

**AMENDMENT 12
TO
THE FISHERY MANAGEMENT PLAN
FOR
COASTAL MIGRATORY PELAGIC RESOURCES (MACKERELS)
IN
THE GULF OF MEXICO
AND
SOUTH ATLANTIC
INCLUDING ENVIRONMENTAL ASSESSMENT
AND
REGULATORY IMPACT REVIEW**



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ACRONYMS/ABBREVIATIONS
USED IN THIS DOCUMENT

ABC	acceptable biological catch
AP	advisory panel
BRD	bycatch reduction device
CZMA	Coastal Zone Management Act
EA	environmental assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FL	fork length
FAO	Food and Agriculture Organization
FMP	fishery management plan
IFQ	Individual Fishing Quotas
IRFA	initial regulatory flexibility analysis
ITQ	individual transferable quota
MAFMC	Mid-Atlantic Fishery Management Council
MFMT	Maximum Fishing Mortality Threshold
MSAP	Mackerel Stock Assessment Panel
MSST	Minimum Stock Size Threshold
MSY	maximum sustainable yield
NMFS	National Marine Fisheries Service
OY	optimum yield
RFA	Regulatory Flexibility Act
RIR	regulatory impact review
SBA	Small Business Administration
SEFSC	Southeast Fisheries Science Center of NMFS
SFA	Sustainable Fisheries Act
SPR	spawning potential ratio
TAC	total allowable catch
TL	total length

1.0 PURPOSE AND NEED FOR ACTION

1.1 History of Management

Species in the Fishery for Coastal Migratory Pelagics:

King mackerel	<i>Scomberomorus cavalla</i>
Spanish mackerel	<i>S. maculatus</i>
Cobia	<i>Rachycentron canadum</i>
Cero	<i>S. regalis</i>
Little tunny	<i>Euthynnus alleteratus</i>
Dolphin	<i>Coryphaena hippurus</i>
Bluefish (Gulf of Mexico only)	<i>Pomatomus saltatrix</i>

The Fishery Management Plan for Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic (FMP) and Environmental Assessment (EA), approved in 1982 and implemented by regulations effective in February of 1983, treated king and Spanish mackerel each as one U.S. stock. Allocations were established for recreational and commercial fisheries, and the commercial allocation was divided between net and hook-and-line fishermen.

Amendment 1 and its Environmental Impact Statement (EIS), implemented in September of 1985, provided a framework procedure for pre-season adjustment of total allowable catch (TAC), revised 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 were eliminated. The Gulf commercial allocation for king mackerel was divided into eastern and western zones for the purpose of regional allocation.

Amendment 2 with EA, implemented in July of 1987, revised Spanish mackerel MSY downward, recognized two migratory groups, and set commercial quotas and bag limits. Charterboat permits were required, and it was clarified that TAC for overfished stocks must be set below the upper range of acceptable biological catch (ABC). The use of purse seines on overfished stocks was prohibited.

Amendment 3 with EA, was partially approved in 1989, revised, resubmitted, and approved in 1990. It prohibited drift gill nets for coastal pelagics and purse seines for the overfished groups of mackerels.

Amendment 4 with EA, implemented in 1989, reallocated Spanish mackerel equally between recreational and commercial fishermen on the Atlantic group with an increase in TAC.

Amendment 5 with EA, implemented in August 1990, made a number of changes in the management regime which:

- Extended the management area for Atlantic groups of mackerels through the Mid-Atlantic Fishery Management Council's (MAFMC) area of jurisdiction;
- Revised problems in the fishery and plan objectives;
- Revised the fishing year for Gulf group Spanish mackerel from July-June to April-March;
- Revised the definition of "overfishing";
- Added cobia to the annual stock assessment procedure;
- Provided that the South Atlantic Fishery Management Council (SAFMC) will be responsible for pre-season adjustments of TACs and bag limits for the Atlantic migratory groups of mackerels while the Gulf Council will be responsible for Gulf migratory groups;
- Continued to manage the two recognized Gulf migratory groups of king mackerel as one until management measures appropriate to the eastern and western groups can be determined;
- Redefined recreational bag limits as daily limits;
- Deleted a provision that specified that bag limit catches 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 limit of two cobia per person per day for all fishermen;
- Established a minimum size of 12-inch (30.5 cm.) fork length (FL) or 14-inch (35.6 cm.) total length (TL) for king mackerel and included a definition of "conflict" to provide guidance to the Secretary.

Amendment 6, 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, including size limits, vessel trip limits, closed seasons or areas, and gear restrictions;
- Allowed Gulf group 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, implemented in September 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, implemented in 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 the Council's intent to evaluate the impacts of permanent jurisdictional boundaries between the GMFMC and SAFMC and 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 percent 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 (barracuda damaged) king mackerel on vessels with commercial trip limits, but precluded sale;
- Set an optimum yield (OY) target at 30 percent static spawning potential ratio (SPR);
- 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 I).

Amendment 9, currently under review by NMFS, would:

- Reallocate 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 retain the recreational and commercial allocations of TAC at 68% recreational and 32% commercial
- Subdivide 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.
- Establish 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 divided:
 - 50% - Net Fishery
 - 50% - Hook-and-Line Fishery
- Establish a trip limit of 3,000 pounds per vessel per trip for the Western Zone
- Establish 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 NMFS or trip tickets from the FDEP; allow transfer of gill net endorsements to immediate family members (son, daughter, father, mother, or spouse) only; and

prohibit 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

- Increase the minimum size limit for Gulf group king mackerel from 20 inches FL to 24 inches FL
- Allow the retention and sale of cut-off (damaged) legal-sized king and Spanish mackerel within established trip limits

Amendment 10 incorporated essential fish habitat (EFH) provisions for the SAFMC, and Amendment 11 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. To date, neither of these amendments have been implemented.

The present management regime for king mackerel recognizes two migratory groups, the Gulf migratory group and the Atlantic migratory group. These groups are hypothesized to mix on the east coast of Florida. For management and assessment purposes, a boundary between groups was specified as the Volusia-Flagler County border on the Florida east coast in the winter (November 1-March 31) and the Monroe-Collier County border on the Florida southwest coast in the summer (April 1-October 31) (Figure 1).

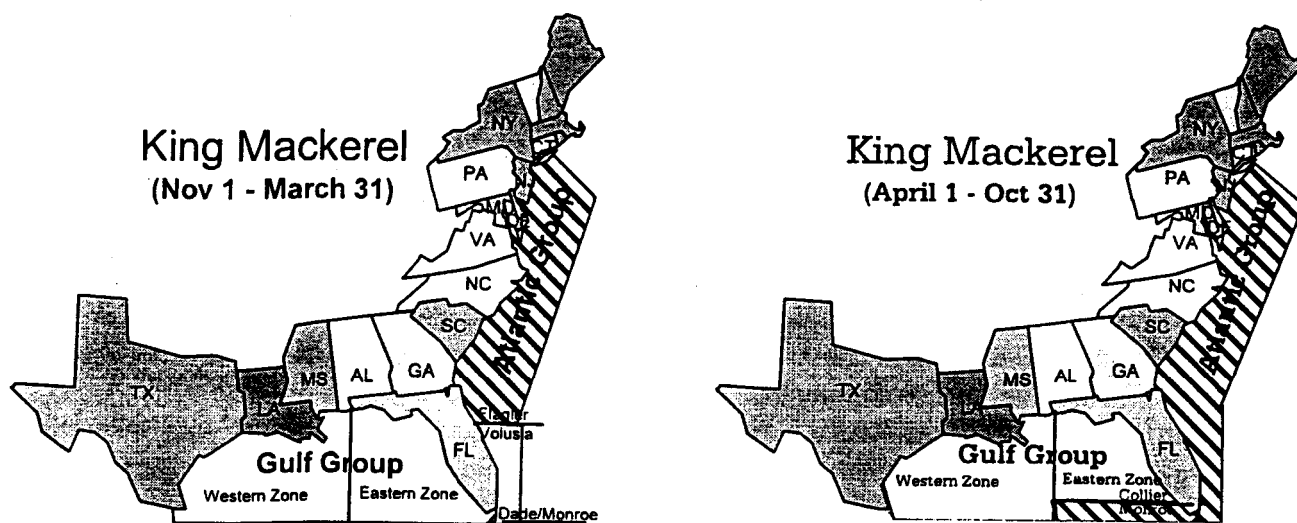


Figure 1. Seasonal boundaries and divisions of the Gulf and Atlantic migratory groups of king mackerel.

For commercial allocation purposes, the Gulf migratory group is also divided into the Eastern and Western Zones at the Florida-Alabama border (Figure 1). For the purpose of distributing a limited resource among users, the FMP has set ratios based on historic unregulated catches. The Gulf migratory group is allocated with 68 percent for recreational fishermen and 32 percent for commercial fishermen. The commercial allocation is further subdivided 69 percent for the Eastern Zone and 31 percent for the Western Zone.

The Atlantic migratory group of king mackerel is allocated with 62.9 percent to recreational fishermen and 37.1 percent to commercial fishermen.

1.2 Problems in the Fishery as Addressed Previously in the Amended FMP

The stocks of Spanish mackerel and Gulf group king mackerel are below the level of producing MSY, and spawning stocks have been reduced such that recruitment has been affected. The harvest levels of Atlantic king mackerel are close to their upper limit. Uncontrolled fishing would further reduce biomass. (Note: The Gulf group Spanish mackerel stock recovered above the OY level [30 percent static SPR] in the 1997-98 fishing year and continues to be neither overfished nor undergoing overfishing.)

2. a. Available recreational catch statistics were not designed to track catch for quota purposes.
b. Additional biological and statistical data on both the recreational and commercial fisheries are needed and economic information that assesses the impact of regulations and allocations is not available.
3. Intense conflicts and competition exist between recreational and commercial users of the mackerel stocks and between commercial users employing different gears.
4. The existence of separate state and federal jurisdiction and lack of coordination between these two make biological management difficult; since, in some instances, the resource may be fished beyond the allocation in state waters. (Note: In recent years, most states have adopted compatible regulations for bag limits, size limits, quota closures, etc. with federal regulations.)
5. The condition of the cobia stock is not known and increased landings over the last ten years have prompted concern about overfishing.
6. Lack of information on multiple stocks or migratory groups of king mackerel that may mix seasonally confounds and complicates management.
7. Large catches of mackerel over a short period cause quotas and TAC to be exceeded before closures can be implemented; therefore, some users have obtained a share in excess of their allocation.
8. Closures of a fishery and reversion of bag limits to zero due to the filling of a quota have deprived geographic areas of access to a fishery.
9. Fish caught under the bag limit and sold contribute to the filling of both the recreational and commercial quotas.

10. Part-time commercial fishermen compete with full-time commercial fishermen for the available quota.
11. Localized reduction in abundance of fish due to high fishing pressure.
12. Disruption of markets.

1.3 Management Objectives

The current FMP as amended lists eight plan objectives:

1. The primary objective of this FMP is to stabilize yield at MSY, allow recovery of overfished populations, and maintain population levels sufficient to ensure adequate recruitment.
2. To provide a flexible management system for the resource which minimizes regulatory delay while retaining substantial Council and public input in management decisions and which can rapidly adapt to changes in resource abundance, new scientific information, and changes in fishing patterns among user groups or by areas.
3. To provide necessary information for effective management and establish a mandatory reporting system for monitoring catch.
4. To minimize gear and user group conflicts.
5. To distribute the TAC of Atlantic migratory group Spanish mackerel between recreational and commercial user groups based on the catches that occurred during the early to mid 1970's, which is prior to the development of the deep water run-around gill net fishery and when the resource was not overfished.
6. To minimize waste and bycatch in the fishery.
7. To provide appropriate management to address specific migratory groups of king mackerel.
8. To optimize the social and economic benefits of the coastal migratory pelagic fisheries.

1.4 Current Status of the Fishery

The Gulf migratory groups of king and Spanish mackerel were determined to be overfished in the mid 1980s, and a rebuilding program of reduced allowable catches was implemented. Both stocks improved to a level that in 1995 the mackerel stock assessment panel (MSAP) recommended that they no longer be considered as overfished. This conclusion was reinforced by Mace et al. (1996), wherein the overfished definition was recommended to be a 20 percent transitional SPR. The Gulf Council accepted this recommendation and included the change from a 30 percent SPR to 20 percent

transitional SPR in Amendment 8. The National Marine Fisheries Service (NMFS) rejected this portion of Amendment 8 because of changes to the definitions of "overfished" in the Sustainable Fisheries Act (SFA); consequently, the overfished and overfishing definitions for Gulf group king and Spanish mackerel remained at 30 percent SPR. Currently, the estimates of transitional and static SPR for Gulf group king mackerel are 25 percent and 28 percent, respectively; and for Gulf group Spanish mackerel, they are 42 percent and 53 percent, respectively. Consequently, the Gulf group king mackerel fishery is still considered to be "overfished" and undergoing overfishing because transitional and static SPR estimates are below 30 percent. In accordance with NMFS guidelines developed as a result of the SFA amendment to the Magnuson-Stevens Act, both the SAFMC and the Gulf Council submitted Generic SFA Amendments that would change the definitions of overfishing and overfished and relate them to estimates of fishing mortality and biomass at MSY. Under a control rule developed by MSAP (1999) in accordance with a proposed framework procedure in the Gulf Council's Generic SFA amendment, the minimum stock size threshold (MSST) would not be exceeded at current estimates of spawning stock biomass. Consequently, if these proposed changes, via the Gulf Council's Generic SFA Amendment and subsequent regulatory amendments, are approved by NMFS, Gulf group king mackerel would not be considered as overfished. It would, however, still be undergoing overfishing because the fishing mortality rate was estimated to be above the maximum fishing mortality threshold (MFMT) under the control rule.

Atlantic migratory groups of king and Spanish mackerels are not defined as being overfished or undergoing overfishing. Proposed actions in the SAFMC's Generic SFA Amendment that was recently submitted to NMFS for approval would not change these classifications.

The fishery for cobia, restrained by a universal bag limit of 2 fish per person per daily trip, remains stable, and this stock is not considered as being overfished or undergoing overfishing.

Dolphin occur throughout the world's temperate oceans, and there is no evidence of overfishing. There have, however, been some concerns expressed regarding localized reduction in availability due to high fishing pressure in some areas of the Atlantic and increased targeting by longline gear. There are currently no federal regulations on this species; however, the SAFMC is pursuing the development of a Dolphin/Wahoo FMP in conjunction with the Gulf and Caribbean Councils.

1.5 Need for Action

This amendment addresses whether the current moratorium on the issuance of king mackerel permits should be extended beyond the current expiration date of October 15, 2000 in order to allow the Councils to consider various management strategies that include limited access or limited entry, with or without individual transferable quotas (ITQ) or individual fishing quotas (IFQ). Currently, the SFA precludes the submission of amendments that include individual quotas; however, this prohibition is scheduled for expiration on October 1, 2000. If the moratorium is not extended and the Councils do not take other actions to limit access, the king mackerel fisheries for both Gulf and Atlantic migratory groups will revert back to open access. The potential impacts to these stocks of an open access fishery are discussed in Section 2.0 and Section 3.0.

2.0 MANAGEMENT ALTERNATIVES AND REGULATORY IMPACT REVIEW

2.1 Introduction

The NMFS requires a Regulatory Impact Review (RIR) for all regulatory actions that are of public interest. The RIR does three things: (1) it provides a comprehensive review of the level and incidence of impacts associated with a proposed or final regulatory action, (2) it provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives that could be used to solve the problem, and (3) it ensures that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost effective way.

The RIR also serves as the basis for determining whether any proposed regulations are a "significant regulatory action" under certain criteria provided in Executive Order 12866 and whether the proposed regulations will have a "significant economic impact on a substantial number of small business entities" in compliance with the Regulatory Flexibility Act of 1980 (RFA).

This RIR analyzes the probable impacts on fishery participants of the proposed plan amendment to the Fishery Management Plan for Coastal Migratory Pelagic Resources in the Gulf of Mexico and South Atlantic.

2.2 Problems and Objectives

The general problems and objectives are found in the FMP, as amended, and Sections 1.2 and 1.3 of this document. Section 1.5 specifies the purpose and need for the present plan amendment. The current plan amendment addresses the issue of whether the current moratorium on the issuance of king mackerel permits should be extended beyond the current expiration date of October 15, 2000 in order to allow the Councils to consider various management strategies that include limited access or limited entry, with or without ITQ or IFQ.

2.3 Methodology and Framework for Analysis

This RIR assesses management measures from the standpoint of determining the resulting changes in costs and benefits to society. To the extent practicable, the net effects are stated in terms of producer surplus to the harvest sector, net profits to the intermediate sector, and consumer surplus to the final users of the resource.

In addition to changes in the surpluses mentioned above, there are public and private costs associated with the process of changing and enforcing regulations on the mackerel fishery. A simple estimation of these costs is made in this document.

Ideally, all these changes in costs and benefits need to be accounted for in assessing the net economic benefit from management of coastal pelagic resources. The RIR attempts to determine these changes

to the extent possible. The discussions under the "Economic Impacts" sub-heading comprise the bulk of the impact analysis for RIR purposes.

2.4 Management Alternatives and Regulatory Impacts

2.4.1 Proposed Alternative: Extend the commercial king mackerel permit moratorium from its current expiration date of October 15, 2000 to:

Option A. October 15, 2003, or until replaced with a license limitation, limited access, and/or individual fishing quota or individual transferable quota system, whichever occurs earlier.

Proposed Option B. 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.

Discussion: The purpose of the moratorium that was established in Amendment 8 was to provide stability and prevent speculative entry into the fishery while the Councils developed a limited access or limited entry program. In Amendment 8, the Councils noted that the number of commercial vessel permits for mackerel had increased by 102 percent from 1,280 to 2,588 between the 1987-88 and 1993-94 fishing years. The number continued to increase in 1994-1995 to 3,072 and 3,353 in 1995-1996. The number of mackerel permits in fishing years 1996-97 and 1997-98 were 2,256 and 2,754, respectively. Amendment 8 concluded that effort exceeded that which was needed to optimally harvest the available TAC. It also noted that some permit holders may only fish king mackerel on a seasonal basis while others may not fish for king mackerel at all. Some permittees obtained permits as insurance policies for use when more lucrative fisheries become less lucrative or not available, or simply to establish a presence in the fishery in the event such criteria are used in a future limited entry proposal. Additionally, and especially in the late 1980s, some vessels may have targeted Spanish mackerel to a greater extent than king mackerel; and prior to implementation of Amendment 8 on March 4, 1998, the mackerel permit was for both Spanish and king mackerel. Consequently, the number of permits may not be an accurate measure of the number of vessels participating in the king mackerel fishery. In recent years, especially since 1995, however, the landings of Spanish mackerel have declined dramatically primarily as a result of the net ban in Florida and substantial reductions in the market demand for Spanish mackerel. This observation would support the contention that the majority, if not all, of the vessels with mackerel permits in fishing years 1997-98 and 1998-99 targeted king mackerel at least during part of the season.

The intent of the moratorium was to prevent further increases in effort and possibly reduce the number of permittees in the king mackerel fishery. For Gulf group king mackerel, this management measure was also intended to reduce overfishing and aid in the recovery of this overfished stock. The moratorium was extended to October 15, 2000 to provide time for the Councils to address a limited access program that would be a more long-range effort to provide stability to the fishery and a more equitable distribution of the catch.

A key consideration when evaluating limited access or entry programs is the potential use of IFQs or ITQs. Under Section 303 (d)(1)(A) of the Magnuson-Stevens Fishery Conservation and Management Act, the Councils are prohibited from submitting fishery management plans or amendments that would create IFQs until October 1, 2000. Even if the Councils had completed an amendment to establish a limited entry program with or without an individual quota portion on October 1, 2000, there would be insufficient time for the Secretary of Commerce to implement such a program before the current moratorium would expire. Additionally, as experienced with Amendments 8 and 9 of the Reef Fish FMP, the development of an amendment that includes limited entry or access in combination with individual quotas has proven to be a very lengthy and arduous process that would probably take more than a year to complete. If so, there would be insufficient time to develop such an amendment before the October 15, 2000 end of the present moratorium. Consequently, an extension of the permit moratorium would provide time for the development of a limited license or limited entry system and for consideration of IFQs and ITQs, potentially as part of such a system. A 3-year extension (Option A) would probably provide a minimal amount of time for development and implementation of a license limitation/limited access system. Option B (a 5-year extension) would probably provide adequate time, and there is a good possibility that completion and implementation of the amendment could occur before this date.

Biological Impacts: There would probably be very few biological impacts, positive or negative, from continuing the present moratorium on the issuance of king mackerel permits. The harvest of king mackerel is regulated through TAC allocations and other management measures (size limits, bag limits, trip limits, etc.) that are prescribed in the framework procedure (Appendix A) and are reviewed annually. Consequently, the harvest level and rate are primarily controlled with these measures, and the presence or absence of a moratorium on the number of participants would probably have minimal effects on the biological integrity of king mackerel stocks. To the extent that the continuation of the moratorium maintains or further reduces participation and effort in the fishery, some biological improvement and accelerated recovery of the Gulf group king mackerel stock may occur; however, such impacts, if any, would likely be small.

Economic Impacts: The commercial fisheries for both Gulf and South Atlantic groups of king mackerel have been experiencing quota closures that have become more acute over the years especially for the Gulf group fishery. In this latter fishery, various regulatory measures have been enacted to alleviate quota closures, with special emphasis given to distributing the stock among various user groups by area and gear. For several years after the equal split of the Eastern Zone commercial quota between the Florida east and west coast fishermen, the east coast fishery had never experienced a quota closure. The most recent season, however, proved otherwise when the fishery was closed on March 13, 1999. These quota closures are partially indicative of the existence of overcapacity in the king mackerel fishery relative to the quota.

Table 1 shows the number of active permits from 1987-88 to 1997-98. The number of permits increased over the years, peaked in 1995-96, and subsequently declined. At the start of the 1998-99 fishing season for Gulf group king mackerel (July 1, 1998), there were 2,153 permits for king mackerel and king mackerel in combination with Spanish mackerel. As of March 25, 1999, there

were 2,109 active permits (2,443 in all inclusive of permits for Spanish mackerel only). While it is still too early to conclude that the moratorium has resulted in the reduction of permits since this has been in effect for only about a year, the October 16, 1995 cut off participation date for eligibility to initially qualify for a king mackerel permit might have disqualified some permittees to renew their permits. At any rate, the number of vessels actively participating in the fishery is still relatively high as partly demonstrated by the shortened fishing season for all segments of the commercial king mackerel fishery, including that of the east coast of Florida. What the moratorium may be expected to achieve is merely to mitigate the effects of the shortened season by preventing the entry of more vessels into the fishery. This mitigation effect assumes an important role as the Councils proceed with the development of a controlled access system for the king mackerel fishery. It is important because the act of considering and developing a controlled access system generally invites more entrants into the fishery, exacerbating the process.

One of the more controversial aspects of developing a controlled access system for any fishery is the initial distribution of fishing privileges. In the red snapper case, the Gulf Council decided to give more weight to historical rather than to present participation in the assignment of initial fishing privileges. To the extent that this weighting carries over to the controlled access system for king mackerel, the absence of a moratorium would tend to heavily penalize new entrants into the fishery. The controversy stemming from this could only delay or complicate the development of a controlled access system for the fishery. Any of the alternatives to extend the moratorium would minimize the controversy surrounding the initial distribution of fishing privileges.

All the alternatives may be deemed to indicate the Councils' intent to evaluate the applicability of a controlled access system for the commercial king mackerel fishery. Given the potentially complex process of designing such a system, a 5-year extension of the moratorium appears more appropriate. The shorter period accommodates the possibility that, after considering a broad range of alternatives, the Councils may opt for a simple license limitation system. One such system would be the conversion of the current moratorium into a permanent license limitation system, with all features remaining intact except possibly the transferability nature of the permits. The current conditions for permit transfer appear to be relatively restrictive as to limit the development of a market that enables full pricing of licenses. Licenses that are not fully priced would not reflect the value of the underlying resource and thus would not capture the economic rent that may be realized under a license limitation program. To the extent that these transfer conditions are less restrictive than existing ones, the development of a market for licenses could develop in a relatively short period of time. Any economic rent generated by the controlled access program could be immediately reflected in the price for fishing privileges.

2.4.2 Alternative: Status Quo - No Change - The current moratorium on the issuance of commercial king mackerel permits expires on October 15, 2000.

Discussion: The no action alternative would allow open access to the king mackerel fishery when the existing permit moratorium expires on October 15, 2000. This alternative would probably result in an increase in the number of participants in the king mackerel fishery, potentially negating any

reduction in effort that may have occurred as a result of the original implementation of the moratorium.

Biological Impacts: Since the commercial king mackerel harvest is regulated through allocations of TAC, the biological effects of open access and an increase in the number of participants would be constrained to the possibility of increased overruns due to problems with effectively counting catches and closing the fishery in a timely manner as a result of this increased participation. Reduced enforcement effectiveness as a result on an increased number of participants could also exacerbate the problem of overruns of the commercial allocations of TAC. As discussed below, however, the economic impacts would probably be more severe on existing participants and new entrants, as well as the dealer/processing segment.

Economic Impacts: As discussed elsewhere in this document, the Councils' development of a controlled access system for the commercial king mackerel fishery would likely extend beyond the current expiration date of the moratorium. Without the benefit of the moratorium, the Councils' consideration of a controlled access system for the fishery would only invite more participants into the fishery. This would not only exacerbate the effects of a derby now occurring in the fishery but also introduce more complexity and controversy in the initial distribution of fishing privileges. As new entrants come in, earlier closures of the various segments of the commercial king mackerel fishery would result, prompting both a reduction in industry revenues and an increase in industry costs. The complexity and controversy introduced by the new entrants may be expected to arise more in the assignment of initial fishing privileges. If this assignment is weighted more towards historical rather than current participation, new entrants would tend to lose a good part of their new investments.

2.5 Public and Private Costs of Regulations

The preparation, implementation, enforcement, and monitoring of this or any federal action involves the expenditure of public and private resources which can be expressed as costs associated with the regulations. Costs associated with this amendment include:

Councils' costs of document preparation, meetings, public hearings, and information dissemination	\$20,000
NMFS' administrative costs of document preparation, meetings, and review	15,000
Law enforcement costs	none
Public burden associated with permits	none
NMFS' costs associated with permits	none
TOTAL	\$35,000

These costs of document preparation are based on staff time, travel, printing, and any other relevant items where funds were expended directly for this specific action. The proposed measures are not expected to incur additional enforcement costs and permit costs to either the public or NMFS.

2.6 Summary of Economic Impacts

Developing a controlled access program for the commercial king mackerel fishery is expected to be complex and lengthy such that its completion would likely extend beyond the expiration date of the current moratorium. Without the benefit of the moratorium, development of a controlled access program would only invite many new entrants to the fishery, complicating and perhaps lengthening the process. While opening up the fishery may partly alleviate the plight of those excluded from the fishery because of the moratorium, their presence would adversely impact the economic performance of current participants, including the recreational sector, especially because the commercial fishery has been experiencing quota closures and the recreational fishery has been overrunning its allocation of TAC. In addition, investments by the new entrants could lose some of their value if the chosen controlled access program assigns initial fishing privileges weighted more towards historical than current participation. Any of the moratorium extension alternatives is expected to maintain a certain level of stability in the commercial king mackerel fishery as the Councils proceed with the development of a more permanent controlled access program for the fishery.

Government costs are estimated at \$35,000, and all cost items are one-time costs that pertain to the Councils' and NMFS' preparation of this document.

2.7 Determination of Significant Regulatory Action

Pursuant to Executive Order 12866, a regulation is considered a "significant regulatory action" if it is likely to result in a rule that may: (1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy; a sector of the economy; productivity; competition; jobs; the environment; public health or safety; or state, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of the recipients thereof; or (4) raise novel, legal, or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

The entire commercial king mackerel fishery in the Southeast is currently valued at approximately \$7.0 million (Vondruska 1999), which is significantly less than \$100 million. There is no adequate valuation of the recreational fishery. Considering the size of the fishery and the findings that the measures considered in this amendment do not significantly affect the total revenues generated by the king mackerel commercial sector and for-hire sector, a \$100 million annual impact due to this amendment is not likely to happen. Prices of mackerel to consumers are not expected to substantially increase as a result of this amendment, since virtually the same amount of landings, constrained by the quota, may be expected from the commercial fishery. Even in the case of

allowing the moratorium to lapse on its current expiration date, prices are unlikely to rise but may in fact fall as the derby worsens with more fishery participants. Industry costs are also not expected to rise under an extended moratorium, since this basically maintains the status quo with respect to fishing costs. Any of the alternatives to extend the moratorium may be expected to have some unquantifiable adverse effects on employment and investment; but at the same time, they may prevent a worsening of the derby that now characterizes the commercial king mackerel fishery in the Gulf. A high level of competition is now prevailing in this fishery as partly demonstrated by early closures in all segments of the fishery.

Any of the alternatives to extend the moratorium is deemed not to interfere or create inconsistency with an action of another agency, including state fishing agencies. No potential effects on any entitlements, grants, user fees, or loan programs have been identified as directly attributable to any of the alternatives to extend the moratorium. Finally, it is deemed that no novel, legal, or policy issue is raised by the proposed regulation. All issues in this amendment have been considered in the past by the Council.

The foregoing discussion leads to the conclusion that the proposed regulation, if enacted, would not constitute a significant regulatory action.

2.8 Determination of the Need for an Initial Regulatory Flexibility Analysis

Introduction

The Regulatory Flexibility Act requires a determination as to whether or not a proposed rule has a significant impact on a substantial number of small entities. If the rule does have this impact then an Initial Regulatory Flexibility Analysis (IRFA) has to be completed for public comment. The IRFA becomes final after the public comments have been addressed. If the proposed rule does not meet the criteria for "substantial number" and "significant impact," then a certification to this effect must be prepared.

Determination of Significant Economic Impact on a Substantial Number of Small Entities

In general, a "substantial number" of small entities is more than 20 percent of those small entities engaged in the fishery (NMFS, 1998). As of March 25, 1999, a total of 2,109 commercial king and combination king and Spanish mackerel permits were issued to qualifying individuals and attached to vessels. This number is deemed to comprise the commercial king mackerel participants in the U.S. Gulf of Mexico and South Atlantic because by May 1, 1999 the moratorium as recommended in Amendment 8 should be fully implemented. There may, however, be a few additional permittees that are in the process of being renewed. Of these, 450 are king mackerel only permits and 1,659 are both king and Spanish mackerel permits. There are currently 1,700 coastal migratory pelagics charter permits issued to charterboats and party boats operating in the Gulf and South Atlantic.

The Small Business Administration (SBA) defines a small business in the commercial fishing activity as a firm with receipts of up to \$3.0 million annually. The SBA also defines a small business in the charterboat activity as a firm with receipts up to \$5 million per year.

All of the commercial king mackerel harvesting entities affected by the rule will qualify as small business entities because their gross revenues are less than \$3 million annually. In addition, any for-hire vessel that may be affected by the proposed rule generally earns less than \$5 million in annual revenues and thus would be considered as a small business entity. Hence, it is clear that the criterion of a substantial number of the small business entities comprising the commercial king mackerel harvesting industry that may be affected by the proposed rule will be met. The outcome of "significant impact" is less clear but can be triggered by any of the five conditions or criteria discussed below.

The regulations are likely to result in a change in annual gross revenues by more than 5 percent. All the alternatives to extend the moratorium would basically maintain the status quo fishing operations, and thus industry revenues are unlikely to be affected.

Annual compliance costs (annualized capital, operating, reporting, etc.) increase total costs of production for small entities by more than 5 percent. There is no additional public burden required to comply with the provisions of this amendment. The burden requirement under an extended moratorium is considered part of the current practice of renewing permits and endorsements.

Compliance costs as a percent of sales for small entities are at least 10 percent higher than compliance costs as a percent of sales for large entities. All the firms expected to be adversely impacted by the rule are small entities and hence there is no differential impact.

Capital costs of compliance represent a significant portion of capital available to small entities, considering internal cash flow and external financing capabilities. General information available as to the ability of small business fishing firms to finance items such as a switch to new gear indicate that this would be a problem for at least some of the firms. The evidence is that the banking community is becoming increasingly reluctant to finance changes of this type, especially if the firm has a history of cash flow problems. Commercial and for-hire vessels that are now heavily dependent on sale of recreationally caught king mackerel are not directly affected by extending the moratorium with respect to their continued viability in the fishery.

The requirements of the regulation are likely to result in a number of the small entities affected being forced to cease business operations. This number is not precisely defined by SBA but a "rule of thumb" to trigger this criterion would be two percent of the small entities affected. Extending the moratorium would eventually drive some vessels out of the king mackerel fishery, but this cessation of fishing may be attributed more to the performance of subject vessels than to the moratorium itself. There is an unknown number of fishing operations that may cease due to their inability to enter the king mackerel fishery during the moratorium. It may be noted, however, that they may enter the fishery by purchasing permitted vessels (inclusive of the permit).

The foregoing discussion leads to the inference that small businesses will not be significantly affected by extending the moratorium. Hence, the determination is made that the proposed rule will not have a significant economic impact on a substantial number of small business entities, and an IRFA is not required.

3.0 ENVIRONMENTAL CONSEQUENCES

This section reviews and discusses the biological, physical, and human environment of the coastal pelagic resources of the Gulf of Mexico and South Atlantic.

3.1 Biological Environment

Amendment 1 (with Environmental Impact Statement [EIS]) and Amendment 3 (with Environmental Assessment [EA]) provide a review of the biology and habitat of the coastal migratory pelagic fishery resources, and they are incorporated here by reference. No new information that would appreciably change these discussions is available. The biological effects, if any, of this proposed action are discussed immediately following the proposed alternative in Section 2. As discussed, there should be very little, if any, impact on the biological environment as a result of either extending or not extending the commercial king mackerel permit moratorium.

3.2 Physical Environment

The alternative proposed in this amendment will not have a negative impact on the physical environment. Gear traditionally used in this fishery (hook-and-line and run-around gill nets) have no adverse impact on the bottom substrate or other habitat. These gear are selective for the target species, and there is little bycatch. Continuing studies have provided no new information beyond that already contained in the FMP, as amended, that would change this determination. The relationship between mackerel stocks and their habitats, including the physical requirements, are contained in the Coastal Migratory Pelagics FMP, as amended, and in the Councils' essential fish habitat (EFH) amendments. Additionally, subsequent studies have not provided new or different information that could be used to further define relationships or alter the aforementioned conclusions.

3.2.1 Effect on Wetlands: The proposed action will have no effect on flood plains, rivers, creeks, or other streams and tributaries to the marine environment or their associated wetlands.

3.2.2 Effect on Essential Fish Habitat: The proposed action will have no effect on EFH.

3.2.3 Mitigating Measures: No mitigating measures related to the proposed action are necessary because there are no harmful impacts to the environment.

3.2.4 Unavoidable Adverse Affects: The proposed action does not create unavoidable adverse affects.

3.2.5 Irreversible and Irretrievable Commitments of Resources: There are no irreversible commitments of resources other than costs of administering and enforcing the proposed rule resulting from implementation of this amendment.

3.2.6 Relationship Between Short-Term Uses and Long-Term Productivity: Since 1985, the FMP has restricted annual catches in order to restore overfished stocks. The result of these actions has been a gradual rebuilding of the stocks; however, under current interpretation of the SFA, stocks that are not currently producing MSY are considered overfished and must be restored to MSY. As such the Gulf group king mackerel fishery is below this level; however, rebuilding programs to increase standing stocks of all mackerel resources to their management goals of OY remain in effect.

3.2.7 Impacts on Other Fisheries: The alternatives proposed in this amendment do not directly affect other fisheries.

3.3 Human Environment

3.3.1 Description of the Fishery: The FMP and Amendments 1 through 3 with accompanying Environmental Impact Statements or Environmental Assessments describe the fishery for coastal migratory pelagic resources. In recent years, increasing fishing effort and other factors have caused some changes. The following is a synopsis of the fishery and some of the known changes.

For many years, king mackerel has been a major target species of an important commercial fishery in South Florida. Additionally, this species is and has been a major target species for the private boat and charterboat recreational fishery along widespread areas within the Gulf and South Atlantic regions. King mackerel are particularly important to the charterboat and offshore private boat fleets, and it is a highly sought species in many fishing tournaments. In addition, king mackerel are caught as a commercial supplement by the charterboat fleet in the Florida Keys and to a lesser extent in North Carolina and other areas of Florida.

A hook-and-line fishery for king mackerel developed commercially off Louisiana in the winter of 1982-83. This trolled, handline fishery used gear and methods similar to the Florida hook-and-line fleet and was centered in the Grand Isle, Louisiana area. Since the number of participants and effort have increased, this fishery is no longer a winter fishery because the quota has been caught before the winter season in recent years. In 1998, the 1.05 million-pound quota was filled in 56 days from the start of the fishing season on July 1, and in 1999 this fishery closed after only 55 days under the same quota.

The commercial fishery for king and Spanish mackerel is primarily located off Florida, and most of the catch is taken there from November through March. The number of commercial mackerel permits issued to vessels in Florida in the 1997-98 fishing year was 1,934. This amounted to 70 percent of the total number of permits issued in the southeast region (2,754). Additionally, virtually all permittees utilized hook-and line gear, with less than 30 participants having used gill nets. Only about 12 gill net boats have been consistently fished for king mackerel on the Florida west coast (primarily the Florida Keys) in recent years. King mackerel begin forming tight schools and become available to run-around gill nets in this area in January. With a trip limit of 25,000 pounds, the gill net allocation of TAC is quickly taken and this segment of the fishery is usually closed before February 1.

The king mackerel fishery is divided into two migratory groups: the Gulf group and the Atlantic group. As previously discussed, the boundary between these groups shifts seasonally between the Volusia/Flagler County line and the Collier/Monroe County line on the coast of Florida. The fishing year for Gulf group king mackerel is July 1 through June 30; however, in recent years the TAC has been taken before the end of the season. The fishing year for Atlantic group king mackerel is April 1 through March 31, and this fishery has only closed twice in recent years (1996-97 and 1997-98) due to achieving its allocation of TAC.

Because of the migratory boundaries between the two groups of king mackerel, the Gulf group is divided into the Florida east coast subzone and the Florida west coast subzone. When the season opens on July 1, Gulf group king mackerel are distributed from the Collier/Monroe County line to Texas. On November 1 the distribution expands up the east coast of Florida to the Volusia/Flagler County line. In recent years, the hook and line commercial fishery has been constrained by the daily trip limit of 1,250 pounds for the west coast of Florida and 50 fish for the east coast; and daily trip catches are generally less than 500 pounds. Historically, over 80 percent of the total harvest of Gulf group king mackerel has come from the Florida Keys; however, in recent years an increasingly larger portion of the total harvest has come from the Panhandle area of Florida. Consequently, regulations are being proposed to further subdivide the allocation of TAC by area on the west coast of Florida in an effort to preserve historical allocations.

Bycatch of juvenile king and Spanish mackerels in trawls in the Gulf shrimp fishery exceeds the number taken in the directed commercial and recreational fishery (Powers et al 1994). In the Atlantic shrimp fishery, shrimp trawl bycatch estimates of king and Spanish mackerel were about 228,000 and 7.5 million, respectively, based on the 1992-94 average. Bycatch reduction has been addressed through the approval of Amendment 9 to the Gulf Shrimp FMP and Amendment 2 to the South Atlantic Shrimp FMP, wherein both amendments require trawlers to install NMFS- approved bycatch reduction devices (BRDs).

3.3.2 History of Management: The management history is described in Section 1.1.

3.3.3 Economic and Social Assessment: The economic and social effects of this amendment are discussed in detail in Section 2.0 in the discussion following each set of alternatives.

3.4 Finding of No Significant Environmental Impact

I have reviewed the environmental assessment and determined that the proposed action will not significantly affect the physical or human environment, including EFH, and that preparation of an environmental impact statement is not required.

Assistant Administrator for Fisheries

Date

4.0 OTHER APPLICABLE LAW

4.1 Vessel Safety

The proposed alternatives do not impose requirements for use of unsafe (or other) gear nor do they direct fishing effort to periods of adverse weather conditions. On the contrary, maintenance of a permit moratorium on king mackerel would prevent additional entry into the fishery. Additional entrants could increase the potential for derby fishing and accidents. To the extent that such accidents and or derby fishing are avoided by maintaining a limited number of participants, the effect would be an increase in vessel safety.

4.2 Paperwork Reduction Act

The purpose of the Paperwork Reduction Act is to control paperwork requirements imposed on the public by the Federal Government. The authority to manage information, its collection, and record keeping is vested with the Director of the Office of Management and Budget. This authority encompasses establishment of guidelines and policies, approval of information collection requests, and reduction of paperwork burdens and duplications. The proposed action is not expected to increase paperwork requirements.

4.3 Coastal Zone Management Consistency

The Councils have determined that this proposed action will be implemented in a manner that is consistent to the maximum extent practicable with the approved coastal zone management programs of the affected states. This determination has been submitted for review by the affected states under Section 307 of the Coastal Zone Management Act (CZMA).

4.4 Effect on Endangered Species and Marine Mammals

A formal Section 7 consultation under the Endangered Species Act (ESA) was completed for Amendment 6. In a biological opinion dated August 19, 1992, the NMFS determined that fishing activities conducted under the amendment and its implementing regulations, as well as the fisheries for coastal migratory pelagic resources, are not likely to jeopardize the continued existence of any endangered or threatened species under its jurisdiction. However, it was also determined that gill net fisheries may adversely affect the recovery of listed species of sea turtles. Accordingly, in compliance with the ESA, an Incidental Take Statement was issued and reasonable and prudent measures were specified to minimize such adverse impacts. The proposed action described and considered in this amendment is not expected to have any additional impact on endangered or threatened species.

4.5 Scientific Data Needs

To monitor stocks to determine whether overfishing occurs, the Southeast Fisheries Science Center (SEFSC) of NMFS currently monitors catch by size (age) to estimate recruitment, ABC ranges, and other stock assessment parameters. No additional collection of scientific data would be required by this amendment.

4.6 Federalism

This proposed amendment does not contain policies with federalism implications sufficient to warrant preparation of a federalism assessment under E.O. 12612.

5.0 LIST OF PREPARERS

Dr. Richard Leard, Gulf of Mexico Fishery Management Council
Dr. Antonio Lamberte, Gulf of Mexico Fishery Management Council

6.0 LIST OF AGENCIES, ORGANIZATIONS AND PERSONS TO WHOM COPIES OF THE AMENDMENT/ENVIRONMENTAL ASSESSMENT ARE SENT.

Gulf of Mexico Fishery Management Council
Law Enforcement Advisory Panel
Mackerel Advisory Panel
Socioeconomic Panel
Scientific and Statistical Committee

South Atlantic Fishery Management Council
King and Spanish Mackerel Advisory Panel
Scientific and Statistical Committee

Coastal Zone Management Offices

Alabama, Mississippi, Louisiana, Florida, Texas, Georgia, North Carolina, South Carolina, Virginia, New Jersey, Delaware, New York, Maryland, and Pennsylvania

Others

Monroe County Commercial Fishermen's Association
Organized Fishermen of Florida
Southern Offshore Fisheries Association
Southeastern Fisheries Association
Coastal Conservation Association
Center for Marine Conservation
Environmental Defense Fund
National Marine Fisheries Service Washington Office
National Marine Fisheries Service Southeast Fisheries Center
National Marine Fisheries Service Southeast Regional Office
National Marine Fisheries Service Law Enforcement
United States Fish & Wildlife Service
United States Coast Guard
Monroe County Cooperative Extension Service
Concerned Fishermen of Florida
Mid-Atlantic Fishery Management Council

List of Agencies, Organizations, and Persons Consulted

South Atlantic Fishery Management Council Law Enforcement Advisory Panel
South Atlantic Fishery Management Council Snapper Grouper Advisory Panel
South Atlantic Fishery Management Council Scientific and Statistical Committee
Florida Department of Environmental Protection
Gulf and South Atlantic Fisheries Foundation
Monroe County Commercial Fishermen, Inc.
New River Fisherman's Association
North Carolina Fisheries Association, Inc.
Center for Marine Conservation
National Fisheries Institute
Florida Sea Grant
Atlantic Coast Conservation Association
North Carolina Fisheries Association
Organized Fishermen of Florida
Recreational Fishing Alliance (RFA)
Southeastern Fisheries Association

7.0 PUBLIC HEARING SITES

Public hearings in the Gulf were held at the following locations:

Monday, June 14, 1999

City Hall Auditorium
300 Municipal Drive
Madeira Beach, FL 33708

Wednesday, June 16, 1999

Orange Beach Community Center
27235 Canal Road
Orange Beach, AL 36561

Tuesday, June 15, 1999

National Marine Fisheries Service
Panama City Laboratory
3500 Delwood Beach Road
Panama City, FL 32408

Thursday, June 17, 1999

Port Aransas Library
700 West Avenue A
Port Aransas, TX 78373

Public hearings in the South Atlantic were held at the following locations:

Monday, August 16, 1999

Carteret Community College
Morehead, NC

Tuesday, August 17, 1999

Charleston, SC

Tuesday, August 17, 1999

Miami, FL

Wednesday, August 18, 1999

Green Turtle Inn
Atlantic Beach, FL

Copies of this document may be obtained from the Gulf of Mexico Fishery Management Council office, 3018 U.S. Highway 301 North, Suite 1000, Tampa, Florida 33619-2266, (813)228-2815 or the South Atlantic Fishery Management Council office, 1 Southpark Circle, Suite 306, Charleston, South Carolina 29407-4699.

8.0 REFERENCES

- Mace, P., L. Botsford, J. Collie, W. Gabel, P. Goodyear, J. Powers, V. Restrepo, A. Rosenberg, M. Sissenwine, G. Thompson, and J. Witzig. 1996. Scientific review of definitions of overfishing in U.S. fishery management plans: Supplemental report. NMFS. MSAP 96/15. 20 pp.
- MSAP, 1999. 1999 Report of the mackerel stock assessment panel. Gulf of Mexico Fishery Management Council, 3018 U.S. Highway 301, North, Suite 1000, Tampa, Florida 33619-2266. 25 pp.
- NMFS, 1998. Appendix 2.d: Guidelines for regulatory analysis of fishery management actions. National Marine Fisheries Service, 9721 Executive Center Drive, North, St. Petersburg, Florida 33702.
- Powers, J. E., N. Parrack, and P. Phares. 1994. Summary of evaluations of the status of the Gulf of Mexico and Atlantic king mackerel and Spanish mackerel. Contribution MIA - 93/94-41. National Marine Fisheries Service, Southeast Fisheries Science Center, 75 Virginia Beach Drive, Miami Florida 33149.
- Vondruska, J. 1999. Commercial landings of coastal migratory pelagic fish, east and Gulf coasts, 1977-1998. National Marine Fisheries Service, 9721 Executive Center Drive, North, St. Petersburg, Florida 33702.

Table 1

**Number of Vessels (by State of Registration) with Commercial King and Spanish Mackerel Permits
1987/88 through 1997/98**

Fishing Year	NC	SC	GA	FLEC	FLWC	AL	MS	LA	TX	OTHER	TOTAL	% INCREASE FROM 87/88
1987/88	325	40	2	580	237	4	7	58	9	18	1,280	
1988/89	462	44	6	629	290	3	72	86	15	27	1,634	28
1989/90	533	56	7	645	340	5	12	161	14	51	1,824	43
1990/91	590	74	13	767	558	14	13	195	32	52	2,308	80
1991/92	481	69	11	717	580	15	13	172	27	46	2,131	66
1992/93	488	112	37	819	891	64	38	178	98	61	2,786	118
1993/94	412	79	10	846	808	20	21	238	56	98	2,588	102
1994/95	353	69	10	619	858	12	12	183	56	76	2,248	76
1995/96	320	62	9	724	1153	11	8	205	54	101	2,647	107
1996/97	312	52	12	599	967	8	11	163	50	82	2,256	76
1997/98	374	66	12	760	1174	16	12	185	53	102	2,754	115

Number of active permits as of March 25, 1999:

King mackerel only:	450
Spanish mackerel only:	334
Both king and Spanish mackerel:	<u>1,659</u>
 Total	 2,443