SUPPLEMENTAL

FRAMEWORK SEASONAL ADJUSTMENT

OF HARVEST LEVELS AND PROCEDURES

UNDER THE

FISHERY MANAGEMENT PLAN FOR COASTAL PELAGICS

IN

THE GULF OF MEXICO AND SOUTH ATLANTIC

INCLUDES ENVIRONMENTAL ASSESSMENT

REGULATORY IMPACT REVIEW

AND

INITIAL REGULATORY FLEXIBILITY ANALYSIS

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I. HISTORY OF MANAGEMENT

The "Mackerel" FMP, 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, 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, implemented in July of 1987, revised Spanish mackerel MSY downward, recognized two migratory groups, and set commercial quotas and bag limits. Charter boat 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.

Amendment 3 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, implemented in 1989, reallocated Spanish mackerel equally between recreational and commercial fishermen on the Atlantic group.

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

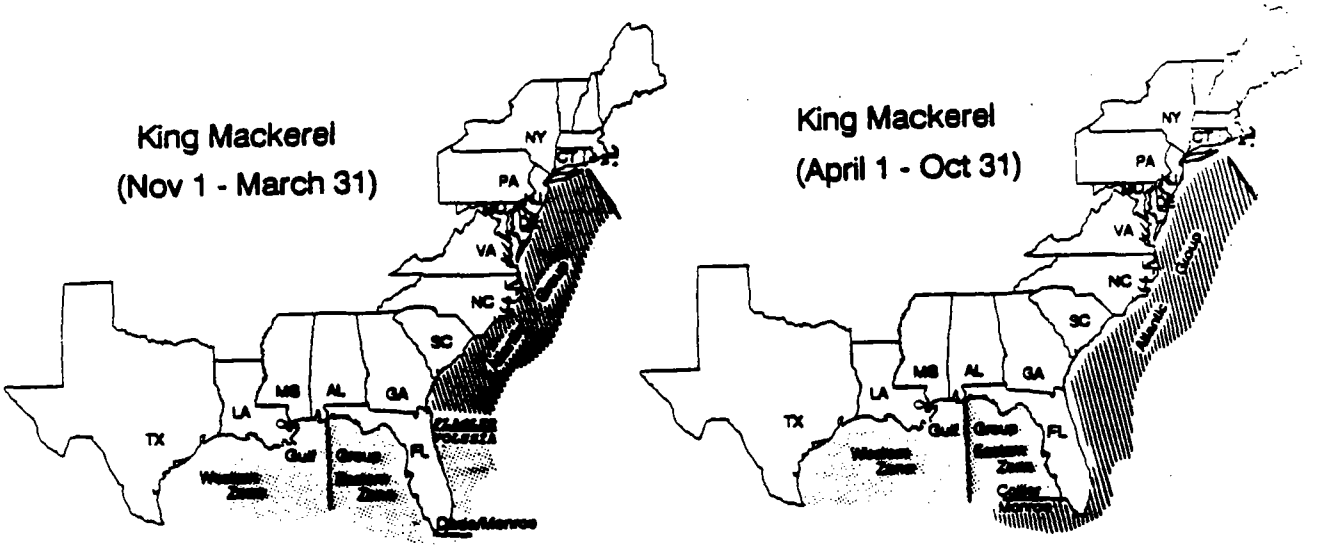
- Extended management area for Atlantic groups of mackerels through the Mid-Atlantic Council's area of jurisdiction;
- Revised problems in the fishery and planned objectives;
- Revised the fishing year for Gulf Spanish mackerel from July-June to April-March;
- Revised the definition of "overfishing";
- Added cobia to the annual stock assessment procedure;
- Provided that the South Atlantic Council will be responsible for pre-season adjustments of TACs and bag limits for the Atlantic migratory groups of mackerels while the Gulf Council will be responsible for Gulf migratory groups;
- Continued to manage the two recognized Gulf migratory groups of king mackerel as one until management measures appropriate to the eastern and western groups can be determined;
- Redefined recreational bag limits as daily limits;
- Deleted provision specifying that bag limit catch of mackerel may be sold;
- Provided guidelines for corporate commercial vessel permits;
- Specified that Gulf 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;
- Established a minimum size of 12-inch (30.5 cm.) fork length or 14-inch (35.6 cm.) total length 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;

- o Provided for biennial assessments and adjustments;
- o Provided for more seasonal adjustment actions;
- o Allowed Gulf king mackerel stock identification and allocation when appropriate;
- o Provided for commercial Atlantic Spanish mackerel possession limits;
- o Changed commercial permit requirements to allow qualification in one of three preceding years;
- o Discontinued the reversion of the bag limit to zero when the recreational quota is filled;
- o Modified the recreational fishing year to the calendar; and
- o Changed minimum size limit for king mackerel to 20 inches fork length, and changed all size limit measures to fork length only.

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 which was 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). The Gulf Migratory Group may be divided at the Florida-Alabama border when the stock assessment panel is able to provide separate acceptable biological catches for each group. The commercial allocation for the Gulf group is currently divided at this boundary.



For the purpose of allocating 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 mechanism for seasonal framework adjustments is described in Appendix 1.

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 total allowable catch 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.

II. PURPOSE AND NEED FOR ACTION

The proposed action would provide equitable distribution of Eastern Zone Gulf group king mackerel among commercial fishermen.

A federal court ruling had the effect of vacating Florida's king mackerel trip limit rule for commercial vessels in December of 1992. That, coupled with unseasonable weather, resulted in the filling of the commercial quota in south Florida before the migrating schools became available to Florida east coast fishermen north of the Dade-Monroe County line. To give economic relief to these fishermen, an emergency allocation of 259,000 pounds of king mackerel was provided over the quota to these fishermen, with trip limits of 25 fish per day.

In order to obtain information to prevent a repeat of this occurrence, the councils convened a workshop for king mackerel fishermen in February of 1993 in Miami attended by about 50 fishermen. The issue was also reviewed by the Council's Mackerel Advisory Panel in April 1993, and public comment was received from 35 mackerel fishermen and interested persons at the Council's May 1993 meeting in Tampa, Florida. The consensus was that for the 1993-1994 fishing season the commercial quota for the Eastern Zone of Gulf group king mackerel should be divided equally at the Dade-Monroe County, Florida line, the same arrangement as had been used by the state. There were various alternatives suggested for trip limits.

The framework provisions of the Mackerel Fishery Management Plan do not provide for suballocation by regulatory amendment, and there was insufficient time for the councils to develop, and the Secretary to implement, a plan amendment by the beginning of the fishing season in November. Therefore, while the councils are proceeding with development of a long-term resolution to the problem by means of an amendment, the Gulf Council requested that the Secretary provide emergency implementation of the

suballocation of quota and trip limits for the forthcoming season for the Gulf migratory group of king mackerel.

Specifically, the Council requested emergency implementation of the following actions to become effective on November 1, 1993:

1. The commercial quota for Eastern Zone Gulf group king mackerel (1.73 million pounds) be divided equally at the Dade-Monroe County line, with subquotas of 865,000 pounds north, and the same amount south and west of the line.

2. In the area Dade through Volusia Counties, daily commercial trip limits of up to 50 fish per vessel are to be allowed until 50 percent of the subquota is filled, then 25 fish per daily trip until the quota is filled.

3. In the area Monroe County to the Florida-Alabama border, there are to be no commercial trip limits until 75 percent of the subquota is taken, then 50 fish per vessel per day until the subquota is taken.

NMFS approved for emergency implementation only the first action, geographic division of the commercial allocation, advising the Council to implement the trip limits under framework procedures. (See Appendix 1 for Framework Procedures). NMFS advised that this would allow the public time for review and comment, and there should be sufficient time for implementation.

With the assistance of the NMFS Southeast Regional office, and explanation and invitation to comment was distributed to all 1,700 holders of commercial permits and other interested parties. These individuals were also notified of an additional hearing held in Fort Pierce, Florida, on July 12 and attended by 61 fishermen. A public comment period was also held at the Council's meeting in San Antonio, Texas, on July 14, but there was no additional testimony.

III. AFFECTED ENVIRONMENT

1. Description of the Fishery

King mackerel and Spanish mackerel are major target species of an important commercial fishery in South Florida as well as a major target species for the private boat and charter boat recreational fishery along widespread areas within the Gulf and South Atlantic regions. King mackerel are particularly important to the charter boat and offshore private boat fleets. In addition, smaller amounts of king mackerel are caught as a commercial supplement by the North Carolina charter boat fleet. North Carolina and Virginia follow Florida in commercial production of Spanish mackerel, their combined catches in 1992 amounting to about 900,000 pounds. Small amounts of Spanish mackerel are caught as an incidental catch or supplemental commercial target species off Alabama, Mississippi, Louisiana, and to a smaller degree Georgia and South Carolina.

Most of the commercial fishery for king mackerel is located in Florida, and most are taken there 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. A net fishery on the east coast of Florida, which occurred later (March), has been eliminated since 1985 due to the filling of the commercial quota before fish became seasonally available there. Florida attempted to allocate king mackerel catches among fishermen in different geographic areas by subquotas and landing limits. The Florida trip limit regulations were vacated in December 1992, by a federal court ruling, and the commercial quota was quickly taken in the Keys with 900,.000 pounds landed there in a 10-day period in

January, 1993. An emergency allocation of 259,000 pounds was given to Florida's east coast commercial fishermen. Boats were limited to 25-fish daily, and took the supplemental allocation between February 18 and March 27, 1993.

A hook-and-line fishery for king mackerel was developed commercially off Louisiana in the winter of 1982-1983. A trolled handline fishery is similar to the Florida hook-and-line fleet and is centered in the Grand Isle area.

Recreational users have increased in numbers over time. Many come from outside the management area as well as areas within it. Increased income, leisure time, and a wide variety of supplies have increased participation. This participation has, in turn, generated significant amounts of economic value and also employment.

The habitat of King mackerel is described and updated in Amendments 1 and 3. No new information is available.

2. Status of Stocks

Atlantic group king mackerel are not classified as overfished. Gulf group king mackerel are overfished and are in a rebuilding program to restore the stocks.

In its 1993 report the Council's stock assessment panel concluded:

> "The panel continues to evaluate this stock as overfished because the spawning potential ratio (SPR) is less than 30 percent relative to maximum spawning potential. The current SPR is 23 percent. While the stock is still considered overfished, estimated SPR is improving. Overage of catches will increase the risk of not reaching the SPR goal of 30 percent by the target recovery year of 1997."

IV. PROPOSED ACTIONS INCLUDING ALTERNATIVES

Summary: The proposed actions would implement the distribution of commercial Gulf group king mackerel catch in the Eastern Zone within its North Area (Section A) and South/West Area (Section B).

A. Alternatives for commercial Gulf migratory group king mackerel in the Eastern Zone, Northern Area.

A-1. Proposed Action: In the area Dade through Volusia Counties, daily commercial trip limits of up to 50 fish per vessel are to be allowed until 50 percent of the suballocation of 865 thousand pounds is filled, then 25 fish per daily trip until the allocation is filled. (The suballocation is to be implemented by emergency rule.)

Discussion: Commercial trip limits of 50 fish declining to 25 fish in the northern portion are intended to extend the fishing season as long as possible. Of these small vessel hook-and-line troll fishermen approximately 150 are full-time fishermen, who have few alternative fisheries and are dependent almost entirely on the king mackerel. In February of 1993 the fish taken were averaging about ten pounds each. Ex-vessel price varied depending on the market from $1.25 to $1.80 per pound.

The proposed trip limits are too small to allow for the reintroduction of the use of nets in this fishery north of the Dade-Monroe boundary. There are approximately 12 net boats in the area

equipped to fish for king mackerel. However, although that gear has been used to harvest Atlantic group king mackerel, it has not been used on the Gulf stock since 1985 because of quota closures before the fish school and become vulnerable to nets in this area, usually in February and March. Net vessels have the opportunity to fish on Atlantic king mackerel beginning in April and on Spanish mackerel. The 1994-1995 season's commercial quota for Atlantic Spanish mackerel has been increased by one million pounds. Some net vessels may also elect to troll for king mackerel under the 50-fish trip limit, as some net vessels did in Monroe County in December of 1992. The limit reduction to 25 fish is intended to reduce total daily catch, to extend the open season, and to reduce the opportunity to overrun the suballocation.

The implementation of this alternative conforms to FMP objectives:

2. To provide a flexible management . . . for changes in fishing patterns among user groups or by areas,

4. To minimize gear and user group conflicts,

7. To provide appropriate management to address specific migratory groups of king mackerel, and

8. To optimize the social and economic benefits of the coastal migratory pelagic fisheries.

The 12 net boats in the fishery, each with catch capacities of about 20,000 pounds per trip, have the potential to take about 35 percent of the commercial allocation of the North Area in a single day and virtually the entire allocation in 3 days. Pulse landings would glut the market, lower value to fishermen, create gear and user conflict, and shorten the fishing season for 150 other hook-and-line fishermen dependent on this fishery. It is questionable whether the Gulf migratory group king mackerel will ever again be able to sustain the level of fishing effort applied in the early 1980's. Net fishermen have the option during November-March of fishing for Spanish mackerel, a lower valued fish, which is not economically available to the hook-and-liners.

The few trollers north of Cape Canaveral, who must travel further to reach fishing grounds, may find the 25 fish per daily trip to be economically impractical. However, they do have the option of fishing south of the Cape where ports are closer to fishing grounds, as some did last season. The alternative of a quota closure before fish arrive on the East Coast is less attractive.

This proposed action alternative is by far the most preferable one among the fishermen in the area and was also endorsed by the South Atlantic Council within whose geographical area of responsibility the fishery occurs.

A-2. Rejected Alternative: Florida's trip limit program for both east and west coast areas was:

Begin Season, July 1:	1,000 pounds/trip until January 1,
January 1 to 75 percent of allocation:	15,000 pounds/trip (gill net season),
75 percent to 100 percent of allocation:	300 pounds/trip,
100 percent of allocation through March 31:	2 fish/person/day (state waters).

Discussion: This alternative implemented by the state provided for 1,000 pound trips until January 1, but did not provide flexibility to begin the next trip limit stage earlier or later. The suballocation was always filled before the net boats gained access to fishable schools in

February. The 2 fish per day provision after the allocation was filled allowed landings beyond total allowable catch under the commercial subquota.

A-3. Rejected Alternative for the Northern Area:

All Eastern Zone (Florida) July 1 - October 31: 300 pounds/day.

North Area:

November 1 to filling of 50 percent of North Area suballocation:	(1,000 - 5,000) pounds/day,
50 percent to 80 percent of suballocation:	600 pounds/day,
80 percent to 100 percent of suballocation:	300 pounds/day,
100 percent of suballocation:	North Area season closes.

Discussion: This alternative provides for a traditional limited small boat fishery from July 1 to October 31 with an increase in daily limit during the height of the season, then tapering down to a closure. This procedure would require four adjustments during the season and was judged to be too complicated to administer and confusing to the fishermen.

A-4. Rejected Alternative:

All Eastern Zone (Florida) July 1 - October 31: 300 pounds/day

North Area:

November 1 to filling of (50) percent of North Area suballocation:	(1,000 - 5,000) pounds/day,
From 50 percent to 75 percent of North Area suballocation (schedule for February):	(10,000 - 15,000) pounds/day,
From 75 percent to 100 percent of North Area suballocation:	300 pounds/day,
100 percent of suballocation:	North Area season closes.

Discussion: This alternative is the same as Alternative A-3, except that it provides for an allowable catch of 25 percent of the allocation by large capacity (net) boats. This alternative was rejected for the same reason and also because it was judged to be inappropriate to provide for reentry of a few (12) net boats to take a large portion (x percent) of a small allocation from the much greater number (150) of other gear users. This alternative was suggested by the Council's advisory panel.

A-5. Rejected Alternative: Status quo, no trip limits in the Northern Area.

Discussion: Without a suballocation (as requested as an emergency rule) and trip limits in the northern area the entire Eastern Zone allocation could be filled in the South/West Area as occurred in the 1992-1993 season. Without trip limits a fishing derby would occur among the trollers resulting in a market glut, short season, low prices, and unequal distribution of catch. The season would close before February, still precluding net fishing in the Northern Area which becomes practical in February and March.

B. Alternatives for commercial Gulf migratory group king mackerel in the Eastern Zone South/West Area.

B-1. Proposed Action: In the area Monroe County to the Florida-Alabama border, there are to be no commercial trip limits until 75 percent of the suballocation is taken, then 50 fish per vessel per day until the suballocation is taken.

Discussion: For the area from Monroe County to the Florida-Alabama border, fishing will have begun from Collier County westward in July. Some small vessel production will be landed in the Florida Panhandle prior to the November implementation of the requested action. This amounted to about 22,000 pounds in 1991, and 56,000 pounds in 1992. After Monroe County (Florida Keys) enters the fishery in November at the shift of the boundary between migratory groups northward to Volusia/Flagler County line, landings can be expected to increase due to the presence there of 75-100 troll vessels and 16 to 20 net vessels, which may also troll for king mackerel. When conditions become favorable to the use of nets, usually in late December, large landings begin. With good fishing and marketing opportunities, the level of 75 percent of the suballocation (649,000 pounds) should be reached in late December or early January.

Most Monroe County fishermen have access to alternative fisheries, such as stone crab, spiny lobster, and reef fish and thus prefer a short mackerel season. The final 25 percent of the suballocation, (216,000 pounds) would be taken under 50 fish trip limits. This daily catch is judged to be adequate for most troll fishermen and some converted net vessels. Many of the net and troll vessels are greater than 34 feet; however, there are also smaller part-time guide and lobster vessels trolling for king mackerel. The reduction in trip limits toward the end of the suballocation is again intended to reduce the likelihood of exceeding the quota, by large daily landings before closure can be implemented.

This action is responsive to Management Objectives:

2. It provides flexible management for changes in fishing patterns among user groups or by areas,

4. It minimizes gear and user group conflicts, and

8. It optimizes social and economic benefits of the coastal migratory pelagic fisheries.

B-2. Rejected Alternative for South/West Area:

July 1 to 50 percent of suballocation:	3,500 pounds/trip,
50 to 75 percent of suballocation:	20,000 pounds/trip,
75 to 100 percent of suballocation:	300 pounds/trip.

Discussion: This alternative provides a daily catch of 3,500 pounds for the first half of the suballocation. This allows for longer trips for the troll boats. Following is a 20,000 pound trip limit to accommodate large net boats with 25 percent of the suballocation. The 300 pound trip limit for the final 25 percent reduces the likelihood of overrun and allows for smaller catches by dependent small trollers. This is a viable alternative but was deemed too difficult to administer and confusing with the three catch levels and adjustments.

B-3. Rejected Alternative for South/West Area:

South/West Area:	
July 1 to December 1:	(300 - 1,000) pounds/day,
December 1 to January 1 or 35 percent of suballocation:	3,500 pounds/day,

January 2 to 85 percent of suballocation (fishing only by net boats):	20,000 pounds/day,
85 percent to 100 percent of suballocation:	3,500 pounds/day,
100 percent of suballocation:	South/West Area season closes.

Discussion: This alternative was suggested by the Council's advisory panel. It would provide for an allocation of 50 percent of the suballocation to the net boats. Again, it was judged to be confusing and overly complicated to administer.

B-4. Rejected Alternative for South/West Area: Status quo, no trip limits and no suballocation (as requested as emergency rule).

Discussion: In December of 1992 about 380,000 pounds of king mackerel were landed by trollers in Monroe County. From January 4 to January 13, 1993 about 900,000 pounds were landed there by net and troll boats, filling the entire Eastern Zone commercial allocation and closing the fishery before the fish were available north of Monroe County, i.e., Northern Area. A supplemental allocation of 259,000 pounds was given to the east coast fishermen in the Northern Area who had been excluded by the early closure. Some action is required to prevent reoccurrence of this pulse fishing.

V. REGULATORY IMPACT REVIEW AND INITIAL REGULATORY FLEXIBILITY ANALYSIS

Introduction

The National Marine Fisheries Service (NMFS) requires a Regulatory Impact Review (RIR) for all regulatory actions that are of public interest. The RIR does three things: 1) 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 "major rule" under certain criteria provided in Executive Order 12291 and whether the proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Act of 1980 (RFA).

This RIR analyzes the probable impacts that the proposed alternatives for commercial trip limits for the Gulf group of king mackerel in the Eastern Zone have on the commercial fishery. It may be noted that under the FMP, as amended, the Gulf group of king mackerel is allocated in various ways. The overall TAC (currently 7.8 million pounds) is first divided between the recreational and commercial fishermen (62/38 split). The commercial quota is in turn subdivided into Eastern Zone and Western Zone sub-quotas (69/31 split). Under an emergency action to be followed by a plan amendment, the Eastern Zone commercial sub-quota will be further subdivided between those fishing north of the Dade-Monroe county line and those fishing south to west of the line (50/50 split). The current regulatory amendment is designed to impose different trip limits on these latter two sub-regions of the Eastern Zone, and this RIR addresses only these proposed trip limits. The 50/50 allocation between the two sub-regions will be analyzed in the forthcoming plan amendment. For purposes of this RIR, the area north of the Dade-Monroe county line up through the Volusia/Flagler county line is denoted Northern Area and the area south of the line up through the Florida/Alabama state line, as South/West Area.

Problems and Objectives

The general problems and objectives are found in the FMP, as amended. The purpose and need for the present regulatory amendment are found in Section II of the amendment document. Essentially the current regulatory amendment addresses the issue of imposing trip limits on the commercial harvest of Gulf king mackerel in the Eastern Zone.

Methodology and Framework for Analysis

The fundamental issue in this current regulatory amendment is the resulting catch allocation effected by the trip limits. Determination of the economic and social impacts of such allocation is therefore the main emphasis of this RIR. It needs to be stressed here that assessment of the proposed actions and alternatives assumes a 50/50 allocation of the commercial quota in the Eastern Zone between the Nothern Area and South/West Area.

From an economics standpoint, an allocation is deemed better than another allocation if the sum of changes in net benefits to the affected sectors is larger than that of the other. For an optimal allocation, the necessary condition is that the marginal benefit is equalized among various users of the mackerel resource. In the absence of most information that must be employed in determining an optimal allocation and the presence of other potential sources of inefficiency in the king mackerel fishery such as the recreational-commercial allocation, Eastern Zone-Western Zone commercial sub-allocation and the Northern Area-South/West Area further commercial sub-allocation, the methodology adopted in this RIR is one that assesses whether the allocation brought about by the proposed trip limits would be more beneficial than the resulting allocation in the absence of such trip limits or in the presence of other sets of trip limits. The benefits considered here are composed of consumer and producer surpluses in the commercial sector mainly because this is the only sector directly affected by the proposed regulations. The analysis, nonetheless, will be more qualitative in nature.

In addition to discussions on net economic benefits, this RIR also considers such other issues as community employment and income opportunity, acceptability of the regulatory measures, present and historical participation in the fishery, and excessive shares by anyone resource user or group of users.

Impacts of Proposed Actions and Alternatives

A. Alternatives for commercial Gulf migratory king mackerel in the Eastern Zone, Northern Area

Proposed Action: **In the area Dade through Volusia counties, daily commercial trip limits of up to 50 fish per vessel are to be allowed until 50 percent of the suballocation is filled, then 25 fish per daily trip until the allocation is filled.**

The fishing season for Gulf king mackerel starts on July 1 of every year and extends to June 30 of the following year. A TAC of 7.8 million pounds (MP) has been established. The established 68/32 recreational/commercial allocation ratio translates to a 2.5 MP overall quota for the commercial sector. Out of this commercial quota, 1.73 MP is allocated to the Eastern Zone and the rest to the Western Zone. Under the 50/50 allocation submitted under an emergency action, the Northern Area will be allocated 0.865 MP. The proposed action then means that each vessel can harvest up to 50 fish per trip until about 0.43 MP of the Northern Area allocation is taken, and thence the trip limit drops to 25 fish per vessel per daily trip until the sub-quota is filled. Although the 1993/1994 fishing season is already under way, fishing for Gulf king mackerel in the Northern Area by regulation starts only on November 1, and so the proposed action if implemented soon can still be effectively enforced.

Since the implementation of more restrictive regulations on the mackerel fishery, the commercial fishing season for Gulf king mackerel in the Eastern Zone has never remained open beyond January. The only exception is the 1992/1993 season due to the re-opening of the fishery from February 18 through March 26, 1993 through an emergency action upon request from commercial fishermen in the area. The closure date has remained relatively unchanged despite the more recent increases in TAC and commercial quota. In terms of landings, the Eastern Zone sub-quota has been taken practically equally between the two areas in this zone. A significant change occurred in the last season for a variety of reasons including the vacating of Florida's regulation regarding the equal division of the quota between the two areas and attendant trip limits. The proposed 50/50 allocation under an emergency action and plan amendment may restore such near equality of landings in the two areas, but without additional restrictions on harvest, the closure date for the fishery is very likely to remain unchanged considering that the overall TAC for the 1993/1994 season is the same as that of the previous year.

With fishery closures occurring around January, net vessels (12 vessels by current account) that used to fish Gulf king mackerel in the Northern Area have been practically excluded from the fishery since the effective fishing season for these vessels starts around late February. The 50/50 allocation of the Eastern Zone sub-quota could virtually re-open this net fishery, but the proposed trip limits would be too restrictive these vessels to re-enter the fishery. The proposed trip limits would maintain the hook and line fishery with an estimated 150 full-time fishing crafts, and in this way would allocate practically all the allocation for the Northern Area to the hook and line fishing vessels.

Because of the capacity of net vessels to land large amounts of king mackerel, their presence in the fishery would mean shorter fishing season in the Northern Area and relatively lower ex-vessel price for king mackerel. It has been reported that the 12 net boats equipped to fish for king mackerel in the Northern area has a harvest capacity of about 20,000 pounds per trip and that under favorable conditions these vessels can harvest the entire allocation in 3 days. The opposite may be expected if only hook and line vessels operate in the area, at least in the short run. The past year's re-opening of the fishery under a 259,000-pound quota and a 25-fish trip limit lasted a little over a month. Using this information it may be inferred that the hook and line fishery can potentially harvest the allocation in about 2 months assuming no trip limits and about 3 months with the proposed trip limits. Over a longer period under the current open access management, a derby fishery may still be expected to occur regardless of who fishes the majority of the allocation. Such derby, however, may be more acute under a situation where net vessels are given almost a free rein on the harvest of the stock. From a revenue standpoint, the Northern Area allocation may be expected to translate into more revenues to the harvest sector under the proposed trip limits than without it, since mackerel would on average command higher prices. In addition a steady supply of king mackerel over a longer period can take advantage of a relatively higher seasonal demand shifter in February and March (see Easley et al., 1993 for the relative magnitude of monthly demand shifters).[1] More revenues, however, do not necessarily mean larger net economic benefits to the nation. The ensuing discussion deals on what such revenue increase means to the harvest sector composed of hook and line and net fishermen, fish dealers, and consumers.

In the harvest sector, producer surplus is the main factor to consider when measuring net economic benefits. Producer surplus may be roughly equated to net profits to the harvest sector, i.e., the difference between revenues and costs. If costs to the harvest sector remain the same after the imposition of trip limits, the resulting higher revenues mean higher profits, and consequently the trip limits may be adjudged to result in higher net economic benefits to the harvest sector. Fishing costs, however, have been reported to differ between hook-and-line and net vessels. In fact, if netters can

[1] It may be pointed out that this particular study was not intended to rigorously examined monthly demand for king mackerel, but it does provide monthly demand shifters that may be roughly considered as indicative of the relative strength of demand on a month to month basis.

catch the allocation in a significantly less number of days than hook and line fishermen, costs to netters may be expected to be less than those for hook and line fishermen. Thus, we are confronted with two relatively extreme situations – one with higher revenues and costs when only hook and line fishermen take most of the allocation and another with lower revenues and costs when netters take most of the allocation. Without quantitative estimates, it is impossible to categorically conclude that the allocation effected by the trip limits, i.e., biased to hook and line, would result in higher profits than the one that would ensue without the proposed trip limits, i.e., potentially biased to netters.

Nevertheless, there are two conclusions that appear to be reasonable. First, it appears that an allocation that allows both hook and line and netters to remain in the fishery is economically better off than that resulting from the proposed trip limits which would exclude netters, especially when considering the marginal values of fish allocated to each of the two segments of the harvest sector. That is, it is very unlikely that the last remaining fish (out of the total allocation) would bring in higher net value to hook and line fishermen than to netters. The second conclusion relates to changes in profits that take account of opportunity costs. Most hook and line fishermen in the Northern Area have fewer alternative fishing activities than netters who could also direct their effort to Spanish mackerel. After March 31 netters can and do fish for the Atlantic group of king mackerel in the Northern Area (Testimony at the May 1993 Council meetings). Under this condition, the producer surplus to hook and line fishermen would be nearly equal to their net profits while that for netters would be equal to their net profits in the king mackerel fishery less their profits in alternative fisheries such as the Spanish mackerel fishery.

One limiting factor, however, that needs to be recognized is the fact that the subject netters are targeting the Atlantic group of Spanish mackerels, a fishery that is also regulated. Although by approval of Amendment 6 to the mackerel FMP, the commercial Atlantic Spanish mackerel fishery no longer closes, the commercial quota for the 1992/1993 season was fully taken as in the past years. A year round open season for this fishery was enabled mainly by the trip limits imposed on the commercial fishery. In principle, such trip limits could have limited the harvest of larger net vessels, but low catches by small boats and by vessels north of Florida enabled larger net vessels in Florida to experience higher than expected catches. A recent regulatory amendment modifying the trigger mechanism for changing trip limits could negatively impact these larger vessels, as argued in the RIR accompanying the mentioned regulatory amendment. A redeeming factor, however, is the recent increase in TAC (from 7 to 9 million pounds) and commercial quota (from 3.5 to 4.5 million pounds) for Atlantic Spanish mackerel.

At any rate, given such alternative fishing for netters, an allocation that allows hook and line fishermen to take a larger portion of the quota could result in higher profits to the harvest sector. The unknown factor, of course, is the amount that needs to be allocated to netters to achieve the mentioned higher net profits to the harvest sector. There will be some discussions along this line when considering some of the rejected alternatives.

As with the harvest sector, profits are the main variable to consider when determining the effects of regulatory changes on dealers. In the absence of quantitative information about the operations of dealers as well as general supply and demand information at this level, we can only track the effects of the proposed action on dealers by looking at factors that affect supply and demand and eventually the dealers' revenues and costs. As previously mentioned the proposed trip limits would provide more revenues to fishermen, implying that dealers would incur more expenses. This particular expense is mainly due to the prevailing demand at the time relative to supply. Ex-vessel demand is basically a derived demand and is therefore a function of demand in higher market channels. A relatively old but likely still valid information on marketing margins states that all the price changes in these other markets are not passed on to fishermen (Prochaska, 1978). Thus, even with higher expenses in terms of costs of fish sold, dealers would still stand to potentially profit by generating relatively higher revenues. Cost conditions also differ between long and short season for a given quota of king mackerel. Major cost considerations for dealers would be handling and storage costs, and in general both costs tend to be

lower with a longer season. Hence, it may be concluded that relative to a very short season, the longer season brought about by the proposed trip limits would translate to relatively higher profits for dealers. One limiting factor, of course, is the presence and seasonality of supply for substitute products. There is a possibility that a window for larger supply of king mackerel exists, and such opportunity would be forgone if the landings were spread out more evenly over a longer period. In addition, there are certain fixed costs associated with handling and storage, and there is a possibility that certain large amount of king mackerel at certain particular times may help to spread out such cost. To the extent that these possibilities happen, profitability to dealers would not be as high as it would be if such marketing windows were utilized.

Higher revenues to the harvest and intermediate (dealer) sectors as brought about by the proposed trip limits means more consumer expenditures for the given king mackerel commercial quota. The change on consumer surplus, however, depends also on the change in total consumer benefits, since consumer surplus may be roughly equated to the difference in total benefits and total expenditures. For a given demand, a shorter season, say one month, would mean that prices would be severely depressed, and relatively speaking total expenditures would be less while total benefits would increase. This would result in an increase in consumer surplus for this one month. But in this situation, demand for other months would not be filled so that although there are no expenditures incurred then, benefits for those months and consequently consumer surpluses would be forgone. Whether the net result is an increase or decrease in overall consumer surplus depends to a large extent on the nature of monthly demand. Without the trip limits, it is possible that the season in the Northern Area would remain open only until the end of January or early February. As earlier mentioned, demand shifters for February and March are relatively larger than that for January. Demand then for these latter months would be generally higher. In addition, a longer season is likely to bring in fish of higher quality. Given the two conditions, it is very likely that the sum of consumer surpluses in the latter months would be higher than that of January. Under this condition, it is very likely that the forgone consumer surplus effected by a shorter season would be larger than the increase in consumer surplus in January. In sum, although the proposed trip limits would mean higher consumer expenditures, total consumer benefits would tend to outweigh such expenditure increase. A relatively different scenario may ensue if larger landings occur at later months when demand is relatively stronger. In this case, the proposed trip limits that would more evenly spread out the commercial quota for the Northern Area may not result in larger consumer surplus. This, of course, presupposes that the season could be lengthened by other means than the proposed trip limits. Some consideration along this line will be given when discussing the rejected alternatives.

While the proposed trip limits would promote the hook and line fishery, they would practically exclude netters from the fishery for Gulf group king mackerel. For about 12 net vessels with 5 to 6 people on board, about 60 to 72 people would be excluded from the fishery. If maximizing employment then in terms of number of people is an overriding objective, excluding netters as would likely occur under the proposed trip limits would not be the appropriate approach. It may be noted though that if netters were allowed with unrestricted catch, except the quota, many crew members of the 150 hook and line vessels would be left unemployed a large part of the season so that relative to this situation the proposed trip limits could result in more employment. Another way of looking at the employment issue is to consider the effects of the proposed trip limits in terms of full-time equivalent employment. This index refers to the number of full-time jobs that would be created or maintained, and is not necessarily equivalent to the number of employed individuals. To some extent, this index would take into account alternative employment opportunities as well as the ability of fishermen to remain in the fishery by switching from one gear type to another. Testimonies from public hearing indicated that most hook and line fishermen in the Northern Area are full timers and are heavily dependent on king mackerel. Similar testimonies also indicated that the subject netters have Spanish mackerel as alternative target species and can fish for the Atlantic group of king mackerel in the Northern Area after March 31. In addition, net vessels have the capability of using hook and line for fishing Gulf group of king mackerel although fishing cost would be generally high particularly for larger vessels. Conversely, of course, hook and line vessels have the

capability of switching to nets but most likely at relatively higher cost. Given the lack of alternative target species for hook and line fishermen and the ability of some net vessels to use hook and line, the proposed trip limits would allow more full-time equivalent employment than one without trip limits. It may be noted that to a large extent the effects on the number of full-time equivalent employment is a function of the length of the season. In this case, there may be other management options that could generate even larger number of full-time equivalent employment.

It is highly understandable that in public testimonies, the proposed trip limits have relatively higher acceptance rate among the fishermen since most of those who attended public hearings were hook and line fishermen who would generally be favored by the measure. On the other hand, the Organized Fishermen of Florida supported a different set of trip limits that would allow an opportunity for netters to partake of the Northern Area allocation of king mackerel. Although netters have been effectively closed out of the fishery in the past years, they have also borne part of the cost of restrictive mackerel regulations, and thus they may appropriately be entitled to the benefits of an improving fishery resource. There is, of course, the issue of the extent to which they can partake of the fishery allocation without displacing other fishermen currently targeting the species.

As mentioned or implied in several instances, the current Gulf group king mackerel fishery in the Northern Area is mainly composed of hook and line fishermen. Historically, both net and hook and line fishermen were harvesting king mackerel in this area. In fact, the original FMP provided for a separate sub-allocation to both types of fishermen which was later repealed in an amendment to the FMP. In favoring the hook and line fishermen, the proposed trip limits would maintain the type of fishery that has been in existence since 1985, but it would continue to preclude the netters from re-entering the fishery. It may be noted that although netters have been excluded from the king mackerel fishery by the small allocation, they are still in the commercial fishery but now mostly targeting other species, particularly Spanish mackerel.

The proposed trip limits would allocate, in effect, most of the king mackerel allocation to one segment of the fishery, but each participant in the favored segment of the fishery would be subject to the same trip limits. It is in this sense that the proposed action may be deemed not to directly allocate an "excessive share" of the resource to anyone person.

Any form of trip limits is bound to require enforcement and compliance costs, and the Proposed Action is no exception. Additional enforcement cost will be quantified later together with the enforcement of the proposed trip limits for the South/West Area. Compliance with the proposed regulation may be considered as inversely proportional to the acceptability of the regulation and directly proportional to the complexity of the regulation. Banking on public testimonies, compliance with the proposed limits may be expected to be relatively high. Such high compliance is indeed tempered by the complexity of the measure relative to status quo. It may be noted also that the proposed trip limits provide some mechanism whereby the Northern Area quota is not significantly exceeded.

Rejected Alternative 1: Florida's trip limit program for both east and west coast areas was:

Begin Season, July 1:	**1,000 pounds/trip until January 1,**
January 1 to 75 percent of allocation:	**15,000 pounds/trip (gill net season),**
75 percent to 100 percent of allocation:	**300 pounds/trip,**
100 percent of allocation through March 31:	**2 fish/person/day (state waters).**

The state of Florida attempted to institute the trip limits as defined in this rejected alternative, but the rule did not take effect due to a federal court decision rendered on matter. Although in terms of the general nature of effects on fishery participants this alternative has similarity with the Proposed Action, there are certain major differences that will be noted as the discussion progresses. But a little clarification is in

order here before discussing the potential effects of this alternative. From July 1 through October 31, king mackerel caught in the Northern Area are considered to belong to the Atlantic group; thence until March 31 king mackerel in the said area belong to the Gulf group; and, thereafter through June 30 king mackerel in the area are considered again to belong to the Atlantic group. Currently, commercial fishing for the Atlantic group of king mackerel is not subjected to any trip limit, and in this light the trip limits under this alternative are to be made applicable only to the Gulf group. Since king mackerel in this area belong to the Gulf group starting only on November 1, effectively then the Gulf king mackerel fishing season for this area starts on such a date and ends on March 31.

For the last 8 years, commercial landings of Gulf king mackerel in this area for November and December averaged around 398 thousand pounds. In the 1992/1993 season, about 353 thousand pounds were landed for these two months. These landings were made without any trip limit restrictions. It may be recalled that during the extended 1992/1993 season, fishermen in the Northern Area caught a greater portion of the 259 thousand pound additional allocation of king mackerel under a 25 fish trip limit (roughly 250 pounds using the average weight of fish caught in February 1993) in a little over a month. Although good weather and fish abundance contributed to the speed at which fish was caught, it is very reasonable to assume that at least the historical average of about 398 thousand pounds may be caught under the 1,000-pound trip limit before January 1. Given a Northern Area total allocation of 865 thousand pounds and 25 percent of this is about 216 thousand pounds, about 250 thousand pounds would be allotted to the net season. Assuming that netters harvest most of fish during this season, it would turn out that in effect netters would be allocated roughly 20 percent of the entire Northern Area allocation under this alternative. Of the many factors that affect such percentage, the most important perhaps is the amount caught during the 1,000 pound trip limit season.

In earlier discussion, it was concluded that more net benefits may be realized in the harvest sector if both netters and hook and line fishermen are allowed to partake of the Northern Area commercial quota than if only either segment catch the entire allocation and if more of the quota is allocated (indirectly) to the hook and line fishery. In this sense, this alternative has the potential of generating more economic benefits in the harvest sector of the fishery out of the given Northern Area allocation than either the Proposed Action or status quo. The realization of such potential, however, depends on at least two factors. The first relates to the percentage allocated to netters. With existing information, it is impossible to determine whether the mentioned percentage is the "correct" number, although there is good reason to believe that it is better than a very low allocation as may happen under the Proposed Action. The second factor relates to the timing of harvest by netters. It has been reported that the most profitable season for the net fishery is around March. This also coincides with a relatively higher demand for king mackerel as partly indicated by a relatively large demand shifter (see Easley et al., 1993), which may in turn be partly explain by the fact that this time is generally the height of the lenten season. If most of the net catches occurred around this time, the potential drop in prices from a surge in king mackerel catches would be more than offset by lesser fishing cost. In this way, net vessel profit and harvest sector profit may be relatively higher. If, on the other hand, most of the net catches occurred around January, which has a lower demand shifter, fishing cost would not offset a larger portion of the reduction in prices. As an aside, we may note that revenue would still increase under this condition because of the inflexibility of demand (Easley et al., 1993). Under the above condition, the presence of the netters may not result in higher profits to the harvest sector relative to what would happen under the Proposed Action.

As earlier discussed, dealer profitability tends to be higher under a lengthened season so that on this basis this alternative may be deemed better than the status quo. As alluded to earlier, however, the possibility of marketing windows may exist during which large amounts of king mackerel may be moved through the various markets. Availing of this opportunity through large catches by netters could increase dealers' profits, and this possibility is more likely to occur under this alternative than under the Proposed Action. There is indeed still the cost side to consider. Handling and storage costs would still

be relatively higher than normal, but it is very likely that such costs could be offset by potential large revenues. In addition, storage costs have fixed components, and such portion can be spread out over a larger volume of fish. There is, however, the problem coinciding large harvests with the occurrence of such opportunity. This may not be a big problem for dealers owning or contracting with net vessels, but could be a real one when net vessels catch their "allocation" at some other time. The high likelihood of a derby occurring during the net season under this alternative would tend to lessen the prospects of dealers availing of such marketing opportunity.

The impacts of this alternative on consumer surplus depend to a large extent on the timing of the large catches (presumably by netters). Since relative to the status quo, i.e., no trip limits, the king mackerel season would be lengthened, consumer surplus under this alternative would be higher for the reason mentioned in connection with the assessment of the effects of the Proposed Action. Relative to the Proposed Action, consumer surplus would be higher or lower depending on the timing of large catches. If large catches occur when demand is relatively high (around February and March), this alternative would generate higher consumer surplus than the Proposed Action. Otherwise, the reverse is likely to be the case.

Relative to the absence of trip limits, this alternative would enable a higher employment rate mainly because of the ensuing longer season. Relative to the Proposed Action, this alternative would enable more people to be employed, but in terms of full-time equivalent employment this alternative would probably generate less number mainly because of the alternative fishery for netters and lack thereof for hook and line fishermen.

In terms of acceptability, this alternative appears to be ranked higher than the status quo but possibly lower than the Proposed Action. As alluded to earlier, much left to be desired in terms of generating representative responses from fishermen through public hearings. In terms of present and historical participation, this alternative provides an environment highly conducive to maintaining the historical participants in the fishery by allowing both netters and hook and line fishermen to partake of the commercial quota in the Northern Area. In addition, the trip limits are so structured as to generally provide more catches to current participants (hook and line) participants in the fishery. Although the Proposed Action would not directly result in any one individual getting an "excessive share" of the Northern Area quota, Rejected Alternative 1 would even achieve a more balanced sharing of such quota among a larger number of participants, although this condition depends heavily on the amount caught during the 1,000 pound trip limit season.

Relative to the Proposed Action, Rejected Alternative 1 may be expected to require higher enforcement cost, and compliance thereto may not be as high as that for Proposed Action, because of less acceptability and more complexity of the measure. Similar to the Proposed Action, Rejected Alternative 1 provides a mechanism in preventing significant quota overages.

Rejected Alternative 2:

All Eastern Zone (Florida) July 1 - October 31:	**300 pounds/day.**
North Area:	
November 1 to filling of 50 percent of North Area suballocation:	**(1,000 - 5,000) pounds/day,**
50 percent to 80 percent of suballocation:	**600 pounds/day,**
80 percent to 100 percent of suballocation:	**300 pounds/day,**
100 percent of suballocation:	**North Area season closes.**

The general impacts of this alternative are similar to either those of the Proposed Action or Rejected Alternative 1 depending on the ability of netters to participate in the fishery. Worth noting are two major features of this alternative, namely, the net season starts earlier, at least in principle, and the potential allocation to netters is relatively small.

It may be recalled that the for the months of November and December the historical average commercial landings of king mackerel in the Northern Area is about 398 thousand pounds. As also mentioned earlier, the same amount of landings may occur under a 1,000 pound trip limit. This amount is about 46 percent of the current Northern Area commercial quota of 865 thousand pounds. If the January landings are also included, the average landings for the same period would be about 489 thousand pounds or about 56 percent of the Northern Area quota. Under this scenario, the most likely options for netters to partake of the Northern Area quota are either to fish earlier in the season, that is, during the 1,000 - 5,000 pound trip limit, which could last from November through early January, or wait until sometime late February when fishing becomes more practicable in the hope that total landings at this time are substantially less than 50 percent of the Northern Area quota.

Fishing early in the season is most likely not practicable for netters. Past experience has shown that even without trip limits net vessels have not fished for Gulf king mackerel in the Northern Area mainly because of low profitability prospects. Such disincentive for netters to fish early would only be reinforced by the trip limits. In this respect, this alternative may be seen to bring about similar effects as the Proposed Option. The only potential difference is in the configuration of landings and profits among individual hook and line boats.

If netters start fishing at a later date, say late February, there is a very high likelihood that they would only take a very small percentage of the quota. In this sense, the effects of this alternative would be similar in nature to but slightly different in magnitude from those of Rejected Alternative 1.

Considering the relative complexity of this measure, it may be expected to entail higher enforcement cost and possibly less compliance than the Proposed Action or Rejected Alternative 1. However, this particular alternative also provides some mechanism for not significantly exceeding the quota.

Rejected Alternative 3:

All Eastern Zone (Florida) July 1 - October 31:	**300 pounds/day**
North Area:	
November 1 to filling of (50) percent of North Area suballocation:	**(1,000 - 5,000) pounds/day,**
From 50 percent to 75 percent of North Area suballocation (schedule for February):	**(10,000 - 15,000) pounds/day,**
From 75 percent to 100 percent of North Area suballocation:	**300 pounds/day,**
100 percent of suballocation:	**North Area season closes.**

This alternative closely parallels Rejected Alternative 3 in features, but has close similarity with Rejected Alternative 1 in terms of impacts. In assessing the impacts of Rejected Alternative 2, it was concluded that net vessels would very unlikely fish under the 1,000 - 5,000 pound trip limit season, and so the most likely season for these fishermen would be during the 10,000 - 15,000 pound trip limit season. In this case, the most that netters could harvest would be about 25 percent of the Northern Area quota. Although there is some difference in magnitude, similar effects as those of Rejected Alternative 1 may be expected of this alternative. A major point that is worth reiterating, though, is that such percentage of

the quota that would be potentially caught by netters could change depending on catches during the 1,000 - 5,000 pound trip limit.

This particular alternative is even more complex than the previous ones, and for this reason may be expected to incur higher enforcement cost and less compliance. Like the previous options, however, it does provide some mechanism for not significantly exceeding the quota.

Rejected Alternative 4: Status quo, no trip limits in the Northern Area.

Although by definition, this alternative has no impacts on fishery participants, the basic assumption earlier made concerning the 50/50 allocation of the Eastern Zone commercial quota for Gulf king mackerel between the Northern Area and South/West Area would change the nature of this alternative. In effect, opting for this alternative would mean foregoing the benefits and costs identified for each of the previous alternatives. Relative to the Proposed Action, in particular, maintaining the status quo means foregoing the net benefits identified for the Proposed Action.

B. Alternatives for commercial Gulf migratory group king mackerel in the Eastern Zone, South/West Area

Proposed Action: In the area Monroe County to the Florida-Alabama border, there are to be no commercial trip limits until 75 percent of the suballocation is taken, then 50 fish per vessel per day until the suballocation is taken.

The South/West Area allocation would be about 865 thousand pounds out of the 1.73 million pound Eastern Zone sub-quota for Gulf king mackerel. Unlike the Northern Area, effective fishing for Gulf king mackerel in this area starts around July 1 but prior to November 1, the South/West Area spans only the area south of the Florida/Alabama state line up through the Collier/Monroe county line. By November 1, the South/West area also includes Monroe county. Before November 1, however, only a limited fishery exists and mostly occurs in the Florida Panhandle. For the past 8 years (1985/1986 - 1992/1993), the average landings of this limited fishery amounts to about 62,000 pounds. The peak of the South/West fishery occurs around late November through early January. A record catch for a single month occurred in January 1993 when about 899,600 pounds of king mackerel were landed. In fact, these catches were landed in a span of 10 days. Inclusive of catches during closures in the EEZ, the average catch of king mackerel in the South/West Area for the past 8 years is about 738 thousand pounds. When considering only the July through January landings, the average stands at about 540,000 pounds. During the peak season about 75 to 100 troll vessels and 16 to 20 net vessels target king mackerel in the Keys. Net vessels usually start fishing late December, although some of these vessels troll for mackerel before net fishing becomes more practicable. Most king mackerel fishermen also target other species such as stone crabs, spiny lobster, and reef fish.

The Proposed Action allows about 649,000 pounds out of the 865 thousand pound South/West Area allocation of king mackerel to be caught without trip limit restrictions. From historical catch record in the last 8 years, such amount would be reached around mid-January, but if fish abundance and market condition for this year were similar to those of last year, such amount would be reached around late December. Although it remains to be seen, there exists the possibility of some net vessels that would practically be excluded from the Gulf king mackerel fishery in the Northern Area to travel to the keys and fish for king mackerel there. In the event this happens, a shorter period may be expected before 75 percent of the South/West Area quota is taken. For the rest of the season, the remaining 216,000 pounds of the South/West Area quota would most likely be harvested by troll vessels due to relatively low trip limit.

Like the Proposed Action for the Northern Area, this alternative would likely extend the season relative to status quo (i.e., no trip limits), but unlike it net vessels are provided less restrictive access to the South/West area quota. Nonetheless, the issue of which allocation is economically more beneficial to the industry remains a valid concern in assessing the impacts of the proposed trip limits in the South/West Area.

Relative to the status quo, the South/West Area king mackerel season would be longer under the proposed trip limits. In principle then, higher ex-vessel revenues may be expected from this measure. Similar to earlier discussion, it may be argued that an allocation that favors netters would result in lower revenues for the given quota but fishing cost would also be lower. On the other hand, if an allocation favors the trollers, a given quota would bring in higher revenues and also higher cost. Along similar line it may be argued that the type of an allocation that would likely achieve a higher economic benefit is one that allows both netters and hook and line fishermen to stay in the fishery. This condition is accomplished by the Proposed Action for the South/West Area. While it was earlier concluded that for a given allocation the potential profit loss to hook and line vessels was considered larger than that of the netters, this conclusion depended heavily on the presence of alternative fishing opportunities to netters that were not generally available to hook and line fishermen. In the case of the South/West Area, both trollers and netters generally have alternative fishing opportunities, thus it cannot be determined a-priorily which segment is more likely to suffer larger profit losses for a given allocation. An examination of cost and returns data would have been very helpful, but such information do not currently exist. It thus becomes necessary to delve further into the profitability position of net vessels relative to troll vessels, albeit in a qualitative manner.

In principle, prices that netters get for king mackerel would be relatively lower because fish come in large amounts (or at a time when large catches are made) and reportedly of lower quality. Recently netters received 60 to 80 cents per pound for king mackerel while hook and line fishermen got about 90 cents a pound. It is likely that the 10- to 30-cent difference could be more than offset by the lower fishing cost per pound to netters. In this case, net vessels would appear to be more profitable than hook and line vessels. It may be argued, however, that such higher profitability of net vessels can occur mainly when fish are schooled. In other situations, higher costs would be incurred and thus could not offset price reductions. It may be noted that king mackerel school in waters off the Keys around late December to early January, and perhaps unfortunately this is also the season when demand is relatively weak compared to that in February or March (see Easley et al., 1993). Moreover, this time is the peak season for harvest so that both demand and supply work in such a way as to afford relatively lower prices. Despite this, the presence of netters in the area may be regarded as partial evidence of the profitability of net fishing although a net fisherman in a testimony before the Council mentioned that in the past season when record catches were made he earned a minimal profit. It may be noted, though, that netters (as well as trollers) have alternative fishing opportunities that support them in poor mackerel season, and to some extent this enabled them to remain in the fishery over time. One basic conclusion that can be gleaned from the foregoing discussion is that the higher profitability of net vessels relative to trollers occurs within a relatively small portion of the king mackerel season, and this opportunity is dependent on the conditions of both the stock and market for king mackerel. Unlike in the case of the Northern Area, however, it cannot be determined, whether one group should be allotted more of the South/West quota without more specific information on actual costs and returns of various vessels in the fishery.

The foregoing discussion leads us to conclude that an allocation may be adjudged economically better than another if it allows both netters and trollers to participate in the fishery and in addition allows netters more flexibility in deciding for themselves when to get in the fishery. On this account, both the Preferred Action and the status quo (interpreted here to mean no trip limits but with a 50/50 allocation between the Northern and South/West Areas) meet such conditions better than the other alternatives. Considering, however, that relatively higher revenues with a likely similar cost level may be achieved

under the Proposed Action, this particular option may be deemed slightly economically better than status quo.

The impacts of the Proposed Action on dealers and consumers would not be materially different from those of the status quo. The same may be said about such other impacts as on employment, acceptability of the measure, and likelihood that any person or group of persons would acquire "excessive shares" of the quota. In addition, this option would accommodate both present and historical participants in the fishery in much similar manner as the status quo. Unlike the status quo, however, the Proposed Action provides a mechanism that would prevent significant quota overages.

Rejected Alternative 1:

July 1 to 50 percent of suballocation:	**3,500 pounds/trip,**
50 to 75 percent of suballocation:	**20,000 pounds/trip,**
75 to 100 percent of suballocation:	**300 pounds/trip.**

In terms of impacts on fishery participants, the major difference between this alternative and the Proposed Action or the status quo is the portion of the South/West quota that may be allocated to the net vessels. Under this alternative the potential maximum for net catches would be about 25 percent of the quota whereas under the Proposed Action such percentage can go up as high as 70 percent although it is highly doubtful that close to such maximum would be caught by netters. While this alternative would very likely enable the generation of a higher revenue to the harvest sector of the king mackerel fishery, it does not provide more flexibility for netters to take advantage of the most profitable time to fish for king mackerel. There is, of course, a possibility that such profitable time coincides with the time when the 20,000 pound trip limit applies and this trip limit may be sufficient to generate the most profit, but there is also the possibility that such may not be the case. Thus, this alternative may not give as much profit level as the Proposed Action or the status quo.

All the other impacts of this alternative may not differ materially from those of the Proposed Action or the status quo, except that relative to the status quo this alternative provides some mechanism for preventing significant quota overages.

Rejected Alternative 2:

South/West Area:	
July 1 to December 1:	**(300 - 1,000) pounds/day,**
December 1 to January 1 or 35 percent of suballocation:	**3,500 pounds/day,**
January 2 to 85 percent of suballocation (fishing only by net boats):	**20,000 pounds/day,**
85 percent to 100 percent of suballocation:	**3,500 pounds/day,**
100 percent of suballocation:	**South/West Area season closes.**

This alternative closely parallels Rejected Alternative 1 in terms of impacts on fishery participants. This alternative allows netters to partake of a larger portion of the quota (about 50 percent) than allowed under Rejected Alternative 1, but possibly less than that allowed under the Proposed Action. To the extent that the most profitable situation for netters occurs after January 2, this alternative may generate a relatively higher profit level for the harvest sector than any of the considered alternatives for the South/West Area, especially when only net vessels may fish during this time since prices would not be depressed as much when trollers also land large amounts of fish. There is, however, the underlying problem of whether 50 percent of the South/West quota assigned to netters is better than any other allocation. In the absence of a definite statement supporting such percentage, there is good reason to believe that a better allocation may be achieved by allowing both trollers and netters take their most

profitable shares. It appears that this condition is better achieved under the Proposed Action or the status quo. Thus this alternative may still be ranked relatively lower than the Proposed Action in terms of generating a higher net benefits to the harvest sector.

While all other impacts of this alternative may be similar to those of the Proposed Action or Rejected Alternative 1, it provides less effective mechanism in preventing significant quota overages.

Rejected Alternative 3: Status quo, no trip limits and no suballocation (as requested as emergency rule).

As alluded to earlier, this alternative is interpreted for comparison purposes as no trip limits but with a 50/50 allocation of the Eastern Zone quota between the Northern and South/West Areas. Given this interpretation, maintaining the status quo would translate to forgoing the benefits that may be generated under the Proposed Action.

Government Costs of Regulation

Federal government costs of this action were associated with meetings, travel, calculation of ABCs, preparation of various documents and reviewing all documents. Other sources of additional costs include extraordinary research specifically done for the purpose of this particular action, additional statistics costs, and additional enforcement costs resulting from the action. In the latter cases, except enforcement, no additional costs are anticipated.

Prepare and implement action	$ 30,000
Research	None additional required
Statistics	None additional required
Enforcement	$ 91,200

The proposed change in trip limits (on top of the Northern and South/West Area division of the Eastern Zone commercial quota for king mackerel) demand more than minimal additional enforcement and monitoring activities. The identified cost for enforcement considers mainly dockside enforcement; at sea enforcement will be conducted along with the usual enforcement activities applied to the Gulf king mackerel fishery.

Summary and Expected Net Impact of Proposed Action

The proposed regulatory action constitutes changes in management for the Eastern Zone of the Gulf king mackerel fishery. The emphasis of the summary is on the expected economic impact of the proposed actions. It needs to be reiterated here that the analysis done for the current regulatory amendment presupposes a 50/50 allocation of the Eastern Zone king mackerel commercial sub-quota between the Northern Area and South/West Area.

The Proposed Action for the Northern Area is expected to result in more net economic benefits and potentially social benefits as well relative to the status quo. It has been determined, however, that among the alternatives for the Northern Area, Rejected Option 1 may produce a slightly better economic effects than the Proposed Action.

For the South/West Area, the Proposed Action offers a higher likelihood than any of the other alternatives in generating relatively higher economic benefits to the king mackerel fishery. Rejected Alternative 2 has the potential of generating an economically better allocation than the Proposed Action.

Government costs for preparing and implementing this action are estimated at $121,200. A greater portion of this cost relates to the increased enforcement activities necessitated by the proposed trip limits. There are no expected additional costs from data collection or research from this action.

At this juncture, it is worth stressing the fact that the analysis done in this RIR abstracted from consideration of the long-term effects of the proposed measures. This was done primarily because the proposed trip limits are deemed input regulations that may produce short-term benefits. The condition that the fishery is essentially managed as an open access fishery generally implies that any benefits from regulation are bound to be dissipated over the long run since fishing effort and capitalization in the fishery could increase especially when seen against the backdrop of an improving king mackerel stock. In addition, the analysis proceeded by focusing primarily on the regulatory actions directly affecting the Northern Area or the South/West Area only, and thereby abstracted from considering other sources of inefficiencies characterizing the fishery such as the establishment of a TAC, commercial/recreational allocation of the TAC, and Eastern/Western Zone sub-allocation of the commercial Gulf king mackerel quota. Even with the presence of more information, the presence of such other inefficiencies would, by virtue of the so-called "second best theory" (Lipsey and Lancaster, 1956), preclude analysis of regulatory impacts strictly from the standpoint of economic efficiency.

Determination of a Major Rule

Pursuant to E.O. 12291, a regulation is considered a "major rule" if it is likely to result in: a) an annual effect on the economy of $100 million or more; b) a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or c) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

The entire commercial Gulf king mackerel fishery is valued at significantly less than $100 million. The proposed actions in this regulatory amendment apply only to Eastern Zone commercial Gulf king mackerel fishery, which currently is allocated a quota of about 1.73 million pounds. Hence, given the size of the fishery and the segment of the fishery directly affected by the proposed regulation, it is concluded that any revenue or cost impacts on the fishery would be significantly less than $100 million annually.

The proposed trip limits to both the Northern and South/West Areas of the Eastern Zone of the commercial king mackerel fishery have been determined to result in an increase in revenues to the harvest sector and therefore in an increase in expenditures to the consumers. Mackerel prices would be relatively higher under the proposed actions. At any rate, such price and cost increases to consumers may be deemed small especially when contrasted with potential gains in consumer surplus.

The proposed trip limits are expected to effect no major cost increase to the Gulf king mackerel industries. The $30,000 identified as federal cost has been incurred in the preparation of the regulatory action. A potentially large cost of about $91,200 for enforcement has been identified, but whether this is a major cost increase or not cannot be ascertained.

The proposed trip limits on the South/West Area are also expected to rule out any adverse effects on employment, investment, productivity, innovation, or on the competitive status of the domestic fishery relative to domestic and foreign markets. On the other hand, the proposed trip limits on the Northern Area may create inefficiencies in the system but the extent of such effects cannot be measured with available information.

It is therefore concluded that this regulation if enacted would not constitute a "major rule" under any of the mentioned criteria.

Initial Regulatory Flexibility Analysis

Introduction

The purpose of the Regulatory Flexibility Act is to relieve small businesses, small organizations, and small governmental entities from burdensome regulations and record keeping requirements. The category of small entities likely to be affected by the proposed regulatory amendment is that of commercial businesses currently engaged in the Eastern Zone of the Gulf king mackerel fishery. The impacts of the proposed action on these entities have been discussed above. The following discussion of impacts focuses specifically on the consequences of the proposed action on the mentioned business entities. An Initial Regulatory Flexibility Analysis (IRFA) is conducted to primarily determine whether the proposed action would have a "significant economic impact on a substantial number of small entities." Although an IRFA focuses more on adverse effects, determination of beneficial significant effects is also an integral component of the analysis. In addition to analyses conducted for the Regulatory Impact Review (RIR), the IRFA provides an estimate of the number of small businesses affected, a description of the small businesses affected, and a discussion of the nature and size of the impacts.

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, 1992). For the 1991/1992 fishing season, a total of 3,069 permits were issued broken down into 1,623 commercial, 938 charter boat, and 549 both commercial and charter boat permits (Raulerson, 1992). In the Northern Area there are about 150 hook and line vessels and 12 net vessels, and in the South/West Area there are about 100 troll vessels and 20 net vessels. The Small Business Administration (SBA) defines a small business in the commercial fishing activity as a firm with receipts of up to $2.0 million annually. Since the proposed action will affect practically all participants of the Eastern Zone commercial Gulf king mackerel fishery, the "substantial number" criterion will be met in general.

Economic impacts on small business entities are considered to be "significant" if the proposed action would result in any of the following: a) reduction in annual gross revenues by more than 5 percent; b) increase in total costs of production by more than 5 percent as a result of an increase in compliance costs; c) 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; d) capital costs of compliance represent a significant portion of capital available to small entities, considering internal cash flow and external financing capabilities; or e) as a rule of thumb, 2 percent of small business entities being forced to cease business operations (NMFS, 1992).

The proposed trip limits for both the Northern and South/West Areas are expected to increase benefits to the industry and therefore rules out potential major reduction in gross revenues (item a) as well as potential major increases in compliance costs (items b through d) to the entire industry. However, the proposed trip limits are bound to effect an allocation that has certain revenue implications. In the Northern Area net vessels would be prevented from re-entering the fishery, and this would mean forgoing revenues of probably more than 5 percent of their total potential revenues. In contrast, hook and line vessels may be expected to experience an increase in revenues that could very well exceed 5 percent of their total revenues. Part of this increase in revenues may be associated with the 50/50 allocation between the Northern and South/West Areas while part may be associated with the possibility of receiving more favorable prices for king mackerel over a lengthened season. In the South/West Area, the 25 percent direct allocation to trollers could mean a reduction in net vessel revenues although the reduction would be less than such percentage due to the inflexibility of king mackerel demand.

Considering that all participants in the commercial Gulf king mackerel fishery may be deemed small business entities, the issue of big versus small business operations is not relevant in determining

distributional/regional effects of regulations, and it thus also rules out disproportionate effects on capital costs of compliance (item d). Although the proposed trip limits would not force any business entity to cease operation (item e), the net fishery in the Northern Area would not be given a chance to re-enter the fishery.

It can be inferred from the foregoing discussion that the proposed regulation can be expected to result in a significant economic impact on a substantial number of small entities in the commercial Gulf king mackerel fishery. On this account, an IRFA has been prepared. The following comprises the remaining portions of the IRFA.

Explanation of Why the Action is Being Considered

Refer to the section on Problems and Objectives in the RIR and to Sections I and II of the amendment document.

Objectives and Legal Basis for the Rule

Refer to the section on Problems and Objectives in the RIR and to Sections I and II of the amendment document. The Magnuson Fishery Conservation and Management Act of 1976 provides the legal basis for the rule.

Demographic Analysis

Refer to the Coastal Pelagic Fishery Management Plan, as amended.

Cost Analysis

Refer to the Government Cost and Summary sections of the RIR.

Competitive Effects Analysis

The industry is composed entirely of small businesses (harvesters and charter boats operations). Since no large businesses are involved, there are no disproportional small versus large business effects.

Identification of Overlapping Regulations

The proposed action does not create overlapping regulations with any state regulations or other federal laws.

Conclusion

The proposed regulation is concluded to have a significant economic impact on a substantial number of small entities. In this regard, the foregoing information and pertinent portions of the RIR are deemed to satisfy the analysis required under the RFA.

VI. ENVIRONMENTAL CONSEQUENCES

Physical Environment: To the extent that can be ascertained, the action proposed in this amendment will have no impact on the physical environment. Gear traditionally used in this fishery (hook-and-line and run around gill-nets) has no adverse impact on the bottom substrate or other habitat. As deployed in this fishery, the gear is selective to the target species. Continuing studies have provided no new

information beyond that already contained in the FMP as amended and which further defines the relationship between stocks and habitat.

Fishery Resources: The TACs are consistent with the Council's objective of rebuilding overfished stocks within the prescribed periods. The proposed action is intended to protect coastal pelagic fish stocks from recruitment and growth overfishing while allocating allowable catch among fishermen. The proposed action would have insignificant effect on the fishery resources.

Human Environment and Social Impact Assessment: The management of fisheries may directly affect the human environment. Current social data on users in the mackerel fishery affected by this amendment are sparse. Most of the known impact is of an economic nature. A determination of the net impact on the users of the resource by the proposed action is in the regulatory impact review and initial regulatory flexibility analysis (Section V). The impact on fishery resource users in adjacent areas has been coordinated with the appropriate Council.

Effect on Endangered Species and Marine Mammals: The NOAA conducted a consultation under Section 7 of the Endangered Species Act regarding the impact of Amendment 6 which included the framework measures under which this action is being taken. Therefore, no additional Section 7 consultation is necessary. A biological opinion resulting from that consultation found that (1) Amendment 6 did not contain any regulatory changes that would adversely affect listed species of sea turtles, marine mammals, or fish, or their respective habitats; and (2) the fisheries for coastal migratory pelagic resources will not jeopardize the continued existence of any listed species.

Effect on Wetlands: The proposed action will have no effect on flood plains, wetlands, or rivers.

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

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

Irreversible and Irretrievable Commitments of Resources: There are no irreversible commitments of resources caused by implementation of this amendment.

Finding of No Significant Environmental Impact

The proposed action is not a major action having significant impact on the quality of the marine or human environment of the Gulf of Mexico. The proposed action is an adjustment of the original regulations of the FMP under the framework procedure set forth in Amendment 6 to rebuild overfished stocks. The proposed action should not result in impacts significantly different in context or intensity from those described in the environmental impact statement and environmental assessment published with the regulations implementing the FMP and Amendment 6. The environmental consequences of this action are almost entirely economic in nature and are discussed in the Regulatory Impact Review and Initial Regulatory Flexibility Analysis in Section V.

Having reviewed the environmental assessment and available information relative to the proposed actions, I have determined that there will be no significant environmental impact resulting from the proposed actions. Accordingly, the preparation of a formal environmental impact statement on these issues is not required for this amendment by Section 102(2)(c) of the National Environmental Policy Act or its implementing regulations.

Approved: _____ _____

Assistant Administrator for Fisheries — Date

Scientific Data Needs

To monitor stocks to determine whether overfishing occurs, the SEFC of NMFS currently monitors catch by size (age) to estimate recruitment and acceptable biological catch. No additional collection of scientific data would be required by this amendment. The Mackerel Stock Assessment Panel and the Socioeconomic Assessment Panel have identified the following data needs:

1. An evaluation of CPUE indices should be completed relative to standardization methods and management history.
2. The socioeconomic risks of selecting TAC's above the recommended ABC range needs to be completed.
3. The size at age of both king and Spanish mackerel need to be evaluated.
4. Size/age samples need to be increased for cobia, particularly in the Gulf.
5. The identification of Spanish mackerel stocks through multiple research techniques need to be completed.
6. Yield per recruit analyses should be conducted relative to alternative selective fishing patterns.
7. Mexican landings data needs to be obtained.
8. Research on the consequences and estimation of bycatch needs to be completed.
9. Research on the application of assessment and management models relative to dynamic species such as Spanish mackerel needs to be completed.
10. Recreational and commercial demand studies on the Spanish mackerel fishery need to be conducted and there is a need to estimate supply functions for the vessels involved in the commercial and for-hire mackerel fishery. The supply studies would involve collection of vessel costs and returns information. The studies should also involve consideration of the effect of Mexican fisheries for Spanish and king mackerel.
11. There remains a need to determine the priority research which is necessary to provide minimally acceptable analyses of stock allocation among user groups.
12. The Socioeconomic Assessment Panel recommends that the Marine Recreational Fisheries Statistical Survey be augmented in ways that provide additional data for estimating economic models.

VII. OTHER APPLICABLE LAW

Impacts on Other Fisheries: The proposed action distributes the limited quota among fishermen throughout the area by means of trip limits. It does not redirect effort to other fisheries. The majority of those fishermen in the South/West Area have indicated a preference to a short fishing season for king mackerel because of their diversified options and access to other fisheries which they traditionally pursue.

Vessel Safety: The proposal for implementation of daily commercial trip possession limits for mackerel was discussed with representatives of the affected Coast Guard District and commercial fishermen. They believed that because some catch was allowed on all days during the restricted daily limit period, fishermen would not require alternative fishing opportunity to compensate for unsafe weather for fishing. It was felt that these possession limits posed fewer safety problems than the current derby fishing in which vessels tend to fish as hard as possible regardless of weather conditions before the quota is taken.

Therefore, the proposed actions do not impose requirements for use of unsafe (or other) gear nor do they direct fishing effort to periods of adverse weather conditions.

Paperwork Reduction Act: The Council proposes no additional permit or data collection programs in this amendment.

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

VIII. PUBLIC REVIEW

Hearings to obtain public comment on this regulatory amendment were held by the South Atlantic Fishery Management Council at St. Simons Island, Georgia on April 22, 1993, and by the Gulf of Mexico Fishery Management Council at Tampa, Florida on May 12, 1993, and San Antonio, Texas, on July 14, 1993.. Additionally, the Councils conducted a public workshop to consider king mackerel trip limits on February 26, 1993 in Miami, Florida, and a public hearing on July 12, 1993, at Fort Pierce, Florida.

List of Agencies Consulted:

South Atlantic Fishery Management Council

Gulf of Mexico Fishery Management Council's and South Atlantic Fishery Management Council's
- Scientific and Statistical Committee
- Mackerel Stock Assessment Panel
- Socioeconomic Assessment Panel
- Mackerel Advisory Panel

National Marine Fisheries Service
- Southeast Fisheries Science Center
- Southeast Regional Office

List of Organizations Consulted:

- Concerned Fishermen of Florida
- Organized Fishermen of Florida
- Southeastern Fisheries Association, Inc.

Responsible Agency:

Gulf of Mexico Fishery Management Council
5401 West Kennedy Boulevard
Suite 331
Tampa, Florida 33609
813-228-2815

List of Preparers:

Gulf of Mexico Fishery Management Council
Terrance Leary, Fishery Biologist
Antonio Lamberte, Economist

References:

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Socioeconomic Assessment Panel (R. Riechers, Chairman). 1993. Report of the second mackerel socioeconomic panel meeting. Available from the Gulf of Mexico Fishery Management Council, Tampa, Florida.

Stock Assessment Panel (J. Powers, Chairman). 1993. Report of the mackerel stock assessment panel. Available from the Gulf of Mexico Fishery Management Council, Tampa, Florida.

Appendix I

Section 6.1.1: Mechanism for Determination of Framework Adjustments, as modified by this and previous amendments, is revised as follows:

Section 12.6.1.1

A. An assessment panel appointed by the Councils will normally reassess the condition of each stock or group of king and Spanish mackerel and cobia in alternate years 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, the 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. The panel will address the following 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 assessment panel should describe the likely alternatives.

2. MSY for each identified stock. If more than one possible stock division exists, 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. When the panel is able to provide separate ABC ranges for the eastern and western groups of Gulf king mackerel, separated at the Alabama-Florida border, the ratio of the mix is to be calculated on allele frequencies. Allocations between recreational and commercial users are to remain unchanged or 68 to 32 percent. For each stock, this should include but not be limited to:

   a. Fishing mortality rate relative to F_{msy} or $F_{0.1}$.
   b. Abundance relative to an adequate spawning biomass.
   c. Trends in recruitment.
   d. Acceptable Biological Catch (ABC) which will result in long-term yield as near MSY as possible.
   e. Calculation of catch ratios based on catch statistics using procedures defined in the FMP.

4. Overfishing.

   a. A mackerel or cobia stock shall be considered overfished if the spawning potential ratio (SPR) is less than the target level percentage recommended by the assessment panel, approved by the Scientific and Statistical Committee (SSC), and adopted by the Councils.

      The target level percentage shall not be less than 20 percent. (Based on the recommendation of the assessment panel and approval by the SSC, the Councils and RD have approved a SPR of 30 percent for king and Spanish mackerels.)

   b. When a stock is overfished (as defined in a), the act of overfishing is defined as harvesting at a rate that is not consistent with programs to rebuild the stock to the target level percentage, and the assessment panel will develop ABC ranges based on a fishing mortality rate that will achieve and maintain at least the minimum specified SPR. The recovery period is not to exceed 12 years for king mackerel beginning in 1986 and 7 years for Spanish mackerel beginning in 1987.

   c. When a stock is not overfished [as defined in (a)], the act of overfishing is defined as a harves

rate that if continued would lead to a state of the stock that would not at least allow a harvest of OY on a continuing basis, and the assessment panel will develop ABC ranges based upon OY (currently MSY).

5. Management options. If recreational or commercial fishermen have achieved or are expected to achieve their allocations, the assessment panel may delineate possible options for nonquota 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. Other biological questions as appropriate.

B. The assessment panel will prepare a written report with its recommendations for submission to the Councils, by such date as may be specified by the Councils. The report will contain the scientific basis for their recommendations and indicate the degree of reliability which the Council should place on the recommended stock divisions, levels of catch, and options for nonquota controls of the catch.

C. The Councils will consider the report and recommendations of the assessment panel and such public comments as are relevant to the assessment panel's submission. A public hearing will be held at a time and place where the Councils consider the panel's report. The Councils may convene the joint Advisory Panel and may convene the Scientific and Statistical Committee to provide advice prior to taking final action. After receiving public input, Councils will make findings on the need for changes.

D. If changes are needed in MSYs, TACs, quotas, bag limits, size limits, vessel trip limits, closed seasons or areas, gear restrictions, or initial requirement of permits for each stock of king or Spanish mackerel or cobia, the Councils will advise the Regional Director of the Southeast Region of the National Marine Fisheries Service (RD) in writing of their recommendations, accompanied by the assessment panel's report, relevant background material, and public comment.

   Recommendations with respect to the Atlantic groups of king and Spanish mackerel will be the responsibility of the South Atlantic Council, and those for the Gulf groups of king and Spanish mackerel will be the responsibility of the Gulf Council. This report shall be submitted by such date as may be specified by the Councils.

E. The RD will review the Councils' recommendations, supporting rationale, public comments, and other relevant information, and if he concurs with the recommendation, will draft regulations in accordance with the recommendations. He may also reject the recommendation, providing written reasons for rejection. In the event the RD rejects the recommendations, existing regulations shall remain in effect until resolved. However, if the RD finds that a proposed recreational bag limit for Gulf migratory group or groups of king mackerel 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 RD concurs that the Councils' recommendations are consistent with the goals and objectives of the plan, the National Standards, and other applicable law, he shall implement the regulations by notice 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 which may be implemented by the Regional Director by notice in the Federal Register include:

1. Adjustment of the point estimates of MSY for cobia, for Spanish mackerel within a range of 15.7 million pounds to 19.7 million pounds, and for king mackerel within a range of 21.9 million pound to 35.2 million pounds.

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

   a. No TAC may exceed the best point estimate of MSY by more than ten percent.
   b. No TAC may exceed the upper range of ABC if it results in overfishing as defined in Section 12.6.1.1, A.4.
   c. Downward adjustments of TAC of any amount are allowed in order to protect the stock and prevent overfishing.
   d. Reductions or increases in allocations as a result of changes in the TAC are to be as equitable as may be practical utilizing similar percentage changes to allocations for participants in a fishery. (Changes in bag limits cannot always accommodate the exact desired level of change.)

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

   Implementing or modifying quotas, adjusted quotas, bag limits, size limits, vessel trip limits, closed seasons or areas, gear restrictions, or initial requirement of permits, as necessary to limit the catch of each user group to its allocation.