if the RA concurs with the recommendations, the RA will draft regulations in accordance with the recommendations. The RA may also reject **any** ~~the~~ recommendation, providing written reasons for rejection. In the event the RA rejects **a** ~~the~~ recommendation, existing regulations shall remain in effect until resolved. However, if the RA finds that a proposed recreational bag limit for Gulf migratory group or groups of Spanish

mackerels is likely to exceed the allocation and rejects the Council**'s**~~'~~ recommendation, the bag limit reverts to one fish per person per day.

F. If the RA concurs that the councils' recommendations are consistent with the goals and objectives of the plan, the National Standards, and other applicable law, the RA shall implement the regulations by proposed and final rules in the Federal Register prior to the appropriate fishing year or such dates as may be agreed upon with the councils. A reasonable period for public comment shall be afforded, consistent with the urgency, if any, of the need to implement the management measure.

Appropriate regulatory changes that may be implemented by the RA by proposed and final rules in the Federal Register are:

1. Adjustment of the overfishing level (MFMT) for Spanish and Spanish mackerels and **cobia** ~~other stocks~~. Specification of B_{MSY} and the MSST for the stocks. Respecification of levels or statements of OY and MSY (proxy).

2. Setting **ACLs** ~~total allowable catches (TACs)~~ for each stock or migratory group of fish which should be managed separately, as identified in the FMP provided:

   a. No **ACL** ~~TAC~~ may exceed the best point estimate of MSY ~~by more than 10 percent for more than one year.~~

   b. No **ACL** ~~TAC~~ may exceed the upper range of ABC **or the ABC recommended by the respective SSC** ~~if it results in overfishing~~ **(as previously defined)**~~.~~

   c. Downward adjustments of **ACL** ~~TAC~~ of any amount **(i.e. to ACT)** are allowed in order to protect the stock and prevent overfishing.

   d. Reductions or increases in allocations as a result of changes in the **ACL** ~~TAC~~ are to be as equitable as may be practical utilizing similar percentage changes to allocations for participants in a fishery.

3. Adjusting user group allocations in response to changes in **ACLs** ~~TACs~~ according to the formula specified in the FMP.

4. The reallocation of Atlantic Spanish mackerel between recreational and commercial fishermen may be made through the framework after consideration of changes in the social and/or economic characteristics of the fishery. Such allocation adjustments shall not be greater than a ten percent change in one year to either sector's allocation. Changes may be implemented over several years to reach a desired goal, but must be assessed each year relative to changes in TAC and social and/or economic impacts to either sector of the fishery.

5. Modifying (or implementing for a particular species):

   a. quotas (including zero quotas)
   b. trip limits
   c. bag limits (including zero bag limits)
   d. minimum sizes

e. re-allocation of Atlantic group Spanish mackerel by no more than 10 percent per year to either the commercial or recreational sector.
f. gear restriction (ranging from modifying current regulations to a complete prohibition)
g. permit requirements, or
h. season/area closures and re-openings (including spawning closure)
i. zones, subzones, migratory group boundaries and allocations

Authority is also granted to the RA to close any fishery, i.e., revert any bag limit to zero, and close and reopen any commercial fishery, once a quota has been established through the procedure described above; and such quota has been filled. When such action is necessary, the RA will recommend that the Secretary publish a notice in the Federal Register as soon as possible.

APPENDIX B – BASE FRAMEWORK PROCEDURE

This framework procedure provides standardized procedures for implementing management changes pursuant to the provisions of the FMP. There are two basic processes, the open framework process and the closed framework process. Open frameworks address issues where there is more policy discretion in selecting among various management options developed to address an identified management issue, such as changing a size limit to reduce harvest. Closed frameworks address 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 after their quota has been 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 Council 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 Council 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 MSA, ESA, MMPA, or are required as a result of a court order.

        In such instances the Regional Administrator will notify the Council 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 Council to the Regional Administrator containing the proposed action, and the relevant biological, social and economic information to support the action. If multiple actions are proposed, a finding that the actions are also routine or insignificant must also be included. If the Regional Administrator concurs with the determination and approves the proposed action, the action will be implemented through publication of appropriate notification in the Federal Register. Actions that may be viewed as routine or insignificant include, among others:

i. Reporting and monitoring requirements,

ii. Permitting requirements,

iii. Bag and possession limit changes of not more than 1 fish,

iv. Size limit changes of not more than 10% of the prior size limit,

v. Vessel trip limit changes of not more than 10% of the prior trip limit,

vi. Closed seasons of not more than 10% of the overall open fishing season,

vii. Species complex composition,

viii. Restricted areas (seasonal or year-round) affecting no more than a total of 100 nautical square miles,

ix. Respecification of ACL, ACT or quotas that had been previously approved as part of a series of ACLs, ACTs or quotas,

x. 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,

xi. Gear restrictions, except those that result significant changes in the fishery, such as complete prohibitions on gear types,

xii. 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, among others:

i. Specification of ACTs or sector ACTs,

ii. Rebuilding plans and revisions to approved rebuilding plans,

iii. The addition of new species to existing limited access privilege programs (LAPP),

iv. Changes specified in section 4(a) that exceed the established thresholds.

3. The Council will 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 council meeting.

4. Prior to taking final action on the proposed framework action, the Council may convene its SSC, SEP, or AP, as appropriate, to provide recommendations on the proposed actions.

5. For all framework actions, the Council will provide the letter, memo, or the completed framework document along with proposed regulations to the Regional Administrator in a timely manner following final action by the Council.

6. For all framework action requests, the Regional Administrator will review the Council's recommendations and supporting information and notify the Council of the determinations, in accordance with the MSA[1] and other applicable law.

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[1] SEC. 304. ACTION BY THE SECRETARY 16 U.S.C. 1854

(a) REVIEW OF PLANS.—

(1) Upon transmittal by the Council to the Secretary of a fishery management plan or plan amendment, the Secretary shall—

(A) immediately commence a review of the plan or amendment to determine whether it is consistent with the national standards, the other provisions of this Act, and any other applicable law; and

(B) immediately publish in the Federal Register a notice stating that the plan or amendment is available and that written information, views, or comments of interested persons on the plan or amendment may be submitted to the Secretary during the 60-day period beginning on the date the notice is published.

(2) In undertaking the review required under paragraph (1), the Secretary shall—

(A) take into account the information, views, and comments received from interested persons;

(B) consult with the Secretary of State with respect to foreign fishing; and

(C) consult with the Secretary of the department in which the Coast Guard is operating with respect to enforcement at sea and to fishery access adjustments referred to in section 303(a)(6).

(3) The Secretary shall approve, disapprove, or partially approve a plan or amendment within 30 days of the end of the comment period under paragraph (1) by written notice to the Council. A notice of disapproval or partial approval shall specify—

(A) the applicable law with which the plan or amendment is inconsistent;

(B) the nature of such inconsistencies; and

(C) recommendations concerning the actions that could be taken by the Council to conform such plan or amendment to the requirements of applicable law. If the Secretary does not notify a Council within 30 days of the end of the comment period of the approval, disapproval, or partial approval of a plan or amendment, then such plan or amendment shall take effect as if approved.

(4) If the Secretary disapproves or partially approves a plan or amendment, the Council may submit a revised plan or amendment to the Secretary for review under this subsection.

(5) For purposes of this subsection and subsection (b), the term "immediately" means on or before the 5th day after the day on which a Council transmits to the Secretary a fishery management plan, plan amendment, or proposed regulation that the Council characterizes as final.

(b) REVIEW OF REGULATIONS.—

(1) Upon transmittal by the Council to the Secretary of proposed regulations prepared under section 303(c), the Secretary shall immediately initiate an evaluation of the proposed regulations to determine whether they are consistent with the fishery management plan, plan amendment, this Act and other applicable law. Within 15 days of initiating such evaluation the Secretary shall make a determination and—

(A) if that determination is affirmative, the Secretary shall publish such regulations in the Federal Register, with such technical changes as may be necessary for clarity and an explanation of those changes, for a public comment period of 15 to 60 days; or

(B) if that determination is negative, the Secretary shall notify the Council in writing of the inconsistencies and provide recommendations on revisions that would make the proposed regulations consistent with the fishery management plan, plan amendment, this Act, and other applicable law.

(2) Upon receiving a notification under paragraph (1)(B), the Council may revise the proposed regulations and submit

Closed Framework:

1. Consistent with existing requirements in the FMP and implementing regulations, the Regional Administrator 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 (e.g., within x percent) or is projected to approach its ACL, or implement a post-season AM for a sector that exceeded its ACL in the current year.

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them to the Secretary for reevaluation under paragraph (1).
(3) The Secretary shall promulgate final regulations within 30 days after the end of the comment period under paragraph (1)(A). The Secretary shall consult with the Council before making any revisions to the proposed regulations, and must publish in the Federal Register an explanation of any differences between the proposed and final regulations.

APPENDIX C – BROAD FRAMEWORK PROCEDURE

This framework procedure provides standardized procedures for implementing management changes pursuant to the provisions of the FMP. There are two processes, the open framework process and the closed framework process. Open frameworks address issues where there is more policy discretion in selecting among various management options developed to address an identified management issue, such as changing a size limit to reduce harvest. Closed frameworks address 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 after their quota has been harvested.

Open Framework:

1. The council may utilize this framework procedure to implement management changes in response to any additional information or changed circumstances.

   The Council will, as part of a proposed framework action, identify the new information and provide rationale as to why this new information requires that management measures be adjusted.

2. Open framework actions may be implemented at any time based on information supporting the need for adjustment of management measures or management parameters:

   a. Actions that may be implemented via the framework procedure include:

      i. Reporting and monitoring requirements,

      ii. Permitting requirements,

      iii. Bag and possession limits,

      iv. Size limits,

      v. Vessel trip limits,

      vi. Closed seasons,

      vii. Species complex composition, or inclusion of new species under existing IFQs,

      viii. Restricted areas (seasonal or year-round),

      ix. Respecification of ACL, ACT or quotas that had been previously approved as part of a series of ACLs, ACTs or quotas,

      x. 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,

xi. Gear restrictions, except those that result in significant changes in the fishery, such as complete prohibitions on gear types,

xii. Quota changes,

xiii. Specification of ACTs or sector ACTs,

xiv. Rebuilding plans and revisions to approved rebuilding plans,

xv. Any other measures deemed appropriate by the council.

3. The Council will initiate the open framework process to inform the public of the issue and develop potential alternatives to address the issue. The framework process will include the development of documentation and public discussion during one council meeting.

4. For all framework actions, the Council will provide the letter, memo, or the completed framework document along with proposed regulations to the Regional Administrator following final action by the Council.

5. For all framework action requests, the Regional Administrator will review the Council's recommendations and supporting information and notify the Council of the determinations, in accordance with the MSA and other applicable law.

Closed Framework:

2. Consistent with existing requirements in the FMP and implementing regulations, the Regional Administrator 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 (e.g., within x percent) or is projected to approach its ACL, or implement a post-season AM for a sector that exceeded its ACL in the current year,

d. Take any other immediate action specified in the regulations.

APPENDIX D – NARROW FRAMEWORK PROCEDURE

This framework procedure provides standardized procedures for implementing management changes pursuant to the provisions of the FMP. There are two basic processes, the open framework process and the closed framework process. Open frameworks address issues where there is more policy discretion in selecting among various management options developed to address an identified management issue, such as changing a size limit to reduce harvest. Closed frameworks address 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 after their quota has been harvested.

Open Framework:

1. Situations under which this framework procedure may be used to implement management changes include only 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 Council 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.

2. Open framework actions may be implemented only in response to the above conditions.

    a. Actions that may be implemented via the framework procedure include only the following:

        i. Reporting and monitoring requirements,

        ii. Bag and possession limits,

        iii. Size limits,

        iv. Closed seasons,

        v. Restricted areas (seasonal or year-round),

        vi. Quotas.

3. The Council will initiate the open framework process to inform the public of the issue and develop potential alternatives to address the issue. The framework process will include the development of documentation and public discussion during at least three council meetings, and shall be discussed at separate public hearings within the areas most affected by the proposed measures.

4. Prior to taking final action on the proposed framework action, the Council shall convene its SSC, SEP, and AP to provide recommendations on the proposed actions.

5. For all framework actions, the Council will provide the letter, memo, or the completed framework document, and all supporting analyses, along with proposed regulations to the Regional Administrator in a timely manner following final action by the Council.

6. For all framework action requests, the Regional Administrator will review the Council's recommendations and supporting information and notify the Council of the determinations, in accordance with the MSA and other applicable law. The Regional Administrator will provide the Council weekly updates on the status of the proposed measures.

Closed Framework:

3. Consistent with existing requirements in the FMP and implementing regulations, the Regional Administrator 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,

Implement an in-season AM for a sector that has reached or is projected to reach, or is approaching (e.g., within x percent) or is projected to approach its ACL, or implement a post-season AM for a sector that exceeded its ACL in the current year.

APPENDIX E – TABLES

Table 1. Trends of Fishing Mortality & Spawning Stock Biomass – GOM Stock

SSB VPA estimated value Million hydrated eggs					SSB/MSST				
Year	Deterministic	low CI	Median	upp CI	Year	Deterministic	low CI	Median	upp CI
1981	2123	2103	2111	2124	1981	0.811	0.804	0.807	0.812
1982	2036	2015	2023	2036	1982	0.778	0.770	0.773	0.779
1983	1555	1532	1541	1556	1983	0.594	0.586	0.589	0.595
1984	1590	1565	1574.5	1591	1984	0.607	0.598	0.602	0.608
1985	1502	1473	1484	1503	1985	0.574	0.563	0.567	0.575
1986	1532	1495	1509	1534	1986	0.585	0.572	0.577	0.586
1987	1590	1543	1561	1592	1987	0.607	0.590	0.597	0.608
1988	1731	1676	1697	1733	1988	0.661	0.641	0.649	0.662
1989	1748	1680	1706	1751	1989	0.668	0.643	0.652	0.669
1990	1885	1796	1830	1888	1990	0.720	0.687	0.700	0.722
1991	2040	1929	1972	2045	1991	0.779	0.738	0.754	0.782
1992	2215	2072	2126.5	2220	1992	0.846	0.792	0.813	0.849
1993	2245	2070	2137.5	2252	1993	0.857	0.792	0.817	0.861
1994	2265	2052	2134	2273	1994	0.865	0.785	0.816	0.869
1995	2210	1932	2038.5	2220	1995	0.844	0.739	0.779	0.849
1996	2340	1987	2123	2353	1996	0.894	0.760	0.811	0.900
1997	2443	2006	2174	2459	1997	0.933	0.767	0.831	0.940
1998	2509	1979	2185.5	2531	1998	0.958	0.757	0.835	0.967
1999	2658	2036	2286.5	2700	1999	1.015	0.779	0.874	1.032
2000	2788	2106	2396.5	2850	2000	1.065	0.806	0.916	1.089
2001	2876	2162	2487	2968	2001	1.098	0.828	0.951	1.134
2002	2873	2180	2526	3032	2002	1.097	0.834	0.966	1.159
2003	2872	2226	2578	3091	2003	1.097	0.851	0.987	1.180
2004	2955	2343	2728	3218	2004	1.129	0.896	1.043	1.227
2005	3285	2645	3116	3644	2005	1.255	1.012	1.191	1.394
2006	3921	3224	3846	4512	2006	1.498	1.237	1.471	1.725

F apical VPA Estimate Fishing Mortality Rate				
Year	Deterministic	low CI	Median	upp CI
1981	0.340	0.340	0.342	0.343
1982	1.008	1.008	1.012	1.014
1983	0.413	0.413	0.414	0.415
1984	0.427	0.427	0.429	0.430
1985	0.558	0.558	0.561	0.563
1986	0.556	0.556	0.561	0.565
1987	0.493	0.492	0.499	0.504
1988	0.368	0.367	0.383	0.393
1989	0.548	0.548	0.557	0.563
1990	0.422	0.421	0.439	0.449
1991	0.568	0.568	0.586	0.597
1992	0.713	0.711	0.732	0.745
1993	0.508	0.505	0.552	0.584
1994	0.681	0.679	0.707	0.724
1995	0.537	0.535	0.582	0.614
1996	0.378	0.375	0.420	0.451
1997	0.294	0.292	0.336	0.369
1998	0.313	0.311	0.362	0.401
1999	0.346	0.306	0.339	0.365
2000	0.313	0.259	0.286	0.313
2001	0.212	0.191	0.214	0.239
2002	0.177	0.158	0.185	0.220
2003	0.225	0.202	0.263	0.332
2004	0.223	0.176	0.210	0.257
2005	0.239	0.195	0.233	0.279
2006	0.288	0.212	0.254	0.313

Fcurr/ MFMT				
Year	Deterministic	low CI	Median	upp CI
1983	1.446	1.385	1.530	1.647
1984	1.434	1.376	1.520	1.637
1985	1.398	1.347	1.489	1.607
1986	1.343	1.294	1.431	1.544
1987	1.440	1.387	1.532	1.654
1988	1.613	1.558	1.726	1.863
1989	1.846	1.790	1.983	2.141
1990	1.754	1.713	1.899	2.053
1991	2.027	1.974	2.187	2.367
1992	1.866	1.829	2.032	2.199
1993	1.984	1.957	2.186	2.382
1994	1.942	1.924	2.169	2.373
1995	2.095	2.077	2.365	2.603
1996	1.898	1.889	2.159	2.379
1997	1.536	1.516	1.754	1.935
1998	1.267	1.233	1.424	1.570
1999	1.231	1.165	1.323	1.453
2000	1.273	1.153	1.290	1.412
2001	1.132	0.974	1.119	1.236
2002	0.854	0.738	0.843	0.942
2003	0.765	0.709	0.826	0.958
2004	0.778	0.692	0.810	0.952
2005	0.826	0.728	0.899	1.106
2006	0.827	0.714	0.828	0.969

Table 2. Trends of Fishing Mortality and Spawning Stock Biomass - Atlantic Stock

SSB VPA Estimated Value Million Hydrated Eggs				
Year	Deterministic	low CI	Median	upp CI
1981	4508	4496	4509	4551
1982	4568	4555	4569	4615
1983	4587	4573	4589	4640
1984	4498	4483	4500	4555
1985	4418	4400	4420	4483
1986	4275	4253	4277	4353
1987	4086	4059	4089	4182
1988	3873	3842	3877	3985
1989	3555	3520	3559	3682
1990	3545	3500	3550	3705
1991	3580	3520	3587	3797
1992	3369	3294	3377	3640
1993	3098	3010	3108	3416
1994	2962	2861	2973	3328
1995	2873	2753	2887	3307
1996	2847	2698	2864	3383
1997	2824	2643	2844	3474
1998	2701	2494	2722.5	3439
1999	2641	2410	2664.5	3433
2000	2640	2382	2658.5	3442
2001	2476	2194	2485.5	3258
2002	2377	2069	2374	3119
2003	2341	2000	2320	3008
2004	2365	1958	2336	3038
2005	2433	1973	2426.5	3102
2006	2443	1951	2476.5	3203

SSB/MSST				
Year	Deterministic	low CI	Median	upp CI
1981	2.468	2.463	2.470	2.492
1982	2.501	2.495	2.503	2.528
1983	2.512	2.505	2.514	2.541
1984	2.463	2.455	2.465	2.495
1985	2.419	2.410	2.421	2.455
1986	2.341	2.330	2.343	2.383
1987	2.237	2.224	2.240	2.290
1988	2.121	2.105	2.124	2.182
1989	1.947	1.928	1.950	2.015
1990	1.941	1.917	1.945	2.028
1991	1.960	1.928	1.965	2.078
1992	1.845	1.804	1.851	2
1993	1.696	1.648	1.703	1.869
1994	1.622	1.567	1.629	1.820
1995	1.573	1.508	1.582	1.808
1996	1.559	1.478	1.570	1.849
1997	1.546	1.448	1.559	1.898
1998	1.479	1.367	1.493	1.877
1999	1.446	1.320	1.459	1.872
2000	1.446	1.305	1.456	1.883
2001	1.356	1.202	1.361	1.782
2002	1.302	1.134	1.300	1.706
2003	1.282	1.095	1.271	1.647
2004	1.295	1.074	1.280	1.657
2005	1.332	1.081	1.329	1.697
2006	1.338	1.071	1.357	1.749

F Apical VPA Estimate Fishing Mortality Rate

Year	Deterministic	low CI	Median	upp CI
1981	0.442	0.440	0.442	0.443
1982	0.386	0.383	0.386	0.387
1983	0.382	0.378	0.381	0.382
1984	0.287	0.284	0.287	0.288
1985	0.441	0.437	0.441	0.442
1986	0.288	0.284	0.288	0.289
1987	0.208	0.205	0.208	0.209
1988	0.287	0.282	0.287	0.289
1989	0.219	0.213	0.219	0.220
1990	0.331	0.320	0.331	0.334
1991	0.311	0.297	0.311	0.316
1992	0.345	0.325	0.344	0.351
1993	0.318	0.293	0.317	0.326
1994	0.252	0.226	0.251	0.260
1995	0.361	0.318	0.360	0.376
1996	0.366	0.314	0.364	0.383
1997	0.390	0.320	0.388	0.416
1998	0.315	0.240	0.312	0.346
1999	0.233	0.165	0.230	0.264
2000	0.263	0.203	0.259	0.298
2001	0.285	0.248	0.287	0.305
2002	0.269	0.245	0.274	0.294
2003	0.358	0.284	0.362	0.406
2004	0.377	0.324	0.393	0.455
2005	0.344	0.296	0.373	0.458
2006	0.359	0.310	0.409	0.534

Fcurr/ MFMT

Year	Deterministic	low CI	Median	upp CI
1983	0.914	0.784	0.854	0.919
1984	0.745	0.637	0.695	0.749
1985	0.754	0.645	0.704	0.758
1986	1.010	0.863	0.943	1.016
1987	0.804	0.684	0.751	0.808
1988	0.613	0.521	0.572	0.616
1989	0.623	0.528	0.581	0.625
1990	0.669	0.566	0.625	0.672
1991	0.683	0.575	0.638	0.684
1992	0.815	0.680	0.762	0.817
1993	0.974	0.802	0.912	0.977
1994	0.937	0.758	0.878	0.940
1995	0.831	0.658	0.780	0.835
1996	0.906	0.703	0.852	0.913
1997	1.154	0.873	1.086	1.165
1998	1.025	0.746	0.965	1.043
1999	0.783	0.530	0.737	0.814
2000	0.705	0.477	0.666	0.739
2001	0.725	0.517	0.687	0.747
2002	0.718	0.551	0.684	0.740
2003	0.771	0.628	0.741	0.814
2004	0.893	0.725	0.877	0.983
2005	0.984	0.811	0.985	1.150
2006	1.006	0.869	1.076	1.306

Table 3. Proportions of Catch by Stock Unit at Different Boundaries in the FL East Coast

Deterministic Run Yield Landings Million Pounds – Gulf of Mexico

Projections Final Model

Year	F30%SPR	F40%SPR	F 85%SPR30	F 75%SPR30	F 65%SPR30	Fcurrent
2007	11.810	11.810	11.810	11.810	11.810	11.810
2008	17.130	12.610	14.778	13.162	11.513	14.394
2009	17.491	13.543	15.496	14.050	12.513	15.157
2010	16.286	13.223	14.791	13.640	12.357	14.526
2011	14.240	12.046	13.215	12.366	11.369	13.023
2012	12.432	10.834	11.715	11.080	10.300	11.576
2013	11.277	10.018	10.732	10.221	9.568	10.622
2014	10.503	9.438	10.053	9.614	9.041	9.958
2015	10.148	9.200	9.755	9.361	8.834	9.672
2016	9.886	9.015	9.533	9.165	8.669	9.456

Projections adjusted for Dade-Monroe management unit

Year	F30%SPR	F40%SPR	F 85%SPR30	F 75%SPR30	F 65%SPR30	Fcurrent
2007	10.823	10.823	10.823	10.823	10.823	10.823
2008	15.258	11.200	13.164	11.726	10.258	12.992
2009	15.535	12.006	13.768	12.486	11.124	13.602
2010	14.524	11.772	13.194	12.170	11.028	13.067
2011	12.823	10.826	11.900	11.137	10.242	11.816
2012	11.293	9.814	10.638	10.060	9.351	10.585
2013	10.326	9.145	9.822	9.351	8.753	9.785
2014	9.685	8.677	9.265	8.858	8.330	9.234
2015	9.384	8.480	9.014	8.647	8.159	8.990
2016	9.162	8.328	8.828	8.485	8.024	8.807

Projections adjusted for Council boundary management unit

Year	F30%SPR	F40%SPR	F 85%SPR30	F 75%SPR30	F 65%SPR30	Fcurrent
2007	10.005	10.005	10.005	10.005	10.005	10.005
2008	14.271	10.488	12.312	10.967	9.594	12.085
2009	14.548	11.252	12.891	11.690	10.413	12.683
2010	13.578	11.013	12.333	11.375	10.307	12.172
2011	11.940	10.088	11.080	10.369	9.535	10.968
2012	10.477	9.115	9.871	9.335	8.678	9.794
2013	9.549	8.467	9.084	8.650	8.097	9.026
2014	8.930	8.010	8.545	8.171	7.683	8.495
2015	8.643	7.820	8.305	7.967	7.518	8.262
2016	8.431	7.673	8.126	7.811	7.387	8.088

Projections status quo catch Mixing-winter all GOM unit

Year	F30%SPR	F40%SPR	F 85%SPR30	F 75%SPR30	F 65%SPR30	Fcurrent
2007	14.266	14.266	14.266	14.266	14.266	14.266
2008	25.155	18.371	21.663	19.286	16.868	17.167
2009	24.956	19.180	22.068	20.000	17.805	18.082
2010	22.862	18.481	20.754	19.143	17.346	17.577
2011	19.698	16.685	18.323	17.176	15.820	15.999
2012	16.837	14.775	15.946	15.135	14.118	14.257
2013	14.601	13.102	13.986	13.380	12.586	12.696
2014	12.897	11.693	12.416	11.925	11.263	11.354
2015	12.086	11.039	11.676	11.244	10.653	10.734
2016	11.548	10.591	11.177	10.781	10.232	10.307

Table 4. Proportions of Catch by Stock Unit at Different Boundaries in the FL East Coast

Deterministic Run Yield Landings Million Pounds - Atlantic

Projections Final Model

Year	F30%SPR	F40%SPR	F 85%SPR30	F 75%SPR30	F 65%SPR30	Fcurrent
2007	9.277	9.277	9.277	9.277	9.277	9.277
2008	9.453	6.669	8.170	7.291	6.391	9.504
2009	9.248	6.956	8.236	7.498	6.706	9.288
2010	9.154	7.240	8.344	7.718	7.017	9.184
2011	9.132	7.522	8.477	7.943	7.319	9.156
2012	8.860	7.476	8.314	7.851	7.295	8.880
2013	8.788	7.549	8.309	7.893	7.379	8.805
2014	8.794	7.665	8.369	7.985	7.507	8.810
2015	8.737	7.672	8.338	7.979	7.520	8.750
2016	8.704	7.685	8.327	7.981	7.538	8.717

Projections adjusted for Dade-Monroe management unit

Year	F30%SPR	F40%SPR	F 85%SPR30	F 75%SPR30	F 65%SPR30	Fcurrent
2007	10.264	10.264	10.264	10.264	10.264	10.264
2008	11.326	8.079	9.784	8.726	7.645	10.906
2009	11.205	8.493	9.965	9.062	8.096	10.843
2010	10.915	8.692	9.941	9.188	8.346	10.644
2011	10.548	8.743	9.791	9.172	8.447	10.363
2012	9.999	8.495	9.391	8.871	8.244	9.871
2013	9.738	8.421	9.220	8.762	8.194	9.642
2014	9.612	8.427	9.157	8.741	8.218	9.534
2015	9.501	8.392	9.079	8.692	8.195	9.432
2016	9.427	8.372	9.031	8.661	8.182	9.366

Projections adjusted for Council boundary management unit

Year	F30%SPR	F40%SPR	F 85%SPR30	F 75%SPR30	F 65%SPR30	Fcurrent
2007	11.082	11.082	11.082	11.082	11.082	11.082
2008	12.312	8.791	10.636	9.486	8.310	11.813
2009	12.192	9.247	10.842	9.858	8.807	11.762
2010	11.861	9.450	10.802	9.983	9.068	11.539
2011	11.432	9.480	10.611	9.940	9.154	11.211
2012	10.815	9.194	10.158	9.596	8.917	10.663
2013	10.516	9.099	9.957	9.463	8.850	10.401
2014	10.367	9.093	9.877	9.429	8.865	10.273
2015	10.242	9.052	9.789	9.372	8.836	10.159
2016	10.159	9.027	9.734	9.335	8.819	10.085

Projections status quo catch Mixing-winter all GOM unit

Year	F30%SPR	F40%SPR	F 85%SPR30	F 75%SPR30	F 65%SPR30	Fcurrent
2007	7.756	7.756	7.756	7.756	7.756	7.756
2008	8.710	6.149	7.535	6.729	5.902	8.071
2009	8.221	6.202	7.335	6.687	5.990	7.747
2010	7.981	6.340	7.291	6.757	6.153	7.619
2011	7.897	6.543	7.355	6.905	6.376	7.617
2012	7.502	6.347	7.050	6.665	6.199	7.271
2013	7.423	6.389	7.026	6.682	6.252	7.222
2014	7.405	6.466	7.055	6.737	6.338	7.229
2015	7.330	6.442	7.002	6.702	6.318	7.167
2016	7.293	6.444	6.982	6.695	6.325	7.139

Table 5 Gulf group king mackerel management regulations and harvest levels. Pounds are in millions.

Fishing Year	ABC RANGE[1,2] (lbs.)	TAC (lbs.)	Rec. Alloc./Quota[3] (lbs. / numbers)	Rec. Bag Limit[4]	Commercial Allocation	East/West-EC/WC-North-South [5,6]	Annual Harvest Levels		
							Com	Rec	Total
1986/87	1.2-2.9	2.9	1.97	2/3 FL-TX	0.93 :	0.60/0.27 + PS=0.06	1.473	3.269	4.742
1987/88	0.6-2.7	2.2	1.50	2/3 FL-TX	0.70 :	0.48/0.22	0.868	2.145	3.013
1988/89	0.5-4.3	3.4	2.31	2/3 FL-TX	1.09 :	0.75/0.34	1.405	5.276	6.681
1989/90	2.7-5.8	4.25	2.89 / 298,000	2/3 FL-TX	1.36 :	0.94/0.42	1.954	3.360	5.314
1990/91	3.2-5.4	4.25	2.89 / 301,000	2/3 FL-TX	1.36 :	0.94/0.42	1.816	3.951	5.767
1991/92	4.0-7.0	5.75	3.91 / 574,000	2 FL; 2/3 AL-TX	1.84 :	1.27/0.57	2.117	4.773	6.890
1992/93	4.0-10.79	7.80	5.30 / 715,000[8]	2 FL-TX	2.50+0.259 :	1.73+0.259/0.77[7]	3.599	6.258	9.857
1993/94	1.9-8.1[9]	7.80	5.30 / 759,000	2 FL-TX	2.50 :	1.73/0.77	2.572	6.146	8.718
1994/95	1.9-8.1[9]	7.80	5.30 / 768,000	2 FL-TX	2.05+0.300 :	1.73+0.300/0.77[10]	2.901	7.948	10.849
1995/96	1.9-8.1[9]	7.80	5.30 / 629,000	2 FL-TX	2.50 :	1.73/0.77	2.645	6.265	8.910
1996/97	4.7-8.8	7.80	5.30 / 629,000	2 FL-TX	2.50 :	1.73/0.77	2.864	6.933	9.797
1997/98	6.0-13.7	10.6	7.21	2 FL-TX	3.39 :	2.34/1.05	3.445	6.634[1]	10.08
1998/99	7.1-10.8	10.6	7.21	2 FL-TX	3.39	2.34/1.05	3.895	5.235	9.130
1999/00	8.0-12.5	10.6	7.21	2 FL-TX	3.39	2.34/1.05	2.974	3.994	6.968
2000/01	5.5-8.8	10.2	6.94	2 FL-TX	3.26	3.25/1.01-1.04/1.21-0.169/1.04	3.079	5.061	8.140
2001/02	5.5-8.8	10.2	6.94	2 FL-TX	3.26	3.25/1.01-1.04/1.21-0.169/1.04	2.933	3.755	6.688
2002/03	5.3-9.6	10.2	6.94	2 FL-TX	3.26	3.25/1.01-1.04/1.21-0.169/1.04	3.228	4.475	7.703
2003/04	5.3-9.6	10.2	6.94	2 FL-TX	3.26	3.25/1.01-1.04/1.21-0.169/1.04	3.184	3.503	6.687
2004/05	5.3-9.6	10.2	6.94	2 FL-TX	3.26	3.25/1.01-1.04/1.21-0.169/1.04	3.230	3.661	6.891
2005/06	5.3-9.6	10.2	6.94	2 FL-TX	3.26	3.25/1.01-1.04/1.21-0.169/1.04	2.908	3.314	6.222

[1] Fishing year 1979/80 begins on 1 July 1979 and ends on 30 June 1980.

[2] Sums within rows may not appear to equal the total value shown due to rounding of numbers before printing.

[3] Recreational quota in numbers is the allocation divided by an estimate of annual average weight (not used prior to fishing year 1989).

[4] Bag Limit “2/3" means 2 for private boats; for charterboats: 2 with, or 3 without, captain and crew.

[5] E/W com. allocations apply to all legal gears except purse seine in fishing year 1986 and are divided at the FL/AL Border (only H&L and runaround gillnet beginning 1990/91).

[6] East Zone allocations are divided into East Coast FL and West Coast FL, and West Coast FL is divided into North and South subzones.

[7] 0.250 million pounds added to com. allocation for FL east only, opened 2/18/93 - 3/26/93.

[8] Bag limit will not be reduced to zero when allocation reached, beginning in fishing year 1992/93.

[9] Panel recommended ABC range changed from 16%-84% to 16%-50% and Gulf Council selected TAC accepting greater than 50% risk level.

[10] 0.300 million pounds added to hook-and-line quota for Florida West C

Table 6. Gulf group Spanish mackerel management regulations. Pounds are in millions. Prior to fishing year 1990, management was based upon a July-June fishing year. The regulations shown for fishing year 1987 and later are relative to the July-June fishing year.

Fishing Year	ABC RANGE[1] (lbs)	TAC (lbs)	Rec. Alloc./Quota[2] (lbs / numbers)	Rec. Bag Limit	Com. Alloc. (lbs)	Annual Harvest Levels[3]		
						Com	Rec	Total
1987/88	1.9 - 4.0	2.50	1.08	3	1.42	2.581	3.124	5.705
1988/89	1.9 - 7.1	5.00	2.15	4 FL, 10 AL-TX	2.85	3.902	2.177	6.079
1989/90	4.9 - 6.5	5.25	2.26 / 1,614,000	4 FL, 10 AL-TX	2.99	2.145	1.856	4.001
1990/91	3.9 - 7.4	5.25	2.26 / 1,569,000	3 TX, 4 FL[4], 10 AL-LA	2.99	2.074	2.138	4.213
1991/92	7.1 - 12.2	8.60	3.70 / 2,721,000	3 TX, 5 FL, 10 AL-LA	4.90	4.163	2.889	7.053
1992/93	5.1 - 9.8	8.60	3.70 / 3,274,000[5]	7 TX, 10 FL-LA	4.90	3.113	3.130	6.243
1993/94	4.7 - 8.7	8.60	3.70 / 3,274,000	7 TX, 10 FL-LA	4.90	2.614	2.696	5.309
1994/95	4.4 - 8.7	8.60	3.70 / 2,202,000	7 TX, 10 FL-LA	4.90	2.544	1.556	4.100
1995/96	4.0 - 10.7	8.60	3.70 / 2,782,000	7 TX, 10 FL-LA	4.90	1.075	1.575	2.650
1996/97	1.6 - 9.5	7.00	3.01 /	7 TX, 10 FL-LA	3.99	0.617	2.042	2.659
1997/98	5.5 - 13.9	7.00	3.01 /	7 TX, 10 FL-LA	3.99	0.356	2.455	2.810
1998/99	7.3-14.1	7.00	3.01 /	7 TX, 10 FL-LA	3.99	1.074	2.080	3.154
1999/00	9.1 - 17.1	9.1	3.9 /	7 TX, 10 FL-LA	5.2	1.056	3.355	4.411
2000/01	9.1 - 17.1	9.1	3.9 /	15 TX - FL	5.2	1.036	2.964	3.999
2001/02	9.1 - 17.1	9.1	3.9 /	15 TX - FL	5.2	0.788	3.038	3.826

[1] The range has been defined in terms of acceptable risk of achieving the FMP's fishing mortality rate target; the Panel's best estimate of ABC has been intermediate to the end-points.
[2] Recreational quota in numbers is the allocation divided by an estimate of annual average weight (not used prior to fishing year 1989).
[3] Sums within rows may not appear to equal the total value shown due to rounding of numbers before printing.
[4] Rec. bag limit in Fl changed from 4 to 5 on 1/1/91, and changed from 5 to 10 on 1/1/93.
[5] Bag limit will not be reduced to zero when allocation reached, beginning fishing year 1992
[6] Estimated catch equal to the recreational allocation of TAC.

Table 7. Landings (round weight) and 2008 dollars, in thousands

Gulf Migratory Group King Mackerel					
Fishing year	Q	$	$/lb	2008$	2008$/lb
1981/1982	5,442	$5,034	$0.93	$9,621	$1.77
1982/1983	4,516	$4,274	$0.95	$8,089	$1.79
1983/1984	2,882	$1,984	$0.69	$3,666	$1.27
1984/1985	3,121	$2,818	$0.90	$5,180	$1.66
1985/1986	3,539	$3,287	$0.93	$6,110	$1.73
1986/1987	1,474	$1,523	$1.03	$2,883	$1.96
1987/1988	868	$842	$0.97	$1,537	$1.77
1988/1989	1,405	$1,466	$1.04	$2,562	$1.82
1989/1990	1,954	$2,096	$1.07	$3,508	$1.80
1990/1991	1,645	$1,643	$1.00	$2,636	$1.60
1991/1992	2,117	$1,968	$0.93	$3,227	$1.52
1992/1993	3,610	$3,622	$1.00	$5,833	$1.62
1993/1994	2,603	$2,871	$1.10	$4,586	$1.76
1994/1995	2,948	$3,337	$1.13	$5,186	$1.76
1995/1996	2,662	$2,786	$1.05	$4,206	$1.58
1996/1997	2,776	$3,160	$1.14	$4,668	$1.68
1997/1998	3,469	$3,887	$1.12	$5,848	$1.69
1998/1999	3,906	$4,235	$1.08	$6,529	$1.67
1999/2000	3,072	$3,542	$1.15	$5,253	$1.71
2000/2001	3,079	$3,920	$1.27	$5,470	$1.78
2001/2002	2,933	$3,615	$1.23	$5,281	$1.80
2002/2003	3,228	$3,758	$1.16	$5,299	$1.64
2003/2004	3,183	$4,052	$1.27	$5,486	$1.72
2004/2005	3,229	$4,144	$1.28	$5,224	$1.62
2005/2006	3,022	$4,078	$1.35	$4,786	$1.58
2006/2007	3,232	$4,515	$1.40	$5,162	$1.60
2007/2008	3,486	$5,191	$1.49	$5,494	$1.58
2008/2009	1,702	$2,720	$1.60	$2,812	$1.65
5-yr ave	2,934	$4,130	$1.42	$4,696	$1.61

Table 8. Landings (round weight) and 2008 dollars, in thousands

Gulf Migratory Group Spanish Mackerel					
Fishing year	Q	$	$/lb	2008$	2008$/lb
1981/1982	4,479	$1,432	$0.32	$2,751	$0.61
1982/1983	3,074	$969	$0.32	$1,838	$0.60
1983/1984	2,787	$821	$0.29	$1,524	$0.55
1984/1985	3,536	$1,084	$0.31	$1,990	$0.56
1985/1986	3,336	$1,132	$0.34	$2,088	$0.63
1986/1987	2,053	$724	$0.35	$1,369	$0.67
1987/1988	2,582	$992	$0.38	$1,816	$0.70
1988/1989	3,902	$1,517	$0.39	$2,632	$0.67
1989/1990	2,146	$941	$0.44	$1,569	$0.73
1990/1991	2,074	$977	$0.47	$1,572	$0.76
1991/1992	4,164	$1,442	$0.35	$2,362	$0.57
1992/1993	3,200	$1,096	$0.34	$1,770	$0.55
1993/1994	2,614	$1,112	$0.43	$1,772	$0.68
1994/1995	2,554	$1,096	$0.43	$1,712	$0.67
1995/1996	1,076	$412	$0.38	$625	$0.58
1996/1997	617	$321	$0.52	$476	$0.77
1997/1998	356	$203	$0.57	$304	$0.85
1998/1999	1,082	$549	$0.51	$846	$0.78
1999/2000	1,060	$506	$0.48	$750	$0.71
2000/2001	1,053	$501	$0.48	$704	$0.67
2001/2002	809	$502	$0.62	$715	$0.88
2002/2003	1,729	$803	$0.46	$1,134	$0.66
2003/2004	899	$504	$0.56	$691	$0.77
2004/2005	1,981	$1,071	$0.54	$1,359	$0.69
2005/2006	1,124	$629	$0.56	$749	$0.67
2006/2007	1,479	$863	$0.58	$990	$0.67
2007/2008	855	$600	$0.70	$649	$0.76
2008/2009	955	$708	$0.74	$698	$0.73
5-yr ave	1,279	$774	$0.62	$889	$0.70

Table 9. Commercial Landings – Cobia in Thousands of Pounds (1981-2008)

Year	FL wc	AL-TX	Gulf
1981	100	18	118
1982	85	26	110
1983	111	22	132
1984	115	27	142
1985	105	31	136
1986	93	67	160
1987	110	64	175
1988	103	57	161
1989	126	84	210
1990	106	55	161
1991	131	46	177
1992	163	76	239
1993	171	90	261
1994	148	115	264
1995	158	83	241
1996	179	85	265
1997	138	73	211
1998	140	65	205
1999	128	64	192
2000	96	57	153
2001	74	38	112
2002	81	41	122
2003	110	31	142
2004	89	28	117
2005	72	28	100
2006	63	30	93
2007	71	15	86
2008	65	17	82
2004-08 Ave	72	24	96

Table 10. Recreational Landings for Cobia

Length and Weights are for Catch Type A+B		
Year	**Weight**	**PSE**
1986	1,342,456	24.8
1987	851,930	21.6
1988	1,319,627	20.7
1989	839,549	29
1990	722,447	21.4
1991	1,169,265	21.4
1992	838,901	17.3
1993	964,724	16.8
1994	1,301,433	11.3
1995	914,574	20.7
1996	1,530,347	18.3
1997	2,090,565	18.2
1998	849,428	14.2
1999	1,007,072	11.9
2000	898,134	15.4
2001	1,129,714	17.6
2002	791,793	13.7
2003	1,101,782	13
2004	1,227,464	13.5
2005	1,208,989	16
2006	1,072,033	17.2
2007	1,012,921	14.4
2008	913,566	20.1

Table 11. Recreational Landings – Gulf of Mexico Blue Fish

	Harvest			Discard			Total		
Year	For Hire	Private	Total	For Hire	Private	Total	For Hire	Private	Total
1981	24,052	368,231	392,283	0	117,462	117,462	47,873	563,692	611,565
1982	13,337	263,859	277,196	106,930	149,652	256,582	28,963	405,019	433,982
1983	8,131	2,180,317	2,188,448	720	163,466	164,186	39,878	3,575,359	3,615,237
1984	27,926	452,893	480,819	1,786	98,190	99,976	56,495	910,798	967,293
1985	17,594	404,878	422,472	6,446	98,624	105,070	24,014	649,246	673,260
1986	35,168	684,091	719,259	11,902	166,194	178,096	63,810	853,783	917,593
1987	83,563	402,935	486,498	5,847	422,876	428,723	76,938	502,564	579,502
1988	30,503	742,176	772,679	29,429	278,238	307,667	51,404	1,126,718	1,178,122
1989	62,557	442,233	504,790	17,107	364,656	381,763	453,386	1,366,732	1,820,118
1990	6,084	200,117	206,201	7,721	220,075	227,796	13,798	353,222	367,020
1991	16,643	470,206	486,849	13,389	477,888	491,277	49,447	938,448	987,895
1992	9,954	321,604	331,558	1,158	268,008	269,166	24,325	509,469	533,794
1993	6,656	193,154	199,810	6,769	180,747	187,516	15,796	352,012	367,808
1994	13,974	284,026	298,000	4,475	193,514	197,989	24,080	447,041	471,121
1995	27,552	233,613	261,165	2,514	224,607	227,121	27,880	588,478	616,358
1996	23,865	206,015	229,880	39,861	262,829	302,690	43,316	346,852	390,168
1997	7,943	169,526	177,469	17,810	441,332	459,142	9,110	255,404	264,514
1998	36,527	202,474	239,001	5,649	327,927	333,576	80,530	395,332	475,862
1999	12,958	157,452	170,410	8,984	211,820	220,804	22,055	329,406	351,461
2000	12,106	139,180	151,286	4,707	226,357	231,064	22,294	317,972	340,266
2001	20,523	333,156	353,679	9,260	383,652	392,912	36,765	665,787	702,552
2002	14,277	181,116	195,393	14,380	341,254	355,634	21,996	359,532	381,528
2003	17,461	185,578	203,039	39,067	418,111	457,178	37,428	362,062	399,490
2004	6,221	301,092	307,313	22,547	506,734	529,281	9,244	597,383	606,627
2005	15,003	147,565	162,568	24,477	433,511	457,988	25,998	280,036	306,034
2006	6,526	254,176	260,702	54,164	1,395,619	1,449,783	8,096	373,009	381,105
2007	11,662	281,194	292,856	42,144	1,217,538	1,259,682	14,755	383,257	398,012
2008	12,655	180,640	193,295	67,221	644,298	711,519	19,979	298,754	318,733

Table 12. Recreational Landings – Gulf of Mexico Cero

	Harvest			Discard			Total		
Year	For Hire	Private	Total	For Hire	Private	Total	For Hire	Private	Total
1981	4,114	23,858	27,972	0	2,546	2,546	7,256	75,033	82,289
1982	5,247	24,842	30,089	29,740	9,888	39,628	14,190	53,587	67,777
1983	9,048	50,224	59,272	0	0	0	31,119	20,391	51,510
1984	12,026	332,777	344,803	0	0	0	28,588	851,309	879,897
1985	7,752	25	7,777	0	0	0	36,296	88	36,384
1986	10,207	72,722	82,929	0	2,230	2,230	30,542	210,456	240,998
1987	6,625	64,289	70,914	2,293	0	2,293	24,892	181,055	205,947
1988	3,933	17,470	21,403	0	1,726	1,726	12,131	65,956	78,087
1989	2,202	19,920	22,122	3,311	9,663	12,974	5,970	48,194	54,164
1990	4,634	1,207	5,841	2,033	1,321	3,354	14,548	1,224	15,772
1991	8,527	43,893	52,420	362	11,830	12,192	38,246	125,341	163,587
1992	6,110	12,268	18,378	1,939	16,792	18,731	17,691	31,667	49,358
1993	12,947	11,098	24,045	0	17,490	17,490	53,739	29,994	83,733
1994	9,060	9,378	18,438	0	843	843	31,099	31,745	62,844
1995	34,427	12,699	47,126	982	4,890	5,872	175,862	31,029	206,891
1996	42,519	23,787	66,306	4,691	31,484	36,175	217,058	85,447	302,505
1997	19,374	15,345	34,719	8,567	11,985	20,552	73,968	41,407	115,375
1998	7,344	8,554	15,898	666	4,718	5,384	27,548	35,324	62,872
1999	1,894	12,768	14,662	108	4,340	4,448	9,575	42,936	52,511
2000	3,339	0	3,339	170	0	170	11,594	0	11,594
2001	7,229	2,420	9,649	239	0	239	24,433	8,416	32,849
2002	10,540	4,971	15,511	248	0	248	36,355	18,740	55,095
2003	10,162	11,698	21,860	990	0	990	36,971	40,114	77,085
2004	15,564	5,729	21,293	812	4,968	5,780	48,717	17,052	65,769
2005	11,153	2,631	13,784	2,015	3,779	5,794	45,306	11,052	56,358
2006	8,240	6,730	14,970	1,446	2,654	4,100	29,777	17,572	47,349
2007	8,383	11,638	20,021	2,303	0	2,303	23,856	26,180	50,036
2008	8,743	2,026	10,769	1,194	2,059	3,253	29,520	6,965	36,485

Table 13. Recreational Landings – Gulf of Mexico Little Tunny

	Harvest			Discard			Total		
Year	For Hire	Private	Total	For Hire	Private	Total	For Hire	Private	Total
1981	30,732	55,389	86,121	33,246	37,921	71,167	205,534	484,499	690,033
1982	144,855	48,026	192,881	21,083	43,576	64,659	1,055,017	269,112	1,324,129
1983	87,931	27,135	115,066	13,372	62,736	76,108	738,828	142,421	881,249
1984	34,032	55,745	89,777	9,191	36,046	45,237	199,205	269,647	468,852
1985	30,734	24,914	55,648	0	7,385	7,385	305,317	172,769	478,086
1986	65,317	160,488	225,805	78,031	50,651	128,682	495,130	1,185,233	1,680,363
1987	84,345	102,707	187,052	6,550	141,087	147,637	581,063	741,099	1,322,162
1988	69,555	112,538	182,093	16,317	295,559	311,876	489,308	774,287	1,263,595
1989	32,052	60,406	92,458	34,784	132,487	167,271	256,911	414,378	671,289
1990	33,156	148,549	181,705	12,900	138,227	151,127	246,205	1,282,065	1,528,270
1991	55,491	227,255	282,746	36,869	205,483	242,352	439,911	1,963,560	2,403,471
1992	46,730	262,062	308,792	33,688	169,789	203,477	267,599	1,239,899	1,507,498
1993	59,030	72,076	131,106	112,289	226,654	338,943	377,284	464,564	841,848
1994	85,031	81,178	166,209	36,084	185,041	221,125	610,269	644,629	1,254,898
1995	62,248	51,190	113,438	27,444	46,130	73,574	408,860	314,170	723,030
1996	57,437	51,826	109,263	17,994	46,997	64,991	386,134	342,505	728,639
1997	58,024	15,235	73,259	43,089	136,716	179,805	434,843	112,487	547,330
1998	45,616	20,032	65,648	13,994	79,385	93,379	370,685	162,679	533,364
1999	55,057	30,842	85,899	33,042	150,715	183,757	425,871	179,514	605,385
2000	45,496	44,897	90,393	34,030	122,394	156,424	309,934	278,414	588,348
2001	30,518	55,244	85,762	19,927	161,805	181,732	208,721	392,124	600,845
2002	50,962	80,477	131,439	41,150	253,356	294,506	355,176	539,049	894,225
2003	32,054	58,971	91,025	23,503	85,240	108,743	223,610	380,477	604,087
2004	33,351	107,565	140,916	12,442	209,939	222,381	246,650	870,288	1,116,938
2005	16,405	26,904	43,309	5,918	104,958	110,876	120,316	197,434	317,750
2006	42,893	44,784	87,677	14,557	194,014	208,571	314,559	328,250	642,809
2007	31,453	79,472	110,925	15,763	207,873	223,636	224,832	596,567	821,399
2008	29,335	34,035	63,370	10,690	120,290	130,980	195,472	195,871	391,343

Table 14. Recreational Landings – Gulf of Mexico Dolphin

Year	Harvest			Discard			Total		
	For Hire	Private	Total	For Hire	Private	Total	For Hire	Private	Total
1981	47,640	28,119	75,759	6,899	969	7,868	337,003	125,201	462,204
1982	693,939	260,738	954,677	4,957	12,423	17,380	3,816,809	769,608	4,586,417
1983	91,534	101,475	193,009	2,913	51,162	54,075	387,316	415,779	803,095
1984	168,049	84,955	253,004	2,224	95,968	98,192	1,047,230	273,976	1,321,206
1985	126,968	329,158	456,126	0	1,754	1,754	528,899	1,000,306	1,529,205
1986	237,503	540,949	778,452	15,638	41,781	57,419	1,648,206	1,962,747	3,610,953
1987	347,768	180,184	527,952	43,971	34,390	78,361	2,408,952	511,129	2,920,081
1988	112,876	218,973	331,849	5,463	73,965	79,428	312,244	700,206	1,012,450
1989	161,456	425,737	587,193	9,114	63,125	72,239	949,803	1,718,906	2,668,709
1990	50,545	487,789	538,334	6,668	12,890	19,558	485,809	4,679,098	5,164,907
1991	315,355	458,730	774,085	77,807	248,444	326,251	2,426,210	2,940,180	5,366,390
1992	110,066	183,894	293,960	19,364	25,287	44,651	1,298,505	2,161,486	3,459,991
1993	241,132	283,202	524,334	35,446	63,608	99,054	1,549,534	1,536,883	3,086,417
1994	311,921	210,394	522,315	54,667	65,821	120,488	1,626,728	903,514	2,530,242
1995	345,074	310,077	655,151	69,102	155,351	224,453	3,651,837	2,360,107	6,011,944
1996	259,994	179,769	439,763	2,335	10,634	12,969	2,726,193	1,775,317	4,501,510
1997	528,799	288,627	817,426	81,236	32,235	113,471	6,762,446	3,711,240	10,473,686
1998	283,448	208,510	491,958	30,473	37,293	67,766	1,392,131	1,790,298	3,182,429
1999	205,398	196,246	401,644	21,437	19,690	41,127	1,133,276	904,207	2,037,483
2000	242,070	194,794	436,864	26,890	37,830	64,720	1,218,600	1,168,527	2,387,127
2001	243,182	274,760	517,942	30,051	15,548	45,599	1,649,694	883,760	2,533,454
2002	235,627	100,223	335,850	26,610	8,732	35,342	1,662,636	591,948	2,254,584
2003	247,349	299,095	546,444	23,684	42,084	65,768	1,278,655	1,267,665	2,546,320
2004	201,594	187,167	388,761	31,138	18,096	49,234	1,379,905	666,791	2,046,696
2005	124,189	118,311	242,500	28,322	50,250	78,572	749,631	497,102	1,246,733
2006	125,445	102,198	227,643	38,065	60,368	98,433	764,223	457,097	1,221,320
2007	128,473	144,143	272,616	59,515	103,670	163,185	786,017	1,272,493	2,058,510
2008	139,374	113,386	252,760	57,771	62,482	120,253	784,380	578,245	1,362,625