FINAL AMENDMENT 3

TO

THE FISHERY MANAGEMENT PLAN

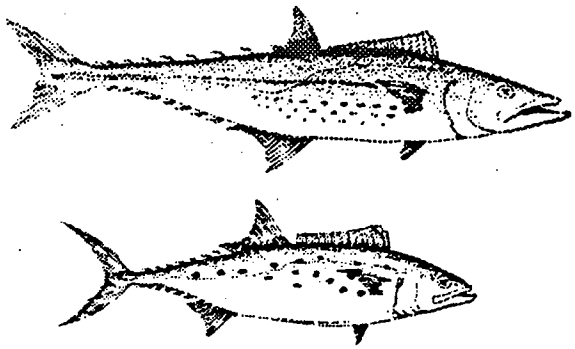
FOR THE

COASTAL MIGRATORY PELAGIC RESOURCES

(MACKERELS)

OF THE GULF OF MEXICO AND THE SOUTH ATLANTIC

INCLUDES ENVIRONMENTAL ASSESSMENT AND REGULATORY IMPACT REVIEW



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AND REGULATORY IMPACT REVIEW

Prepared By The

South Atlantic Fishery Management Council
Gulf of Mexico Fishery Management Council

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I. INTRODUCTION

The "Mackerel" fishery management plan, approved in 1982 and implemented by regulations effective in February of 1983, treated king and Spanish mackerel each as one U.S. stock (GMFMC and SAFMC, 1983). Allocations were made for recreational and commercial fisheries, and the commercial allocation was divided between net and hook & line fishermen.

Amendment 1, implemented in September of 1985, provided a framework procedure for preseason adjustment of total allowable catch, revised king mackerel maximum sustainable yield downward, recognized Atlantic and Gulf migratory groups of king mackerel, and established fishing permits and bag limits for king mackerel (GMFMC and SAFMC, 1985). Objectives of the Mackerel fishery management plan were modified and are as follows: (1) To stabilize yield at maximum sustainable yield, 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 into 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 area; (3) To provide necessary information for effective management and establish a mandatory statistical reporting system for monitoring catch; and (4) To minimize gear and user group conflicts.

Amendment 2, implemented in July, 1987, revised Spanish mackerel maximum sustainable yield downward, recognized two migratory groups, set commercial quotas and set bag limits (GMFMC and SAFMC, 1987). Charterboat permits were required, and it was clarified that total allowable catch must be set below the upper range of the acceptable biological catch. In addition, purse seines were prohibited for the Atlantic and Gulf migratory groups of Spanish mackerel and for the Gulf migratory group of king mackerel.

Amendment 3 (this current amendment) addresses the prohibition of purse seines and run-around gillnets for Atlantic migratory group king mackerel and drift gillnets in the coastal migratory pelagics fishery. This amendment also adds a new objective, updates the habitat section of the fishery management plan, and adds vessel safety considerations to the fishery management plan. The purse seine prohibition for Atlantic king mackerel proposed by the Councils in Amendment 2 was disapproved because the Atlantic migratory group of king mackerel was not in an overfished status and the commercial allocation had never been met. The situation has changed sufficiently (i.e. overfished status of Atlantic migratory group king mackerel and the fact that the commercial quota was filled in November) such that the Councils are again requesting the prohibition of purse seines. Run-around gillnets have not been traditionally used on the Atlantic migratory group of king mackerel and this may be attributed to differences in the schooling behavior of Atlantic and Gulf migratory group king mackerel. Catches by purse seines and run-around gillnets have occurred sporadically during April in prior years but most recently during April 1988. The Councils are prohibiting this gear because it is non-traditional and catches by this gear increase

the probability of an early closure for the commercial fishery, thereby impacting traditional commercial users. Drift gillnets were introduced in 1980; landings increased from virtually zero in 1985 to approximately 217,000 pounds during 1986 and further to approximately 800,000 pounds in 1987. Preliminary 1988 catches were 808,000 pounds and final figures are expected to be higher. This expansion has contributed to the overfished status of Atlantic migratory group king mackerel and led to a number of problems negatively affecting traditional users, i.e., overfished status of Atlantic migratory group king mackerel which triggers a recreational closure if the recreational quota is exceeded and the fact that the commercial quota was filled early this year. Therefore, the South Atlantic and Gulf of Mexico Fishery Management Councils have voted to prohibit drift gillnet gear in the coastal migratory pelagics fishery within their areas of jurisdiction and prohibit the use of purse seines and run-around gillnets on the Atlantic Migratory Group of King Mackerel based on the following: (1) spawning stock biomass has remained relatively constant until 1984, after which a decrease may have occurred; (2) fishing mortality rates appear to be at or slightly above rates of full exploitation; (3) catches were high and variable from 1980 to 1985, but catches from 1986 and 1987 declined; and (4) four of five catch per unit effort data sets indicate declines in abundance. These results have led the South Atlantic and Gulf of Mexico Fishery Management Councils to conclude that the Atlantic migratory group of king mackerel is overfished. In addition, the commercial allocation is sufficiently low that allowing use of purse seines and run-around gillnets in the Atlantic migratory group king mackerel fishery has resulted (and will likely result in the future) in the early closure of the commercial fishery which negatively impacts traditional hook & line commercial participants.

II. DESCRIPTION OF FISHERY AND UTILIZATION PATTERNS

The Fishery Management Plan, Source Document, and Amendments 1 and 2 describe the fishery and utilization patterns (including purse seines) within the king and Spanish mackerel fisheries. More recent information on the use of purse seines is included later in this document.

Quotas, bag limits, catches and closure dates for the 1987/88 and 1988/89 fishing years are shown in Table 1 (Appendix A). In addition, Table 2 in Appendix A reviews recreational and commercial catch data from 1979 through October 1987. The 1988 Assessment Panel Report provided the following information on the Spanish and king mackerel resources:

1. Gulf Migratory Group King Mackerel - The U. S. Gulf resource appears to have responded toward recovery somewhat. Spawning stock biomass has increased a small amount and the fishing mortality rate is at or just below the target rate of $F_{0.1}$. However, the 1987/88 fishing season is the first year in which catches will be reduced to levels within the recommended acceptable biological catch range since this Panel has been making recommendations. Therefore, a large recovery should not have been expected. While the spawning stock biomass has shown some gains, the recruitment has remained stable at low levels. Therefore, we have yet to see a large year-class enter the fishery

which might accelerate recovery.

2. Atlantic Migratory Group King Mackerel - The fishery on the Atlantic Migratory Group has rapidly expanded since 1979. Catches were high and variable from 1980 to 1985, but catches from 1986 and 1987 (through October) declined. Commercial landings have remained relatively stable during this period, whereas the recreational catch has declined, particularly during the 1986 and 1987 fishing seasons. It is not known whether this reduction in recreational catch is the result of the bag limit, first imposed in 1986, or perhaps is due to a decline in abundance, reduced fishing effort, or some other factor or combination thereof. Analyses indicate that spawning stock biomass has remained relatively constant until 1984 after which a decrease may have occurred. If this pattern exists, then caution should be exercised. Fishing mortality rates appear to be at or slightly above rates of full exploitation. These results combined with decreased catches in recent years suggest that harvest levels are close to their upper limit.

3. Spanish Mackerel - U. S. landings of Spanish mackerel have varied between 8.9 and 14 million pounds since 1979. The Atlantic landings have declined over these years, whereas the Gulf has varied without trend. Over 85 percent of the commercial fishery for U. S. Spanish mackerel occurs in Florida and most of the landings are taken in the winter fishery in south Florida. Commercial landings quotas were instituted in Florida state waters as well as for the exclusive economic zone (EEZ) for the 1986-87 and 1987-88 fishing years. The 90 percent landings cutoff, required by Florida law (not federal law) for power assisted gillnet vessels was reached within two weeks (December 29, 1987) of Florida's December 15th opening date for the 1987/88 fishing season for Atlantic group Spanish mackerel. Atlantic spawning biomass apparently has declined, whereas the Gulf spawning biomass appears to have increased. Recruitment of small fish may be up for both stocks.

Southeast Florida Drift Gillnet Fishery

The newly developed drift gillnet fishery is described based on recent information (NMFS, 1987). There are currently 13 vessels operating in the fishery with less than six other local hi-roller gillnet boats in the area that have not purchased king mackerel drift gillnets. Without an influx of distant boats, it is doubtful that the drift gillnet fleet would increase by more than two to three boats in 1989. Each boat is operated by a captain (not necessarily the owner) and carries two to three crew members. There are a total of 39 to 52 individuals currently in the fishery.

These vessels also fish in the run-around gillnet fishery for Gulf migratory group king mackerel, Atlantic migratory group Spanish mackerel, and the shark drift gillnet fishery. Gulf group Spanish mackerel are seasonally available 140 miles south of Ft. Pierce, below the Dade/Monroe County, Florida year-round boundary (see map in Appendix B). Traditional hook & line fishermen catch king mackerel throughout the year off Ft. Pierce: Atlantic migratory group, April 1 — October 31; Gulf migratory group, November 1 — March 31. Run-around gillnet boats generally target Gulf kings, January — March. The fishermen periodically fish smaller gillnet boats

(outboards) in the Indian River and outside the inlets. Traditional commercial gear in the Ft. Pierce area included handlines (trolling) and run-around gillnets (for Gulf migratory group king mackerel and Atlantic migratory group Spanish mackerel).

Drift entanglement nets were tried in 1980-81, initially fishing the Ft. Pierce area, with little success due to problems with sharks damaging catch and gear. The time from 1982 to 1984 was a period of experimentation. In 1985 there was renewed interest by a few of the Pt. Salerno boats and during 1986 seven boats fished out of the Ft. Pierce — Pt. Salerno area with better success. The number of boats increased to 13 in 1987 and catches also increased.

Nets are made of #9 nylon webbing, white when bought but later dipped in black plastic paint. The 5" stretched mesh nets are 140-150 meshes (about 50 feet) deep; most are 150 meshes. Floats are placed about every yard on top of the net and a weighted lead core line weighing 85 pounds per 200 yards attached to the bottom. The nets range from 1,200 to 5,000 yards (0.68 - 2.84 miles) with most full-time boats having at least 3,000 yards (1.70 miles). Nets have strobe lights (some with radar reflectors) at each end and drift about 5 miles at most each night. Nets cost $5 to $6 per yard which works out to $15,000 to $18,000 for a 3,000 yard net. There is an additional cost of $1,300 to dip a 3,000 yard net during the season; this must be done twice during a season.

Usually drift gillnet boats leave port late in the afternoon and return with their catch the next morning. When a boat reaches the fishing grounds, a strobe-light buoy is attached to one end of the net and dropped overboard. The boat then moves in a straight line away from the trailing net and buoy and continues until the entire net has been pulled over the stern. Then another buoy is attached to the end of the net. The net is usually set running east and west, perpendicular to the coast and is never deployed before sunset. Optimally, the net remains in a straight line perpendicular to shore for the entire drift, but wind and current may cause it to curve or fold, thus reducing the effective fishing length. When a strong current is running, the nets will sometimes be set at an angle to the shore. Once the net has been set, the boat may tie onto one end of the net, drift along with the net (but not tie to it), or anchor the boat and let the net drift; the decision is based on weather and current conditions. The boats are normally in radio contact with each other while setting the nets to assure that there is sufficient space separating each net to keep them from getting entangled. All drift gillnet boats are equipped with Loran C.

Soak time varies but is usually six to eight hours. Boats rarely make more than one set per night with a maximum of two sets per night. Nets are rarely left in the water beyond dawn because king mackerel catches decrease dramatically and the bycatch increases with daylight. Soak time decreases as the water gets warmer to prevent deterioration of the catch. Haulback usually begins prior to sunrise and takes three to five hours using a hi-roller, over which the net passes to be pulled onto the boat. Crewmen on either side of the boat pull and stack the net; fish are removed by the same crew pulling the net. One strand of the mesh may have to be cut to remove gilled fish. Some fish fall out of the net onto the deck as they move to the hi-roller. King mackerel and other valuable

species are placed in a holding compartment or ice box; ice is usually shoveled onto the catch several times during haulback. Unwanted fish are discarded overboard; most are dead when the net is hauled, though some fish are released alive. Once the haulback is completed, the crew guts and ices the catch as the boat returns to port.

The 13 vessels in the fishery are 30-50 feet in length and are currently fishing the southeast grounds (centered between St. Lucie and Ft. Pierce Inlets) and Bethel Shoal. Boats must fish outside Florida State waters due to Florida law and usually set three to six miles offshore in 45 to 65 feet over a sand bottom. Fishermen avoid fishing directly offshore of inlets, because of high boat traffic and due to the fact that these areas often have a large abundance of sharks. "Taking these requirements into consideration, there are few new areas for expansion of this gear in the Ft. Pierce-Port Salerno area" (NMFS, 1987). The season usually runs from April through September but may run into October until the Spanish mackerel show up in the area. There has been no deliberate gear damage known so far although one report was received of a hook & line boat being entangled in a drift gillnet (Source: U. S. Coast Guard).

Landings data from 1986 and 1987 are shown below. April to September 1987 landings were at about the same level as during 1986 (1.4 and 1.3 million pounds respectively). (Note: The king mackerel commercial quota on the Atlantic migratory group was 3.59 million pounds for the 1987/88 fishing year).

ATLANTIC MIGRATORY GROUP COMMERCIAL KING MACKEREL LANDINGS

(Pounds, gutted weight)

St. Lucie & Martin Counties:	April-Sept '86		April-Sept '87	
Drift Net Landings	208,554	45%	765,226	79%
Hook & Line Landings	250,274	55%	198,737	21%
Total	458,828		963,963	
Palm Beach, Brevard & Indian River Counties:	April-Sept '86		April-Sept '87	
Drift Net Landings	0		0	
Hook & Line Landings	808,300		452,307	
TOTAL LANDINGS	1,267,128		1,416,270	

The drift gillnet fishery has increased its catch of king mackerel from almost zero in 1985, to 208,554 pounds (45 percent of the total king mackerel catch in St. Lucie and Martin Counties) in 1986 and further to 765,226 pounds (79 percent) in 1987. Catches by hook & line during April-September have decreased in St. Lucie and Martin Counties from 250,274 pounds (55 percent) in 1986 to 198,737 pounds (21 percent) in 1987. Catches by hook & line during April-September have decreased in Palm Beach, Brevard, and Indian River from 808,300 pounds in 1986 to 452,307 pounds in 1987.

Although there have been reports of poor quality net-caught fish, sampled catches have been consistently of acceptable quality; most dealers have stated that there is no problem with the quality of net caught fish. There has been no substantiated discarding of fish due to poor quality. However, there was a price break for king mackerel by gear during the 1987 season: $0.92 to $1.50 per pound for net caught fish; hook & line usually brought about $0.20 more per pound. Some mackerel are shark bitten while in the net; observers have estimated the numbers of damaged king mackerel at about 4 percent. King mackerel averaged 10 pounds gutted weight; recreationally caught fish were smaller, while commercial hook & line fish were the same at the start of the season, then smaller.

A total of 723 drift net trips were made during the 1987 season (April - September) and observers were on 38 trips (5.3 percent coverage). Trips were made at least once aboard each of the boats that fished drift gillnets full-time in the area and observers reported that at times there were 3 to 4 other boats fishing in the same general area (within several miles of each other) as the boats that had an observer. In addition to at-sea observations, dock interviews were conducted; information collected during dock interviews was consistent with that collected by observers. Thus there was no indication that observed trips fished in different areas or in a different manner than unobserved trips.

No marine mammals or birds were observed tangled in the nets on any trip. Porpoises and sea turtles were observed in the vicinity of the nets on haulback on numerous trips. One turtle (leatherback) was observed by a fishermen in the net at haulback; however, by the time the observer reached the stern, the turtle had freed itself and swam away. A few fish caught by hook & line vessels exhibit net marks suggesting that some mackerel do survive after penetrating a drift gillnet. It is felt that these marks are from drift gillnets because run-around gillnets are not operating during this time of year.

Little tunny made up 67 percent of the discarded bycatch during the observer study and 23 percent of the total catch by number. Barracuda comprised 11 percent of the discarded bycatch and 4 percent of the total catch; other species comprised less than 3.6 percent and 1.2 percent respectively. There were 22 sailfish caught on observed trips for an average of 0.58 per trip. If this is expanded for the total number of trips (723), the total sailfish bycatch was 419. (Note: For further information on bycatch, the reader is referred to Table 3)

As shown in Table 3, approximately 14 percent of the total bycatch is landed and sold. This represented approximately 66,000 lb based on the projected total catch. In addition, the Councils have received public input that fish dealers are marketing little tunny as bait and are attempting to develop a higher value market for this discarded species.

III. STATEMENT OF THE PROBLEM

A change in status of Atlantic migratory group king mackerel was reported in the 1988 mackerel stock assessment: (1) spawning stock biomass has remained relatively constant until 1984, after which a decrease may have occurred; (2) fishing mortality rates appear to be at or slightly above rates of full exploitation; (3) catches were high and variable from 1980 to 1985, but catches from 1986 and 1987 declined; and (4) four of five catch per unit effort data sets indicate declines in abundance. These results have led the South Atlantic and Gulf of Mexico Fishery Management Councils to conclude that the Atlantic migratory group of king mackerel is overfished.

Based on the 1988 assessment, the Councils reduced total allowable catch from 9.68 million pounds to 7.0 million pounds (28 percent reduction). This reduction was based on the Councils' concern for apparent declining stocks and their desire to be conservative rather than risk continued overfishing. The resulting commercial allocation was reduced from 3.59 to 2.6 million pounds. This allocation was sufficiently low that the continued use of drift gillnets, purse seines, and run-around gillnets in the Atlantic migratory group king mackerel fishery resulted in the early closure of the commercial fishery, thus negatively impacting traditional hook & line commercial participants.

The Councils are also concerned about waste and bycatch in the recently developed drift gillnet fishery. Allowing the continued or introductory use of drift gillnet gear in any of the coastal migratory pelagic fisheries (king mackerel, Spanish mackerel, cobia, cero mackerel, little tunny, dolphin and in the Gulf of Mexico bluefish) would likely produce a king mackerel catch or bycatch resulting in the early closure of the commercial king mackerel fisheries, thus negatively impacting traditional hook & line commercial participants. Allowing the continued use of drift gillnets would also result in continued waste and bycatch in the fishery.

IV. PROBLEMS IN THE FISHERY

The Fishery Management Plan, as modified by Amendment 1 (April, 1985), identified the following problems:

1. Fishing effort is jeopardizing the biological integrity of the king mackerel fishery. That portion of the stock which inhabits the Gulf of Mexico during the summer and supports the winter fishery in southeast Florida appears to be severely overfished, and fishing mortality on this group needs to be reduced. That portion of the stock which inhabits the Atlantic coast has been exploited to a lesser degree, and fishing mortality rate on that group is below the level which will produce maximum yield.

2. Adequate management has been hindered by lack of current and accurate biological and statistical and economic information. The present system does not provide a mechanism which insures rapid incorporation of new data into stock assessments. Further, there is no coordinated

plan to generate stock assessment data.

3. Intense conflicts and competition exist between recreational and commercial users of the mackerel stocks; and between commercial users employing different gears.

4. The existence of separate state and federal jurisdiction and lack of coordination between these two makes biological management difficult, since in some instances, the resource may be fished beyond the allocation in state waters.

5. Cobia are presently harvested at a size below that necessary for maximum yield and may be overfished in some areas beyond the management area. Most southeastern states have not yet adopted the recommended minimum size limit. Also, no management action has been taken by states which have jurisdiction over cobia populations in Chesapeake Bay, which appear to have been overfished. Federal enforcement capability is limited and not believed to be very effective in this case.

6. Development of a fishery targeting large, mature king mackerel in the wintertime off Louisiana may eventually reduce recruitment to the resource. Total catch of large, mature king mackerel has greatly increased due to development of a commercial fishery in Louisiana during the winter months. Reported commercial catch increased from zero during 1981-82 to 1.2 million pounds during the 1982-83 winter season. Given the already excessive fishing effort on smaller fish in the Gulf of Mexico, increasing fishing effort on the spawning population could result in recruitment declines.

V. OBJECTIVES

The Fishery Management Plan, as modified by Amendment 1, identified the following objectives:

1. The primary objective of this Fishery Management Plan is to stabilize yield at maximum sustainable yield, 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 into 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 area.

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.

This Amendment includes a modification to this list of objectives to reflect changes that have occurred since Amendment 1.

VI. PROPOSED ACTION

ACTION 1: PROHIBIT PURSE SEINES FOR ATLANTIC KING MACKEREL

Section 12.6.3.6 Purse Seine Allocation is currently worded as follows (GMFMC and SAFMC, 1987):

12.6.3.6 No allocation of king and Spanish mackerel is made for purse seines and the use of purse seines for these species is prohibited except for incidental catch allowances. A bycatch of no more than one percent of king mackerel or ten percent of Spanish mackerel by weight or number, whichever is less, is allowed in purse seines. This bycatch is to be counted in the commercial quota, and when the quota is filled, no more of that species may be landed for sale. When a stock or migratory group of overfished mackerel recovers to the level that it can produce MSY and when traditional commercial fishermen are not taking their allocation, the Councils will reevaluate the use of purse seines at that time. The Councils consider the prohibition of the use of purse seines to be severable with respect to the Atlantic migratory group of king mackerel.

Because the prohibition of purse seines on the Atlantic migratory group of king mackerel was not approved a catch allowance for up to 400,000 pounds of the commercial allocation was continued for this gear. This current amendment proposes to modify Section 12.6.3.6 as follows:

12.6.3.6 <u>Purse Seine Allocation</u>

Delete the last sentence: "The Councils consider the prohibition of the use of purse seines to be severable with respect to the Atlantic migratory group of king mackerel."

This has the effect of extending the prohibition of purse seines on Spanish mackerel and Gulf group king mackerel that was approved in Amendment 2 (GMFMC and SAFMC, 1987) to the Atlantic migratory group of king mackerel.

Because stocks of king and Spanish mackerels are overfished catch restrictions were placed on all migratory groups in order to rebuild the stocks. Accordingly, traditional participants in the fishery have experienced restrictive bag limits and early closures. The one exception has been the fishery for the Atlantic migratory group of king mackerel which had not been closed prior to the 1988/89 fishing year. Seasonal commercial quotas for this group have not been filled in the past, although harvest was approaching total allowable catch (TAC). During the 1988/89 fishing year, the commercial quota was reached and the fishery was to be closed on November 23, 1988 but remained open through court order. In addition, the Councils are concerned about the shifting effort onto Atlantic migratory group king mackerel as fishermen are restricted from fishing other mackerel migratory groups. There is no traditional use or indeed no known record of any purse seine fishery targeting Atlantic migratory group king mackerel until April 1988. At that time purse seines took king mackerel in the Ft. Pierce area and directed catches were also made with

run-around gillnets (Table 1). These unprecedented catches possibly occurred because prolonged cool weather retained migratory king mackerel in that area later than usual, thus making them available to purse seine and run-around gillnet fishing operations (total catch for both gears was approximately 340,000 pounds).

A change in status of the Atlantic migratory group of king mackerel was reported in the 1988 stock assessment report which concluded the following (Note: The table and figure are included in Appendix A):

"The fishery on the Atlantic Migratory Group has rapidly expanded since 1979. Catches were high and variable from 1980 to 1985, but catches from 1986 and 1987 (through October) declined (Table 2). Commercial landings have remained relatively stable during this period, whereas the recreational catch has declined, particularly during the 1986 and 1987 fishing seasons. It is not known whether this reduction in recreational catch is the result of the bag limit, first imposed in 1986, or perhaps is due to a decline in abundance, reduced fishing effort or some other factor or combination thereof. Analyses indicate that spawning stock biomass has remained relatively constant until 1984 after which a decrease may have occurred (Figure 2). If this pattern exists, then caution should be exercised. Fishing mortality rates appear to be at or slightly above rates of full exploitation. These results combined with decreased catches in recent years suggest that harvest levels are close to their upper limit."

The stock assessment panel reduced the acceptable biological catch range from 6.9 - 15.4 million pounds to 5.5 - 10.7 million pounds for the 1988/89 fishing year. In doing this, they pointed out to the Councils that in setting total allowable catch for the 1988/89 fishing year, they should be aware that some decline in abundance may be occurring. A background report presented at the 1988 assessment meeting (Powers et al., 1988) contained four catch per unit effort (CPUE) data sets for the Atlantic migratory group of king mackerel. The catch per unit effort trends for headboats and charterboat logbook information in the South Atlantic and private boats on the Florida east coast all showed declines in abundance; the Panama City charterboat survey for boats from Georgia through North Carolina showed an increase from 1982 through 1985 but a decline in 1986 (Appendix A). This declining trend in catch per unit effort further indicates to the Council that the Atlantic migratory group of king mackerel is overfished.

When the Councils initially were preparing the mackerel fishery management plan, the purse seining of mackerel was essentially prohibited by regulation in most state waters and in all waters for Florida fishermen. The Gulf of Mexico and South Atlantic Fishery Management Councils concluded that the use of purse seines in the mackerel fishery was inappropriate and proposed the prohibition of this gear. The original plan was rejected by National Marine Fisheries Service because, in the opinion of National Marine Fisheries Service, sufficient data and rationale were not presented. Therefore a limited catch allowance was provided for study purposes. At the end of the three year study, the Councils were to decide on the future of that special allocation.

The study (Fable and Nakamura, 1986) showed that all directed purse seine catches were made off Florida and consisted of king mackerel from the Gulf migratory group and mostly Spanish

mackerel from the Atlantic migratory group. Some incidental catches of Spanish mackerel occurred off Louisiana. Since the introduction of purse seines for king mackerel, catches have been relatively low and never exceeded the small allocations. The largest annual purse seine catch of Gulf migratory group king mackerel was 134,643 pounds from July 1, 1983 to June 30, 1984. Purse seine catches of Gulf migratory group king mackerel never exceeded 5 percent of the commercial catch. For the entire study period (March 1, 1983 through February 28, 1986), Gulf migratory group king mackerel catches totaled 243,851 pounds or 2.4 percent of the commercial catch. Total Spanish mackerel catches were highest during 1985 when 200,791 pounds were landed, but never exceeded 7 percent of the total commercial catch. For the entire study period (March 1, 1983 through February 28, 1986), Spanish mackerel catches were 506,752 pounds or 2.8 percent of the commercial catch. This information supports the conclusion that the purse seine fishery is a minor and opportunistic fishery for mackerels. As an efficient gear, however, it has the potential for taking a major portion of the commercial quota within a short time period. (NOTE: More detailed catch information is provided in GMFMC and SAFMC (1987) which is Amendment Number 2 to the mackerel fishery management plan.) Subsequent to the study in 1986, the purse seine catch was 296,000 pounds in a quota of 300,000 pounds. During April, 1988 run-around gillnets and purse seines accounted for 338,703 pounds of Atlantic migratory group king mackerel. This represents the first recorded time these gear types have taken Atlantic migratory group king mackerel. The April purse seine catch cannot be provided separately due to the confidential nature of this information.

The Councils reviewed results of the three year purse seine study (Fable and Nakamura, 1986) for which the temporary allocation was made. The authors reported the annual landings by purse seines never equaled their annual allowance, and even the aggregate landings for the entire period from March 1983 through March 1986 had not equaled the first year's king mackerel quota.

The proposed amendment will not severely impact purse seine fishermen because they target species other than mackerel; further, prior to April 1988, purse seines were not used on the Atlantic migratory group of king mackerel. In addition, this proposed amendment is not expected to result in increased cost to consumers.

The Councils concluded that the use of purse seines for mackerels should be discontinued on Atlantic migratory group king mackerel because:

1. The Atlantic migratory group of king mackerel is overfished.

2. It is imprudent and unfair to introduce a new user group into an overfished fishery while existing, historic users are forced to limit catches because of reduced allocations. As stocks recover and traditional commercial fishermen are not taking their allocation, this issue will be reconsidered.

3. Purse seine boats are not historic participants in the mackerel fishery, not having been used since 1969 until introduced in federal waters in 1983 for study purposes. The mackerel fishery appears to be only an opportunistic fishery for purse seines with mackerel being taken in 48 of the 305 purse seine trips (16 percent) as reported by Fable and Nakamura (1986).

4. The Councils are allocating the resource fairly, based on traditional use, to the greatest number of commercial fishermen.

5. All states prohibit the use of purse seines for mackerel in all adjacent state waters.

6. The marginal value of a fish allocated to the traditional commercial fishery is higher than that of a fish allocated to the purse seine fishery (See SFI, in press for the economic condition for optimal allocation).

Section 12.6.3.7 is revised as follows:

12.6.3.7 Rejected Alternative 1: No change, continue a special allowance for purse seines on Atlantic migratory group king mackerel.

The purse seine allowance provided within the commercial allocation is capped at 400,000 pounds. If taken by purse seines, this portion of the commercial quota would be unavailable to other commercial fishermen. The purse seine fishery during the study period failed each year to take its allowance even though other commercial king mackerel fishermen (hook & line and run-around gillnets) filled their quota and had to cease fishing. However, under certain circumstances it has been demonstrated, the potential exists for this gear to take a significant portion of the Atlantic migratory group king mackerel commercial allocation with the potential of adversely impacting the resource and disrupting traditional fishermen (Table 1). The special purse seine allowance for Atlantic migratory group king mackerel represents a potential loss to traditional commercial fishermen.

Rejected Alternative 2: Do not specify a separate allowance (currently 400,000 pounds) for purse seines on the Atlantic migratory group of king mackerel and allow them to fish under the commercial quota.

While purse seines have taken relatively small catches, they have the potential of taking large quantities of mackerel in a short period of time. An unrestricted purse seine catch could severely jeopardize the ability of traditional commercial hook & line mackerel fishermen to prosecute their fishery because they are fishing under severely reduced quotas and premature closures.

ACTION 2: PROHIBITION OF DRIFT GILLNETS FOR ALL COASTAL MIGRATORY PELAGIC RESOURCES

A new Section 12.6.8.6 is added as follows:

12.6.8.3 <u>Drift Gillnets for Coastal Migratory Pelagic Resources</u>

The use of drift gillnet gear for all coastal migratory pelagic resources (king mackerel, Spanish mackerel, cobia, cero mackerel, little tunny, dolphin and in the

Gulf of Mexico bluefish) in the South Atlantic and Gulf of Mexico within the Councils' area of jurisdiction is prohibited and the retention of these species is prohibited in other drift gillnet fisheries.

In prohibiting drift gillnets in these fisheries, it is the Councils' intent that this gear not be altered (e.g. fished with anchors, set in a different manner, etc.) so as to circumvent the above prohibition. To that end, the following definitions were approved with the understanding that they may be modified by technical amendment of the regulations if necessary. **Gillnet** means a wall of netting, suspended vertically in the water by floats along the top and weights along the bottom, that entangles the head, gills, or other body parts of fish that attempt to pass through the meshes. **Drift gillnet** means a gillnet having a float line that is more than 1,000 yards in length; or any gillnet having a float line that is 1,000 yards or less in length, other than a run-around gillnet, that, when used, drifts in the water, that is, is not anchored at both ends, whether or not it is attached to a vessel. **Run-around gillnet** means a gillnet having a float line that is 1,000 yards or less in length that, when used, encloses an area of water.

The following definitions are from Sainsbury (1975): "The **gillnet** is a large wall of netting which may be set either just above the sea bed when fishing for demersal species, or anywhere from mid-water to the surface when pelagic fish are being sought. When working inshore in relatively shallow water, the nets are usually set and anchored in position, but an alternative is the **drift net** which is free to move according to tide and wind conditions." His Figure 85 which depicts various methods of setting gillnets is included in Appendix A.

The Councils are concerned that they cannot adequately protect overfished king and Spanish mackerel resources if they are allowed to be taken as a bycatch in drift net fisheries for other coastal pelagic species. Currently, there is no directed drift gillnet fishing for cobia, cero mackerel, little tunny, dolphin, or bluefish. Because drift gillnets are an indiscriminate gear, they cannot exclusively fish for any of these coastal pelagic species without taking a bycatch of king and Spanish mackerel. In addition, the Councils are prohibiting the retention of coastal migratory pelagics in other drift gillnet fisheries in order to facilitate enforcement and make the drift gillnet prohibition more effective.

The shark drift net fishery is the only fishery, of which the Councils are aware, that will be impacted by the prohibition on retention of all coastal migratory pelagic resources. The Councils have no information on this fishery with which to evaluate the level of impact. When this information is provided by the NMFS, the Councils will be able to quantify this impact.

ANALYSIS OF IMPACTS

Recreational

Recreational catches of king mackerel are reported to have declined and fishing tournaments negatively impacted in 1986 and 1987 which coincides with the introduction of drift gillnets. Data

provided by the Ft. Pierce Sportfishing Club for five tournaments show a decline of 69 percent between 1988 (27 king mackerel caught) and 1987 (88 king mackerel caught). Recreational catch data is limited, making it difficult to determine the magnitude of the impact on recreational catches in areas directly affected by drift gillnet activity. Estimates of recreational catches are most accurate for the entire South Atlantic Region and are somewhat less accurate for the Florida East Coast depending upon the sampling level. The recreational catch of Atlantic migratory group king mackerel on the Florida East Coast for the months April through September (drift gillnet fishing season) is shown in Figure 1. Catches did decline for the entire east coast of Florida in 1986 but were up in 1987 though still below the 1985 level.

Catch data from the charterboat fleet when king mackerel were targeted for April through October, as determined from logbook responses to the mandatory charterboat survey, for 1986 and 1987 were 1,129 kings and 253 kings respectively - a decline of 76 percent (Source: Letter from Brad Brown to Joan Butler dated October 20, 1988). Dr. Brown indicates that some qualifications to the data must be made: "Public relations problems with the mandatory survey may have resulted in the inclusion of suspect data. Therefore, the numbers in these tables must be viewed as approximations with confidence limits in excess of 100% in some cases." Dr. Brown also provided the 1987 headboat catch for southeast Florida. The king mackerel catch was 54,956 fish weighing 356,016 pounds. Monthly catches of king mackerel by number for January through March were 16 percent, 17 percent, and 20 percent respectively of the total king mackerel catch. The drift gillnet fishing season begins in April and ends in September. The monthly headboat catch was 12 percent in April and May and then averaged between 3 percent and 4 percent for the rest of the year. This may provide additional evidence of the decrease in recreational catch after the introduction of drift gillnets although other factors may have affected headboat catches.

Total prohibition on drift gillnets would potentially make available their portion of the king mackerel catch (765,226 pounds; Table 2) for harvest by traditional recreational and commercial hook & line fisheries. This should not be confused with altering existing allocations since it simply refers to the increased local availability that will result from prohibiting drift gillnets. How these king mackerel would be distributed among these two user groups is unknown, but the Councils concluded that this action would improve the recreational catch in the Ft. Pierce area and southward due to increased local availability. Also, other highly valued recreational species taken incidental to the mackerel drift gillnet fishery (Table 3) would become available to recreational users.

Commercial

Hook & Line

Commercial hook & line catches in Brevard County has varied over time (Figure 2). Catches in Indian River County show a general downward trend in recent years (Figure 2). Hook and line catches declined by 21 percent from 1986 to 1987 in St. Lucie and Martin Counties and by 56 percent from 1986 to 1987 in Palm Beach County (from Figure 2). Total hook & line catch for

Broward, Indian River, St. Lucie, Martin, and Palm Beach counties declined from 1.2 million pounds in 1985 to 1.1 million in 1986 and declined further to 0.7 million pounds in 1987 (Figure 2).

King mackerel catch per trip data were made available by the National Marine Fisheries Service's Southeast Fisheries Center during the January (1988) Council meeting. Palm Beach County's monthly catch per trip for 1986 and 1987 declined in April and May, then increased in June and July, then declined in August and increased in September. Overall, the annual catch per trip for Palm Beach County was 150 pounds in 1985 (FL DNR), 186 pounds in 1986 (NMFS) and 174 pounds in 1987 (NMFS).

Other possible reasons for a decline in Palm Beach County's catches are competition, a strong south tide, and major upwellings of cold water. These factors may move the fish further offshore. Also, the 10% earned income requirement (implemented in 1987) reduced the number of fishermen. In 1987, Florida implemented a two fish recreational bag limit in State waters and a 50 fish limit for commercial fishermen holding a federal permit. After reviewing all available information, the Councils concluded that the introduction of drift gillnets was a major contributor to decreased hook & line catches.

Catch data from commercial hook & line fishermen was provided by Mr. Ben Hartig. Examining the catch per trip data from Mr. Hartig's data for 1980 through 1987 (calculated by SAFMC staff), there does not appear to be a decline due to the introduction of drift gillnets in 1986 and 1987 during the April - June time period. The July - September time period does not appear to be affected in 1986 (catch per trip = 418 pounds) but the 1987 catch per trip was only 95 pounds (13 trips with a catch of 1,230 pounds). The same type of data from Mr. Tom Heisler does not appear to indicate a decline during the April - June time period. For the July - September time period, the data track that of Mr. Hartig: catch per trip in 1986 for 17 trips was 635 pounds and for 6 trips in 1987 the catch per trip was 267 pounds. Mr. Hartig provided updated catch information for his 1988 catch: catch per trip for April - June was 547 pounds and catch per trip for July - September was 63 pounds (18 trips with a catch of 1,129 pounds). The catch records from these two individual's fishing within 15 miles of the Jupiter Inlet suggest that the drift gillnet catches during 1987 (and 1988 for Mr. Hartig's records) may have reduced the hook & line catch per trip in the Jupiter Inlet area, however, the average catch per trip for the industry as a whole only decreased from 186 pounds in 1986 to 174 pounds in 1987. For some reason the catches of these individuals were much lower than the average for the industry as a whole during 1987.

Total prohibition on drift gillnets would potentially make available their portion of the king mackerel catch (765,226 pounds) (Table 2) for harvest by traditional recreational and commercial hook & line fisheries. This should not be confused with altering existing allocations since it simply refers to the increased local availability that will result from prohibiting drift gillnets. How these king mackerel would be distributed among these two user groups is unknown, but the Councils concluded that this action would improve the recreational catch in the Ft. Pierce area and southward

due to increased local availability. An additional unknown is how much of this potential increase would be taken by commercial hook & line fishermen in Brevard and Indian River Counties prior to these fish arriving in Palm Beach County.

Drift Gillnet

During 1987 there were thirteen vessels in this fishery, with each boat operated by a captain (not necessarily the owner) and carrying two to three crew members (NMFS, 1987). Industry representatives have pointed out that the total number of vessels was 14 with only 13 vessels actually fishing during 1987 (Joan Butler, pers. comm.). According to National Marine Fisheries Service port agents, fleet size during 1988 should not have exceeded 13 vessels. Total number of fishermen in the fishery ranges between 39 and 52. These vessels and fishermen also fish in the run-around gillnet fishery for Gulf migratory group king mackerel and Gulf and Atlantic migratory group Spanish mackerel and the shark drift gillnet fishery. Periodically they fish smaller gillnet boats (outboards) in the Indian River and outside the inlets. As of September, 1987, there was a total of approximately 34,500 yards (19.6 miles) of drift gillnet gear in the fishery (excluding two boats with unknown net length). If the estimated net lengths given in Table 2 are included, the total length of drift gillnet gear in the fishery is 38,800 yards (22 miles). At a cost of $5 to $6 per yard, the total investment in drift gillnet gear is between $194,000 and $232,800.

The Council's preferred alternative would totally prohibit the use of drift gillnet gear for all coastal migratory pelagic resources (king mackerel, Spanish mackerel, cobia, cero mackerel, little tunny, dolphin and in the Gulf of Mexico bluefish) in the South Atlantic and Gulf of Mexico within the Councils' area of jurisdiction. This would result in the loss of 765,226 pounds of king mackerel (based on 1987 drift gillnet catches) to the thirteen vessels in the fishery (Table 2). Catches during April and May of 1988 were 83,646 and 388,944 pounds respectively (Table 1). Catches for these two months increased over the same months in 1987 by 14 percent and 134 percent respectively. Total drift gillnet catches increased from 795,268 pounds in 1987 to 808,046 pounds in 1988 (16% increase). The 1987 catches are available by vessel and have been used to estimate the impacts at the vessel level; this level of information for 1988 is not available. The value of the 1987 catch was estimated to have been $925,923 using the mid-point of the price range reported for the 1987 season ($1.21 per pound). The range of losses to the individual drift gillnet vessels would be between 3,968 and 122,987 pounds worth between $4,801 and $148,814. These losses only represent losses due to foregone king mackerel catches. There would be additional losses from other incidental bycatch species currently landed and sold. Based on the projected total landed catch (Table 3), 65,755 pounds of fish other than king mackerel were landed. If one assumes an average price per pound of $1.00, then the loss would be $65,755; different assumptions about price per pound yield different estimates of the loss.

Under the Councils' preferred alternative there would not be a net loss in revenue. As pointed out previously, fish that were harvested by drift gillnets would be potentially available for

harvest by commercial and recreational hook & line fishermen. If, for analytical purposes, we assume that the entire 765,226 pounds would be harvested by commercial hook & line fishermen, the fish would be worth $1.41 per pound (NMFS, 1987), for a total value of $1,078,969. This exceeds the losses to the drift gillnet fishermen ($925,923) by $153,046 but does not take into account the loss of other species in the catch (value unknown but not expected to be very large) or the loss from money invested in drift gillnet gear ($194,000 to $232,800). National Marine Fisheries Service (1987) reported that the life expectancy of net gear varied from 60 - 84 months for five of the top vessels in the drift gillnet fishery. Given that these vessels have probably participated since 1986, the losses shown above may overestimate the actual losses invested in net gear; date of first purchase, additional amounts added each season, and rate of depreciation must be determined to quantify the actual lost value.

The assumption that all king mackerel would be caught by traditional commercial hook & line fishermen is not entirely correct. However, given historical catches, the run-around gillnet fishery would not be expected to harvest many, if any, of these fish (NOTE: In addition, action in this amendment will prohibit this gear on Atlantic migratory group king mackerel). Due to the potential increased local availability resulting from the drift gillnet prohibition, recreational fishermen probably would also harvest some portion of these additional king mackerel. This should not be confused with altering existing allocations since it simply refers to the increased local availability that will result from prohibiting drift gillnets. The value of this recreational portion, although unknown, would tend to offset the remaining losses identified above. Therefore, the Councils concluded that when the non-quantified benefits are factored into the quantified benefits and costs, the preferred option of prohibiting drift gillnets results in a net benefit to society.

Because of continuing low commercial allocations, the fisheries for Gulf migratory group king and Spanish mackerel and Atlantic migratory groups of Spanish mackerel do not appear to offer an acceptable alternative source of income for displaced drift gillnet fishermen. The shark fishery may off-set some of their losses;. This option appears limited, however, because of the unknown status of the shark resource and the available life history information indicates that sharks cannot sustain heavy exploitation. Drift gillnet fishermen have advised that winter income from run-around gillnetting was, in the past, sufficient to tie-up the boats during six months in the summer. However, reduced allocations have changed this such that the vessels must supplemental fish during the summer; the shark fishery takes place during winter and these vessels are too big for mackerel troll fishing. Consequently, there do not appear to be any other fisheries available to absorb this effort that are not already fully or over-exploited. However, as the Gulf migratory group of king mackerel and Atlantic Spanish mackerel rebuild, these fishermen may be able to harvest larger catches with run-around gillnets, thereby offsetting some loss of income.

The drift gillnet prohibition would bring the Councils into functional agreement with existing Florida State regulations thereby making enforcement of Florida's prohibition much more effective. Existing Florida regulations do not prohibit the use of drift gillnets in state waters; however,

targeting of king mackerel with any net gear is impractical within Florida waters because only catches under the 2 fish bag limit are permitted. Florida also permits a one percent or 250 pound (whichever is less) bycatch of king mackerel in legal harvests of Spanish mackerel taken in state waters.

BACKGROUND

The Council's requested the Secretary to prohibit drift gillnets by emergency action based on conflict within the fishery. This request was rejected, however, based on lack of sufficient rationale. The Councils contended that "competition" as defined in the original fishery management plan is a form of conflict and therefore is an acceptable rationale for prohibiting this gear through the regulatory amendment process. Using the regulatory amendment process, the South Atlantic Council attempted to reverse reported decreases in recreational and commercial hook & line catches south of the Ft. Pierce - Pt. Salerno area that the Councils believed resulted from drift gillnet use in the Ft. Pierce - Pt. Salerno area during 1986 and 1987, and to prevent further declines in the future. The Gulf of Mexico Fishery Management Council concurred with this position. The Councils' regulatory amendment was disapproved by the National Marine Fisheries Service Southeast Acting Regional Director with the following reasoning: (1) without first establishing that a user or gear conflict exists, the regulatory amendment process is not authorized, and (2) the present record does not establish a user or gear conflict within this fishery. The National Marine Fisheries Service Acting Regional Director stated that the present problem appears to be one of allocation among competing users rather that a user or gear conflict and concluded that if the Councils desire to resolve a problem they believe is caused by drift gillnets, they should amend the plan. The Councils are now proceeding with development of this Amendment 3 to prohibit drift gillnets.

Past mackerel assessment reports have indicated that the Atlantic king mackerel migratory group was fully utilized whereas the Gulf migratory group was considered overfished (Annual National Marine Fisheries Service Assessment Reports). In disapproving the Councils' September, 1987 request for emergency action to prohibit drift gillnets, the National Marine Fisheries Service Acting Regional Director based part of his decision on these assessments and indicated this was not a resource problem, because the quota had never been reached on the Atlantic migratory group. Further, and conversely, he stated that if drift gillnets were deployed in a directed fishery for Gulf king mackerel in the exclusive economic zone, he would prohibit use of the gear by emergency action.

Subsequent to these actions, the status of Atlantic migratory group king mackerel was altered in the 1988 mackerel assessment. A summary of this report is presented under Action 1 and is not repeated here. In the 1988 stock assessment report, the acceptable biological catch range was reduced and the Councils were cautioned that in setting total allowable catch for the 1988/89 fishing year to be aware that some decline in abundance may be occurring. In addition, the declining trend in catch per unit effort further indicated to the Councils that the Atlantic migratory group of king

mackerel is overfished.

The Councils are concerned about the overfished status of Atlantic group king mackerel and believe that conservative management must be immediately implemented. In part, this is based on the Councils' experience with Gulf migratory group king mackerel which have become severely overfished. Because of this concern, and based on the 1988 mackerel assessment, the Councils at their April, 1988 meeting reduced total allowable catch on the Atlantic migratory group of king mackerel by 28 percent from 9.68 million pounds to 7 million pounds. The resulting commercial allocation was reduced from 3.59 to 2.6 million pounds. The drift gillnet fishery has the capacity to harvest a large number of fish in a relatively short period of time which in 1988 contributed to the early closure of the fishery. This negatively impacted traditional hook & line commercial participants during 1988 and these impacts are expected to continue in the future if this gear is not prohibited.

The hook & line catch in St. Lucie and Martin Counties decreased by 21 percent from 1986-1987 and the hook & line catch in Palm Beach, Brevard and Indian River Counties decreased by 44 percent from 1986-1987 (see data presented under Section II). Total hook & line catches for April - September from the southeast Florida fishery were down 25 percent and 37 percent, respectively (Table 1). Additionally, the hook & line contribution to total seasonal landings has progressively decreased from 1986 through 1988 from 83 percent to 38 percent (Table 1). The drift gillnet catch increased by 273 percent from 1986-1988. As a result of these catches, drift gillnets are impacting traditional fishing methods (handlines and trolling) and, as previously discussed, increases the potential for closure of the commercial fishery.

The Florida East Coast hook & line commercial fleet increased from about 50 vessels in 1969 to 250 vessels in 1976 (GMFMC and SAFMC, 1985). The number of commercial permits in Florida for the Atlantic migratory group was 979 in 1986/87 (NMFS SERO). Of these, 861 were hook & line, 49 net and hook & line, 66 net and 3 miscellaneous. The total number decreased to 756 in 1987/88 with 630 hook & line, 63 net and hook & line and 63 net only. Permits issued from April 1, 1988 to July 22, 1988 for Atlantic migratory group king mackerel (Appendix B indicate an increase in Florida to 794 total permits with 647 hook & line, 102 net and hook & line, 42 net only and 2 other gear. Drift gillnet fishermen represent less than 2 percent of the permit holders, yet harvested 42 percent of the commercial Atlantic migratory group of king mackerel taken on the east coast of Florida during the 1988/89 fishing year.

The commercial quota for Atlantic migratory group of king mackerel was revised downward from 3.59 million pounds to 2.6 million pounds as a result of the Councils' actions based on the 1988 stock assessment. In previous years, the commercial allocation was never reached; however the early closure during the 1988/89 fishing year is shown in Figure 3. Under a commercial allocation of 3.59 million pounds average landings from 1979/80 through 1985/86 fishing years were 2.5 million pounds, approximately 1.0 million pounds below the quota. With the 2.6 million pound quota in place, average landings from 1979/80 through 1985/86 would have been

approximately 100,000 pounds below the quota. The last two complete fishing years are shown separately because they give a more accurate picture of the current status of the resource. The quota of 2.6 million pounds would have been exceeded in December during the 1986/87 fishing year and during November during the 1987/88 fishing year. No actual closure took place because the quota during these fishing years was 3.59 million pounds. Catches thus far in the current fishing year (1988/89) under the quota of 2.6 million pounds are also shown in Figure 3 through the end of December. The quota was exceeded during November which should have resulted in closure of the commercial fishery; however, the fishery remained open by court order until February 23, 1989 when an appeals court order resulted in closure of the fishery.

The negative socioeconomic impacts to the traditional hook & line fishermen that resulted from this closure perhaps could have been avoided if drift gillnets had not been permitted in this fishery because a significant portion (47% April—September on the Florida East Coast) of the 1988/89 catches were taken by drift gillnets (Table 1). The Councils concluded that the early closure was exacerbated by the use of drift gillnet gear and that without drift gillnet gear in the fishery, a closure of the commercial fishery could have been avoided.

Given the overfished status of the Atlantic migratory group of king mackerel and the potential for the commercial allocation to be fully utilized by traditional gear, the Councils concluded that prohibiting the use of drift gillnet gear for all coastal migratory pelagic resources (king mackerel, Spanish mackerel, cobia, cero mackerel, little tunny, dolphin and in the Gulf of Mexico bluefish) in the South Atlantic and Gulf of Mexico within the Councils' area of authority is the most appropriate management alternative:

1. To meet the objectives of the Fishery Management Plan,
2. To provide the greatest net societal benefit,
3. To be the least burdensome, and
4. Most likely to correct the problems of overfishing and full utilization of the commercial allocation resulting in the inequities of early closures present in the fishery.

The Councils' conclusions were based on the best available scientific information, the National Marine Fisheries Service's drift gillnet observer report (NMFS, 1987), and extensive public input from all user groups.

In addition, the Councils have the following concerns about drift gillnet gear but for which data is limited, nonexistent or conflicting:

1. Large net catches taken in a limited area, within a short period of time can disrupt schooling behavior and result in localized overfishing.
2. Negative impacts on endangered and threatened sea turtles.
3. Wastage of incidentally caught fish (particularly sailfish).

4. Removal of bycatch may adversely affect predator-prey relationships.
5. Lost or ghost drift gillnets continue to fish.
6. Extent of habitat damage due to nets becoming tangled on live bottom material.
7. Displacement of traditional fishermen and gear by drift gillnets.
8. Drift gillnet gear hampers navigation.
9. Gear conflict.
10. Impact of drift gillnet harvest on exvessel price.
11. Lower quality of net caught fish as compared to hook & line caught fish.

A new Section 12.6.8.7 is added as follows:

12.6.8.7 Alternatives to Prohibition of Drift Gillnets

Rejected Alternative 1. No Action Alternative:

The no action alternative would allow the continued use of drift gillnets in the coastal migratory pelagics fishery. This would result in the continued threat of early closure of the commercial fishery and result in negative impacts on traditional commercial fishermen. In addition, the potential exists for drift gillnet gear to be used on the Gulf migratory group of king mackerel which is overfished and undergoing rebuilding with stringent bag limits and quotas. Fishermen have agreed voluntarily to not use drift gillnets on the Gulf migratory group of king mackerel and the then Acting National Marine Fisheries Service Regional Director indicated that if drift gillnets were used on Gulf migratory group king mackerel he would prohibit this gear by emergency action. The Councils rejected this alternative because it would not address the problems of the overfished status of Atlantic migratory group king mackerel, the potential for early closure of the commercial quota for Atlantic kings and the overfished status of Atlantic and Gulf migratory groups of Spanish mackerel and the Gulf migratory group of king mackerel. Detailed impacts from allowing drift gillnets in this fishery are discussed under Action 2.

Rejected Alternative 2. Limit the number of units in conflict area through the regulatory amendment procedure specified in Amendment 1 to the mackerel fishery management plan. This would be better than a formal limited entry program because the lengthy process for approval of a formal program would exacerbate the problem.

This alternative was rejected because the Councils feel that even allowing a limited number of vessels in this fishery would continue the type of impacts discussed under the no action alternative above and under Action 2. Capping the number of vessels at 14 would do nothing to address the problems identified.

Rejected Alternative 3. More observers. Supported by drift gillnet fishermen. The Councils rejected this alternative because it would not do anything in the immediate future to address problems discussed under the no action alternative and under Action 2. Continuous monitoring for

consecutive years would provide a historical data base to better quantify other problems that have been alluded to but for which insufficient data is available. However, the National Marine Fisheries Service does not have the resources to continue the observer program and have not done so during the 1988/89 fishing year.

Rejected Alternative 4. Prohibition on the use of drift gillnets on only the Gulf migratory group king mackerel. Supported by drift gillnet fishermen. Even though this alternative would provide protection for the Gulf migratory group of king mackerel, the Councils rejected this alternative because it would not address the problems discussed under the no action alternative and under Action 2.

Rejected Alternative 5. Proposal by Organized Fishermen of Florida (OFF) on behalf of the 14 drift gillnet fishermen:

(a) Cap the number of vessels at 14 (current industry estimate).

(b) Limit net length to 4,000 yards and only allow 1 net per boat.

This was rejected for the reasons mentioned in rejected alternatives 1 and 2 above and under Action 2.

Rejected Alternative 6. Base drift gillnet quota on the percentage of total commercial permits that drift gillnet boats represent. If there are 1,014 total commercial permits composed of 776 hook & line and 238 net, 17 of which use drift gillnets, the drift gillnet allocation would be 2 percent of 3.56 million pounds or 60,000 pounds. Under the new commercial allocation of 2.6 million pounds, the drift gillnet quota would be 52,000 pounds. This measure is so restrictive that it would essentially prohibit the use of drift gillnets since the catch per trip can exceed 5,000 pounds (NMFS, 1987). As such it would prevent the problems discussed above and under Action 2 but would increase enforcement costs and probably result in catches in excess of the quota due to the number of vessels and the high catch per trip. The Councils rejected this alternative because it still would allow drift gillnet gear and would result in some of the problems (e.g. bycatch, impact on turtles, ghost nets, habitat damage, navigation problem, gear conflict and lower quality of net caught fish) discussed above and under Action 2.

Rejected Alternative 7. Cap the harvest by providing a quota of 480,000 pounds (average for 1986 and 1987) for the drift gillnet fishery on the Atlantic stock of king mackerel and provide a maximum net length of 3,000 yards per vessel and place a total ban on drift gillnet gear for the Gulf stock of king mackerel. (NOTE: The average catch for drift gillnets in 1986 and 1987 was actually 486,890 pounds.)

Limiting the maximum length of drift gillnets to 3,000 yards would reduce the length of nets on vessels A, B, C and D (Table 2); three vessels would be unaffected and six vessels would be

allowed to increase their nets (Table 2). (NOTE: Net lengths of 2,800 and 1,500 yards were assumed for vessels I and L, respectively, based on similar catches for vessels with a known net length.) The net limit of 3,000 yards would reduce catch (based on assuming a proportional relationship between net length and catch and assuming number of trips remains the same) and value to the vessels as shown in Table 2. Overall, the drift gillnet fishery would lose $151,904; the four larger vessels would lose between $22,487 and $66,552, three vessels would be unaffected and the remaining vessels would gain between $2,768 and $9,603.

The additional measure of a quota of 486,890 pounds would reduce the overall catches of the drift gillnet vessels by 152,795 pounds representing a further loss of $184,882. The fishery would be expected to close sometime during July.

Therefore, total industry losses resulting from the net limit of 3,000 yards and the quota of 486,890 pounds would be $336,786. How these losses are distributed among individual vessels would depend on whether or not additional vessels enter the fishery, whether vessels leave the fishery, whether all vessels fish the maximum length of net and number of trips made during the fishing season. These factors make it impossible to quantitatively estimate losses at the individual firm level.

This measure would prevent any further expansion of this fishery but the Councils rejected this alternative because it would not prevent other problems (e.g. bycatch, impact on turtles, ghost nets, habitat damage, navigation problem, gear conflict and lower quality of net caught fish) mentioned above and under Action 2.

ACTION 3: PROHIBITION OF RUN-AROUND GILLNETS FOR ATLANTIC MIGRATORY GROUP KING MACKEREL

Section 12.6.8 is amended to add a new 12.6.8.6 to read as follows:

12.6.8.6 Run-Around Gillnets for Atlantic Migratory Group King Mackerel

The use of run-around gillnets to take Atlantic migratory group king mackerel is prohibited.

Run-around gillnets catches of Atlantic migratory group king mackerel were first taken during April, 1988 (Table 1), however, this gear has not historically been used to harvest Atlantic migratory group king mackerel (NMFS, 1987). Public input during the hearing process indicated that this gear has been used sporadically in the past, however historical data is not available by gear. After reviewing available information the Councils have voted to prohibit run-around gillnets for taking Atlantic migratory group king mackerel because this group is overfished and continuing the use of run-around gillnets will likely result in early closure of the commercial fishery causing

corresponding negative impacts to traditional hook & line commercial participants. The rationale to prohibit run-around gillnets is entirely consistent with that included under Actions 1 (Purse seine prohibition) and 2 (Drift gillnet prohibition) and that rationale, as well as, information on the status of the Atlantic migratory group of king mackerel, is not repeated here. Further, run-around gillnet gear is not considered a traditional gear in the Atlantic migratory group king mackerel fishery. This prohibition is not being requested for Atlantic or Gulf migratory group Spanish mackerel or Gulf migratory group king mackerel because run-around gillnet gear is considered traditional gear in those fisheries.

A new Section 12.6.8.7 is added as follows:

12.6.8.7 Alternatives to Prohibition of Run-Around Gillnets on Atlantic Migratory Group King Mackerel.

Rejected Alternative 1: No Change - Continue to allow the use of run-around gillnets on Atlantic migratory group king mackerel. Run-around gillnet gear was not used on Atlantic migratory group king mackerel prior to April, 1988 and may or may not be used in the future. The Councils concluded that the potential for run-around gillnet gear to be used is sufficient to warrant its prohibition due to the negative impacts that result to traditional commercial users when this gear is utilized, resulting in early closure of the commercial quota. As a result, both the Gulf and South Atlantic Fishery Management Councils have voted to prohibit this gear.

ACTION 4: ADD A NEW OBJECTIVE TO THE FMP

Section 12.4 Specific Management Objectives is revised by adding the following objective:

Objective 5

Minimize waste and bycatch in the fishery. Waste includes both discarded catch and economic wastage due to product quality.

The Councils have become very concerned over the recent introduction of drift gillnets into the coastal migratory pelagics fishery. In particular, the bycatch (Table 3) and resulting wastage is not resulting in optimum use of these resources. An additional factor is the quality of the product in that the price per pound for the drift gillnet catch is less than that of the hook & line catch which causes economic wastage to commercial participants.

ACTION 5: UPDATE OF THE HABITAT SECTION OF AMENDMENT 1 TO THE FISHERY MANAGEMENT PLAN FOR COASTAL MIGRATORY PELAGIC RESOURCES (MACKERELS)

Replace Section 6.0 of Amendment 1 with the following:

6.2 DESCRIPTION OF HABITAT OF THE STOCKS COMPRISING THE MANAGEMENT UNIT

The habitat of all adults in the coastal pelagic management unit, except dolphin, is the coastal waters out to the edge of the continental shelf in the Gulf of Mexico and the Atlantic Ocean. Dolphin is an oceanic species that may be found on the shelf. Within that area, the occurrence of these species is governed by temperature and salinity. All species except bluefish are seldom found in water temperatures less than 20° C. Bluefish are commonly found in water temperatures down to 12° C. Salinity preference varies, but is generally for high salinity. Dolphin are seldom found in waters with salinity less than 36 ppt. The scombrids prefer high salinities, but less than 36 ppt. Salinity preference of little tunny and cobia is not well defined. Bluefish exhibit a wide preference and can be found in estuarine waters of relatively low salinity. Some populations of bluefish are estuarine-dependent in the juvenile stage. The larval habitat of all species in the coastal pelagic management unit is the water column. These areas are identified for each species in Section 5.1 of the FMP. Within the spawning area, eggs and larvae are concentrated in the surface waters.

Estuaries are important habitats for most of the major prey species of coastal pelagics. For this reason, estuarine habitats and factors which affect them should be considered as a part of the coastal pelagic management unit. All the coastal pelagic species, except the dolphin, move from one area to another and seek as prey whatever local resources happen to be abundant. Many of the prey species of the coastal pelagics are estuarine-dependent in that they spend all or a portion of their lives in estuaries. Accordingly, the coastal pelagic species, by virtue of their food source, are to some degree also dependent upon estuaries and, therefore, can be expected to be detrimentally affected if the productive capabilities of estuaries are greatly degraded.

6.1 Habitat Condition

Offshore areas used by adults appear to be the least affected by nearshore habitat alterations and water quality degradation. Since most of the species reside offshore in deeper water, there is an unknown effect of pesticides, herbicides, and other harmful wastes which may be deleterious to many inshore fisheries. Alterations of the environment, coupled with local changes in environmental parameters such as temperature and salinity, have occurred to an unknown extent in estuaries and nearshore waters. Therefore, habitat degradation is more likely to affect eggs and larvae, because of their sensitivity to environmental changes, or indirectly affect the adults through predator-prey relations.

The prey species, which are largely estuarine-dependent, may be directly threatened by

estuarine alterations. Natural and man-induced changes have altered freshwater inflow and removed much habitat. Natural wetland losses result from forces such as erosion, sea level rises, subsidence, and accretion. The major man-induced activities that have impacted environmental gradients in the estuarine zone are:

1. construction and maintenance of navigation channels;
2. discharges from wastewater plants and industries;
3. dredge and fill for land use development;
4. agricultural runoff;
5. ditching, draining, or impounding wetlands;
6. oil spills;
7. thermal discharges;
8. mining, particularly for phosphate, and petroleum;
9. entrainment and impingement from electric powerplants;
10. dams;
11. marinas;
12. alteration of freshwater inflows to estuaries;
13. saltwater intrusion; and
14. non-point-source discharges of contaminants.

All of the south Atlantic and Gulf of Mexico estuaries have been impacted to some degree by one or more of the above activities. The estuaries also have been the most impacted by water quality degradation. Numerous pollution-related reports and publications exist (e.g., NOAA, 1987), but there still is no complete list of chemical contaminants, their effects, or concentrations. A comprehensive inventory to assess how seriously the estuaries are polluted also is needed. The coastal pelagics spend almost all of their life cycle offshore where environmental conditions are more stable and man's effect is less severe. However, if depletion of estuarine-dependent coastal pelagic food sources begins to affect the stocks, then estuaries will have to be managed to the same degree for coastal pelagics as for estuarine-dependent species such as shrimp.

6.1.1 Habitat Areas of Particular Concern

Habitat areas of particular concern would be those areas that are spawning grounds and habitats where eggs and larvae develop. Estuarine habitats that provide prey species along migration pathways also are vital. Such areas, however, are still poorly known and require further delineation before specific critical habitats can be designated.

6.1.2 We are unaware of any current habitat condition that affects the ability to harvest and market coastal pelagic resources. The same applies to recreationally caught fish.

6.2 Habitat Threats

At present, there is no documented evidence that egg and larval habitats have been degraded by natural or man-made impact to a degree sufficient to affect recruitment. However, man's impact on the habitat has greater potential to affect the eggs and larvae than the adults, and the magnitude of man's impact in the spawning area has been rapidly increasing.

Oil pollution from offshore oil spills or chronic leakage or discharge from operating oil wells is a potential danger to the spawning grounds of coastal pelagic species. The water soluble aromatic hydrocarbon component of crude oil is damaging to fish eggs and embryos. Fifty percent mortality was experienced in herring and anchovy larvae exposed to benzene in the range of 20 to 25 ppm in a laboratory experiment (Struhsaker et al., 1974). Sublethal effects observed in laboratory experiments were abnormal development and altered respiration rates. Eggs collected from areas impacted by chronic oil pollution showed a lower hatching rate (20-25 percent did not hatch) and larvae showed a higher percent of abnormalities than eggs and larvae collected from other sites (Struhsaker et al., 1974).

Other pollutants such as pesticides may act synergistically with oil to produce deleterious effects on young stages of fish (Struhsaker et al., 1974). Oil dispersants with water soluble aromatic hydrocarbon fractions also have been found to be damaging to eggs and larvae (Wilson, 1976), although the second generation dispersants are less toxic than those originally used after oil spills, due to the reduction in aromatic hydrocarbons (Wilson, 1977). .

6.3 Habitat Information Needs

The vast majority of our highly-valued living marine resources are critically dependent upon healthy environments. Declines in several of these commercially and recreationally important fisheries have been attributed to overfishing, loss of habitat, pollution, environmental alteration, disease, and natural variability of the stocks. Effective fisheries management requires an improved understanding of these factors.

Our chief concern related to living marine resources is how human activities impact fishery productivity. Research is needed to provide knowledge of the factors that affect energy flow. This understanding of ecological processes must then be combined with information on the health, distribution, and abundance of ecologically important organisms. By understanding the ecological linkages and information on the status of fishery stocks, managers of fisheries and habitat will be better able to manage estuarine-dependent living marine resources.

To understand the causes of fishery declines and better predict the effects of human activities on fishery populations, the following research needs relative to coastal pelagics are provided so that state, federal, and private research efforts can focus on those areas that would allow the development of measures to better manage coastal pelagics and their habitat:

1. Identify optimum coastal pelagic habitat and environmental and habitat conditions that limit production (e.g., focus more on life history studies that will define the critical fisheries habitats for food, cover, spawning, nursery areas, and migration routes);

2. Determine whether or not king mackerel hatching or larval development in the western Gulf, a major spawning area, are significantly affected by proximity to operating oil wells (or brine discharges) and if this affects recruitment;

3. Quantify the relationships between coastal pelagic resources production and habitat (e.g., what are the key trophic pathways in the ecosystem, and how does the flux of essential nutrients, carbon compounds, and energy through these systems influence fisheries productivity?); and

4. Determine the relative effects of fishing, pollution, and natural mortality on fishery population dynamics. Also determine the effects of cumulative habitat loss on fisheries productivity and economic value.

6.4 Habitat Protection Programs

State and federal agencies and laws and policies that affect coastal pelagics habitat are found in Section 7 of the Coastal Migratory Pelagics FMP (GMFMC and SAFMC, 1983) and in Section 6 of Amendment 1 to the FMP (GMFMC and SAFMC, 1985). Specific involvement by other federal agencies are noted as follows:

Office of Coastal Zone Management, Marine Sanctuaries Program (MSP), NOAA. Specifically, this program manages and funds the marine sanctuaries program (MSP). On-site management and enforcement are generally delegated to the states through special agreements. Funding for research and management is arranged through grants.

In terms of complementing the protection of nearshore habitat that may be used by coastal migratory pelagics from a site-specific perspective, this is one of the most important federal programs. This program was authorized under Title III of the Marine Protection Research and Sanctuaries Act (MPRSA) of 1972. Its purpose is to preserve or restore the conservation, recreational, ecological, or aesthetic values of localized area "... as far seaward as the outer edge of the continental shelf, ...(and in) other coastal waters whether the tide ebbs and flows ..." (MPRSA, Section 302a). In effect, the MSP is a coastal water counterpart to the more familiar national park, forest, wildlife refuge, and wilderness systems.

Site management and administrative responsibility for a sanctuary may either be retained by OCZM or delegated with necessary funding support to other appropriate management units.

The MSP is particularly interested in protecting outstanding coral reef areas. One of the six existing sanctuaries - the KLCRNMS off Key Largo, Florida, - complements state effort at John

Pennekamp State Park by protecting a 343 km^2 (100 nm^2, section of the upper Florida reef tract. A management plan for the Key Largo sanctuary has been designed to provide the protection necessary and insure long-term viability of the ecosystem. The management plan also addresses public education, environmental and regulatory enforcement monitoring, and regulatory enforcement needs at the site. Enforcement is conducted cooperatively by the DNR (Marine Patrol and Park Rangers) and the U.S. Coast Guard.

The Looe Key National Marine Sanctuary covers a 5 nm^2 coral reef area located 6.7 nm east of Big Pine Key, Florida. It was designated in January 1981 to maintain, protect, and enhance the quality of the natural, biological, aesthetic, and cultural resources of the Looe Key system, to promote and stimulate marine research efforts directed toward improved management decision making and identification and analysis of marine ecological interrelationships, and to enhance public awareness of the functioning of the Looe Key coral reef system.

National Marine Fisheries Service (NMFS). The enactment of the Magnuson Act provides for exclusive management of fisheries seaward of state jurisdiction. This includes both specific fishery stocks and habitat. The process for developing FMPs is highly complex. It includes plan development by various procedures by eight Regional Fishery Management Councils. NMFS implements approved plans. The Coast Guard, NMFS, and states enforce FMPs. FMPs for coral and coral reefs, reef fish, grouper and snapper, coastal migratory pelagics, swordfish, billfish and spiny lobster are in force.

National Park Service (NPS). National parks and monuments are under the jurisdiction of NPS. Management, enforcement, and research are accomplished in house. The system of national parks and monuments operated by the NPS, in the broadest terms, preserve for all times scenic beauty, wilderness, native wildlife, indigenous plant life, and areas of scientific significance and antiquity §16 U.S.C. (1)r. Although the NPS includes several marine areas, their distinctly land-based orientation makes them somewhat less likely to include new marine areas within their system. Nevertheless, areas operated by the NPS within the present study area include and manage significant areas that could be used by coastal migratory pelagics or their food sources - the Everglades National Park, the Biscayne National Park north of Key Largo, Florida, and the Fort Jefferson National Monument in the Dry Tortugas, Florida.

Both the statement for management for the Jefferson National Monument and the general management plan for Everglades National Park and Biscayne National Park, include as major management objectives the protection of natural resources within their boundaries. At the Fort Jefferson Monument, all areas within the Monument's administrative boundaries (with the exception of Garden Key), are classified as an outstanding natural area under the NPS's land classification system. Prohibited activities include commercial fishing, while allowed uses include sport fishing and nonconsumptive recreational activities.

Minerals Management Service (MMS). This agency has jurisdiction over mineral and petroleum resources on the continental shelf. The MMS along with the U.S. Geological Survey is charged with administering mineral exploration and development on the Outer Continental Shelf (OCS), pursuant to the OCS Lands Act (OCSLA), as amended in 1978 [43 U.S.C. (1331 et seq.)]. The MMS serves as the administrative agency for leasing submerged federal lands.

Of particular interest is MMS' ability to withdraw tracts from proposed OCS mineral lease sales for lack of information, aesthetic, environmental, geologic, or other reasons. The presence of coral reefs, hard bottoms, or other marine areas containing significant resources could be reasons for withdrawing tracts. Further, the OCSLA [43 U.S.C. (1341)] also provides for permanent disposition from leasing; Key Largo Coral Reef was provided such protection by President Eisenhower, through Proclamation No. 3339 (55 CFR 2552) which established the KLCRMS.

During 1988, the Secretary of the Interior and State of Florida have reached an agreement that OCS drilling will not be allowed south of 26° N. latitude to assure protection of nearshore habitats. The Oil Pollution Convention (T.I.A.S. 4900,6109) and the Oil Pollution Act [33 U.S.C. (1001-1016)] also prohibit oil discharges within 50 nm of shore by U.S. and foreign vessels.

Fish and Wildlife Service (FWS). FWS assists with environmental impact review, develops biological resource evaluations, and administers the endangered species program with the NMFS. Three National Wildlife Refuges are located in the Florida Keys which undoubtedly contain habitats that may be of use to coastal migratory pelagics or their food source: The National Key Deer Refuge, The Great White Heron National Wildlife Refuge, and the Key West National Wildlife Refuge.

Geological Survey (USGS). The USGS has conducted considerable research in nearshore areas and assisted or cooperated with other institutions and agencies to facilitate logistics and support of research. The USGS also is charged with supervising mineral development operations on the OCS. Further, the USGS must ensure oil company compliance with regulations and lease stipulations once a lease is sold. This represents a key management authority for ensuring protection of nearshore communities. Although these authorities are not comprehensive, they are significant because of the widespread interest in current OCS oil and gas development and its potential impacts on corals.

Coast Guard. The 1978 Waterways Safety Act charges the CG with marine environmental protection. The CG is the general enforcement agency for all marine activity in the federal zone. Among the duties are enforcement of sanctuary and fishery management regulations, managing vessel salvage, and coordinating oil spill cleanup operations at sea.

U.S. Army Corps of Engineers. The COE contracts and regulates coastal engineering projects, particularly harbor and channel dredging and beach renourishment projects. The COE also reviews and is the permitting agency for coastal development projects, artificial reefs, and offshore structures.

Environmental Protection Agency (EPA). This agency has a general responsibility for controlling air and water pollution. Disposal of hazardous wastes and point-source discharge permitting are EPA functions. Certain mineral and petroleum exploration and production activities also are managed by EPA. Environmental research germane to waste disposal and pollution also are funded. EPA regulates chemical discharges into Gulf of Mexico and south Atlantic waters, under the National Pollution Discharge Elimination System (NPDES) program of the Clean Water Act for chemicals used or produced in the Gulf and south Atlantic area (i.e., drilling muds, produced water or biocides) and then released, or under the Ocean Dumping Regulations of the MPRSA if the chemicals are transported into the Gulf and south Atlantic area for the purpose of dumping.

Federal environmental agencies such as the NMFS, FWS, and the EPA also analyze projects proposing inshore and offshore alterations for potential impacts on resources under their purview. Recommendations resulting from these analyses are provided to the permitting agencies (the COE for physical alterations in inshore waters and territorial sea, the MMS for physical alterations in the OCS or the offshore Exclusive Economic Zone (EEZ) and EPA for chemical alterations). Even though the COE issues permits for oil and gas structures in the EEZ, they only consider navigation and national defense impacts, thus leaving the rest to the Department of Interior (DOI), in a nationwide general permit.

6.5 Habitat Recommendations

The coastal pelagic fishery contributes to the food supply, economy, and health of the Nation, and provides recreational and commercial fishing opportunities. The fishery is dependent upon the survival of these resources, which can only be assured by the wise management of all aspects of the fishery. This includes assurance of a steady food supply of species that that may require estuaries as feeding, spawning, or nursery areas. Accordingly, activities that adversely affect estuaries also will require action by the Councils. Increased productivity of stocks may not be possible without habitat maintenance and regulatory restrictions.

Recognizing that all species are dependent on the quantity and quality of their essential habitats, it is the policy of the Councils to protect, restore, and improve habitats upon which commercial and recreational marine fisheries depend, to increase their extent and to improve their productive capacity for the benefit of the present and future generations. This policy shall be supported by three objectives which are to:

1. Maintain the current quantity and productive capacity of habitats supporting important commercial and recreational fisheries, including their food base (This objective may be accomplished through the recommendation of no net loss and minimization of environmental degradation of existing habitat);

2. Restore and rehabilitate the productive capacity of habitats which have already been degraded; and

3. Create and develop productive habitats where increased fishery productivity will benefit society.

The Councils have formed Habitat Committees and Advisory Panels for the south Atlantic and Gulf states to bring to the Councils' attention activities that may affect the habitat of fisheries under their management. The Councils, pursuant to the Magnuson Act, will use existing authorities to support state and federal environmental agencies in their habitat conservation efforts and will directly engage the regulatory agencies on significant actions that may affect habitat. This may include commenting on specific actions, policies, or regulations that affect the habitat of species being managed. Public hearings and the building of administrative records also may be conducted to assure an adequate disclosure of facts and public participation in actions that adversely affect habitat. The goal is to insure that habitat losses are kept to the minimum and that efforts for appropriate mitigation strategies and applicable research are supported.

ACTION 6: ADD VESSEL SAFETY CONSIDERATIONS TO THE FISHERY MANAGEMENT PLAN

Amendment by P.L. 99-659 to the Magnuson Act requires that a fishery management plan, must consider and may provide for, temporary adjustments, after consultation with the Coast Guard and persons utilizing the fishery regarding access to the fishery for vessels otherwise prevented from harvesting because of weather or other ocean conditions affecting the safety of the vessels.

No vessel will be forced to participate in the fishery under adverse weather or ocean conditions as a result of the imposition of the management regulations set forth in the original Fishery Management Plan, as amended, or in Amendment 3. Therefore, no management adjustments for fishery access will be provided.

1. Fishery access and weather related safety. There are no fishery conditions or management measures or regulations contained in the original Fishery Management Plan, as amended, or Amendment 3 that would result in the loss of harvesting opportunity because of the crew and vessel safety effects of adverse weather or ocean conditions. There have been no concerns raised by the Coast Guard or by persons engaged in the fishery, that the proposed management measures directly

or indirectly pose a hazard to crew or vessel safety under adverse weather or ocean conditions.

2. No Impact Determinations. Vessel safety has not been identified as a relevant or significant issue in the mackerel fishery or in the management measures set forth.

3. Adjustments. There are no procedures for making management adjustments in the original Fishery Management Plan, as amended, or Amendment 3 because no person will be precluded from a fair or equitable harvesting opportunity by the management measures set forth.

4. Coast Guard Evaluation. No vessel safety issues, whether pertinent to fishery access and weather-related vessel safety or to other significant or relevant safety issues have been identified by the Coast Guard.

5. Procedures. There are no procedures proposed to monitor, evaluate and report on the effect of management measures on vessel or crew safety, under adverse weather or ocean conditions.

6. Other Safety Issues. There have been no significant and relevant safety issues raised by fishery users, other public or the Coast Guard, therefore, there are no social or economic implications resulting.

VII. ENVIRONMENTAL CONSEQUENCES

Physical Environment

The actions proposed in this amendment will have no adverse impact on the physical environment. The effect of these actions is to prohibit the use of purse seines and run-around gillnets for Atlantic migratory group king mackerel and the use of drift gillnets for the capture of all coastal migratory pelagic resources (king mackerel, Spanish mackerel, cobia, cero mackerel, little tunny, dolphin and in the Gulf of Mexico bluefish).

Fishery Resource

The proposed actions would have an indirect benefit by slowing the rate of harvest in an overfished fishery. This will reduce the likelihood of a closure and possibly allow faster rebuilding of the resource due to the lower rate of harvest.

Human Environment

The proposed action will eliminate the drift gillnet harvest component of the catch from thirteen vessels that fished during 1987. Impacts from prohibiting use of drift gillnets is in excess of $925,923. These fishermen do not appear to have the opportunity to replace this lost income

utilizing these vessels and other gear, however, as the Gulf migratory group of king mackerel rebuilds, they may have the opportunity to replace some of this lost income by fishing run-around gillnet gear. These fishermen also have the opportunity to fish smaller vessels in the Atlantic migratory group king mackerel hook & line fishery. One action would also eliminate the catch of Atlantic migratory group king mackerel taken, for the first time this year, by purse seines and run-around gillnets. Individual catches are confidential and cannot be released but together totaled 326,262 pounds worth $394,777 using the price of $1.21 per pound.

The proposed amendment would increase the potential catch of Atlantic migratory group king mackerel by recreational and commercial hook & line fisheries in nearby geographical areas.

Effect on Endangered Species and Marine Mammals

One of the proposed actions will remove a potential mortality source on turtles but will have no demonstrated impact on marine mammals in this specific fishery. The observer study reported that one turtle was observed by a fisherman in the drift gillnet at haulback, however, by the time the observer reached the stern, the turtle had freed itself and swam away. To the extent that drift gillnets catch and kill turtles, prohibition of this gear will remove that source of mortality and result in a positive impact.

Effect on Wetlands

The proposed actions will have no effect on any flood plains, wetlands, trails or rivers.

VIII. CONCLUSIONS

Mitigating Measures Related to the Proposed Action

None.

Unavoidable Adverse Effects

Prohibition on the use of drift gillnets in the mackerel fishery will affect thirteen vessels during the April through September time period. These affected fishermen do not appear to have the opportunity to replace this lost income by utilizing these vessels and other gear at present. However, as the Gulf migratory group of king mackerel rebuilds, they may have the opportunity to replace some of this lost income by fishing run-around gillnet gear. These fishermen also have the opportunity to fish smaller vessels in the Atlantic migratory group king mackerel hook & line fishery.

There will be a small impact on less than three purse seine vessels and an unknown number of run-around gillnet vessels from foregone Atlantic migratory group king mackerel catches that occurred for the first time in 1988.

Relation Between Local, Short-Term Users of the Resource and Enhancement of Long-Term Productivity

Utilization of the resource by thirteen vessels while fishing with drift gillnets, a rare and limited harvest by a small number of purse seine vessels and an unknown number of run-around gillnet vessels will be prohibited. This action will help to limit fishing mortality on Atlantic migratory group king mackerel which are overfished and will help to continue rebuilding of Gulf migratory group king mackerel. The net affect will be to rebuild and maintain harvests at or near the maximum sustainable yield.

Irreversible or Irretrievable Commitment of Resources

None.

Enforcement Costs

Enforcements costs for the preferred alternatives is less than the costs of options considered and rejected because enforcement of the purse seine, drift gillnet, and run-around gillnet prohibition will consist of primarily dockside enforcement.

Finding of No Significant Environmental Impact

Having reviewed the environmental assessment and available information relating to the proposed actions, I have determined that the proposed actions will not significantly affect the human environment.

_____ _____

Assistant Administrator For Fisheries Date

Comments on this Draft are to be received by the responsible agencies before _____, 1988.

RESPONSIBLE AGENCIES

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LIST OF AGENCIES AND PERSONS CONSULTED

In addition to extensive comments received during the 10 public hearings (minutes and list of persons attending are available), 97 letters from individuals, 60 form letters, and petitions with 55 signatures comments were received from the following organizations and agencies:

Pt. St. Lucie Anglers Club, FL - 200 anglers
Organized Fishermen of Florida
SC Wildlife Federation
Florida League of Anglers, FL
Charlotte Offshore Sportfishing Club, NC
Top Sail Offshore Fishing Club, NC
Atlantic Coast Conservation Association of SC
US Open Mackerel Tournament, NC
New Hanover Fishing Club, NC - 400 members
Wrightsville Beach King Mackerel Tournament, NC
Sebastian Inlet Sportfishing Association, FL
Azalea Coast Marine Dealers Association, NC
Stuart Sailfish Club, FL
Central Florida Offshore Anglers - 900 members
Rep. H.E. Pearce, Jr., SC
National Marine Fisheries Service

LIST OF PREPARERS

South Atlantic Fishery Management Council
- Gregg T. Waugh, Fishery Biologist/Statistician

Gulf of Mexico Fishery Management Council
- Terrance R. Leary, Biologist

LOCATION AND DATES OF PUBLIC HEARINGS

October 17, 1988	American Legion Hall	Key West, Florida
October 18, 1988	Ft. Pierce Elementary School	Ft. Pierce, Florida
October 19, 1988	Holiday Inn - Oceanfront	Jacksonville, Florida
October 20, 1988	Quality Inn	Brunswick, Georgia
October 21, 1988	Thunderbolt Town Hall	Thunderbolt, Georgia
October 24, 1988	Murrells Inlet Community Center	Murrells Inlet, South Carolina
	Marine Resource Center	Manteo, North Carolina
October 25, 1988	Island Recreation Center	Hilton Head, South Carolina
	New Hanover County Courthouse	Wilmington, North Carolina
October 26, 1988	Carteret Community College	Morehead City, North Carolina

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TABLE 1. SOUTH ATLANTIC GROUP KING MACKEREL COMMERCIAL LANDINGS. (Source: NMFS SERO)

	HOOK AND LINE			DRIFT GILLNET			RUNAROUND GILLNET & PURSE SEINE		
YEAR/MONTH	TRIPS	POUNDS	LB/TRIP	TRIPS	POUNDS	LB/TRIP	TRIPS	POUNDS	LB/TRIP
Year=1986									
April	884	195,480	221	13	18,667	1,436	0	0	
May	1,641	392,444	239	36	32,051	890	0	0	
June	448	45,982	103	15	5,259	351	0	0	
July	1,206	103,457	86	98	61,879	631	0	0	
August	1,437	245,107	171	86	86,341	1,004	0	0	
September	573	65,010	113	33	12,612	382	0	0	
TOTAL	6,189	1,047,480	169	281	216,809	772			
Year=1987									
April	1,130	239,206	212	92	73,475	799	0	0	
May	1,166	247,582	212	115	165,983	1,443	0	0	
June	497	70,512	142	146	137,327	941	0	0	
July	551	59,590	108	155	191,540	1,236	0	0	
August	897	112,689	126	125	166,745	1,334	0	0	
September	510	50,750	100	90	60,198	669	0	0	
TOTAL	4,751	780,329	164	723	795,268	1,100			
Year=1988									
April	603	203,408	337	58	83,646	1,442	24	338,703	14,113
May	814	273,500	336	172	388,944	2,261	0	0	
June	152	17,721	117	107	64,734	605	0	0	
July	114	7,182	63	119	65,178	548	0	0	
August	588	70,574	120	181	158,224	874	0	0	
September	N/A	N/A		58	47,320	816	0	0	
TOTAL	2,271	572,385	252	695	808,046	1,163	24	338,703	14,113

Data for 1988 represents landings of 10 major dealers
Data for 1986 & 1987 are from all commercial dealers
N/A Not Available

TABLE 2. ESTIMATED IMPACTS TO THE DRIFTNET FISHERY

BOAT	NUM TRIPS	MACKEREL LANDED (LB)	MACKEREL VALUE	NET LENGTH (YARDS)	CATCH WITH NET LIMIT (3000 YDS)	VALUE WITH NET LIMIT (3000 YDS)	GAINS AND (LOSSES)
A	79	122,987	$148,814	4,500	81,991	$99,210	($49,605)
B	68	121,004	$146,415	5,500	66,002	$79,863	($66,552)
C	85	117,915	$142,677	4,500	78,610	$95,118	($47,559)
D	82	98,231	$118,860	3,700	79,647	$96,373	($22,487)
E	77	80,328	$97,197	3,000	80,328	$97,197	$0
F	83	79,231	$95,870	3,000	79,231	$95,870	$0
G	79	47,628	$57,630	3,000	47,628	$57,630	$0
H	64	43,441	$52,564	2,800	46,544	$56,318	$3,755
I	39	32,024	$38,749	2,800	34,311	$41,517	$2,768
J	18	6,899	$8,348	2,000	10,349	$12,522	$4,174
K	16	6,193	$7,494	1,500	12,386	$14,987	$7,494
L	13	5,377	$6,506	1,500	10,754	$13,012	$6,506
M	20	3,968	$4,801	1,000	11,904	$14,404	$9,603
TOTALS		765,226	$925,923	38,800	639,685	$774,019	($151,904)

(Source: NMFS; October, 1987)

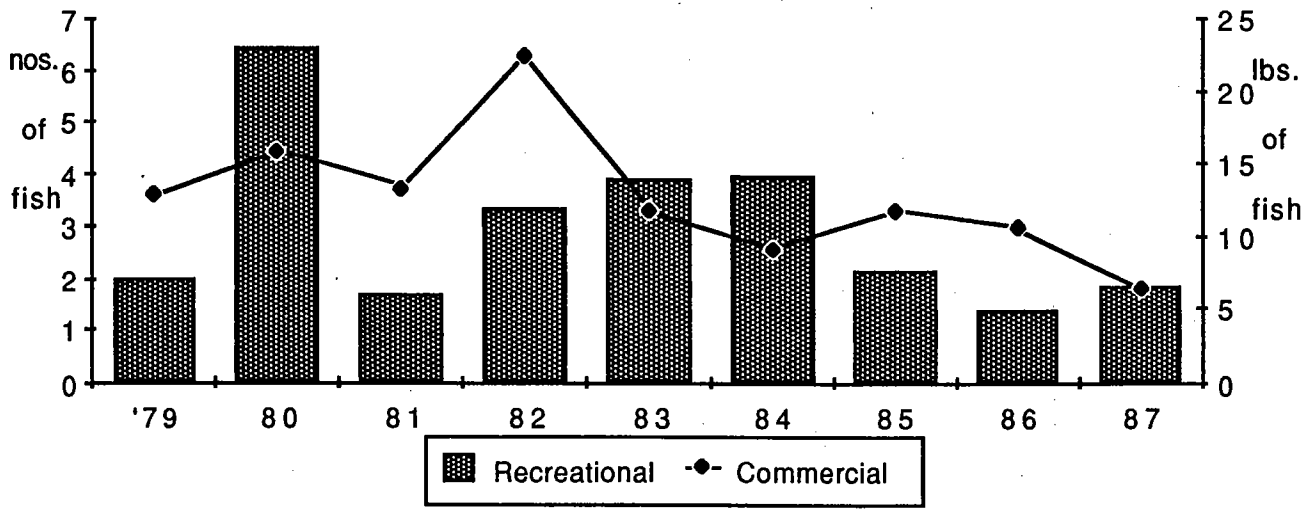
TABLE 3. DRIFT GILLNET BYCATCH INFORMATION (Source: NMFS, 1987).

	OBSERVED LANDED CATCH (38 TRIPS)			PROJECTED TOTAL LANDED CATCH (723 TRIPS)	
	NUMBER	WEIGHT*(LB)	AVG. WT. (LB)	NUMBER	WEIGHT (LB)
KING MACKEREL	4,831	46,325	9.59	91,916	881,394
BLUE RUNNER	106	487	4.59	2,017	9,266
BLACKTIP SHARK	67	478	7.13	1,275	9,095
SPANISH MACKEREL	93	367	3.95	1,769	6,983
COBIA	54	857	15.87	1,027	16,306
SHARK	31	90	2.90	590	1,712
BLACKFIN TUNA	29	604	20.83	552	11,492
RED SNAPPER	21	64	3.05	400	1,218
BARRACUDA	15	90	6.00	285	1,712
AFRICAN POMPANO	11	260	23.64	209	4,947
CREVALLE JACK	5	68	13.60	95	1,294
GREATER AMBERJACK	4	8	2.00	76	152
WAHOO	4	81	20.25	76	1,541
DOLPHIN	3	2	0.67	57	38
TRIPLE TAIL	1			19	0
TOTALS	5,275	49,781		100,364	947,149

*SOME WEIGHTS MISSING

	OBSERVED DISCARDED CATCH (38 TRIPS)	PROJECTED DISCARDED CATCH (723 TRIPS)
LITTLY TUNNY	1,854	35,275
BARRACUDA	300	5,708
SMOOTH DOGFISH	95	1,808
FILEFISH	73	1,389
SHARK	89	1,693
LOOKDOWN	53	1,008
REMORA	32	609
MOONFISH	100	1,903
HAMMERHEAD SHARK	16	304
CREVALLE JACK	12	228
SAILFISH	22	419
ATLANTIC BUMPER	8	152
ATLANTIC CROAKER	15	285
COWNOSE RAY	27	514
GREATER AMBERJACK	6	114
FLOUNDER	5	95
AFRICAN POMPANO	8	152
BLUE RUNNER	21	400
SCORPION FISH	3	57
TRIGGERFISH	2	38
MANTA RAY	2	38
BLACK SNAPPER	2	38
STINGRAY	1	19
GAG GROUPER	1	19
BLACKTIP SHARK	1	19
COWFISH	1	19
ATLANTIC BONITO	1	19
ATLANTIC THREAD HERRING	10	190
STRIPED SEA ROBIN	2	38
TIGER SHARK	1	19
PERMIT	1	19
ATLANTIC GUITAR FISH	1	19
BUTTER FISH	1	19
TOTALS	2,766	52,627

Figure 1. Florida East Coast King Mackerel (April through September) from the recreational (numbers caught) and commercial (pounds caught) fisheries (in hundreds of thousands)

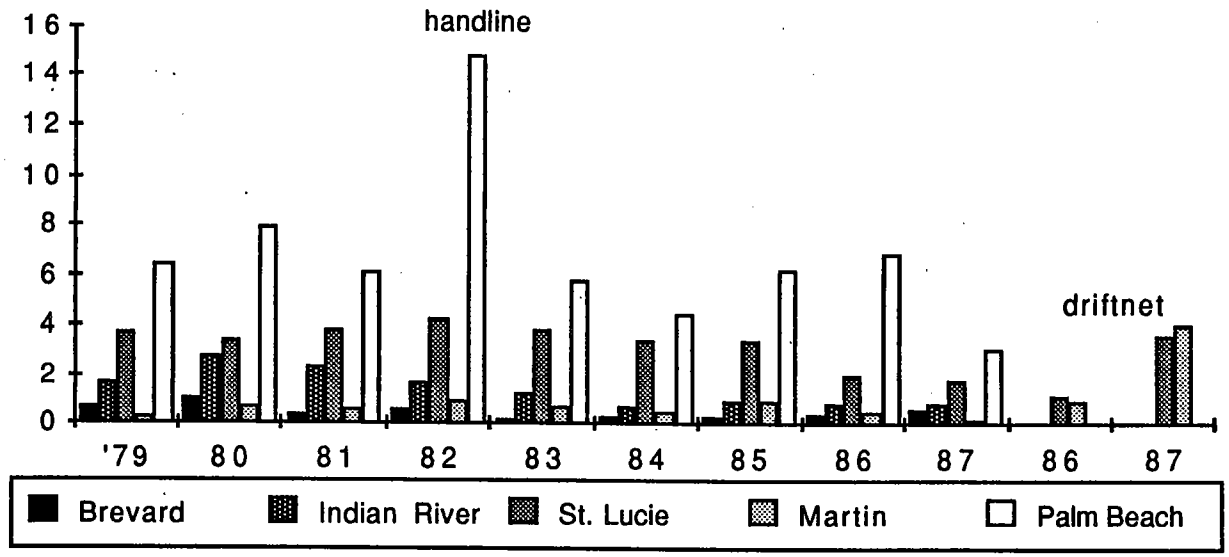


Hook and Line

Year	Recreational (numbers)	Commercial (pounds)
79	203,212	1,282,945
80	643,862	1,588,754
81	171,410	1,332,185
82	336,175	2,237,395
83	392,290	1,176,778
84	397,610	929,055
85	216,566	1,179,466
86	137,665	1,058,574
87	184,854	651,044

(Rec. data source: John Witzig, NMFS Washington, D.C., pers. commun., 1/21/88)
(Com. data source: Ernie Snell, NMFS Miami, FL, pers. commun., 1/21/88)

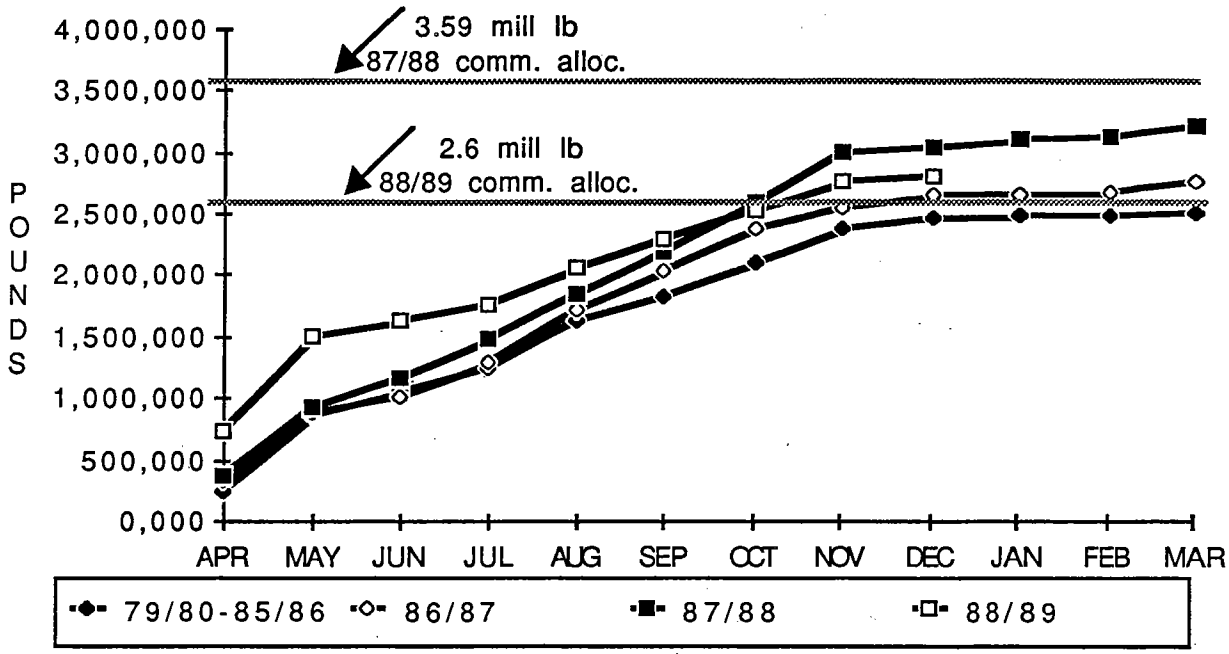
Figure 2. Pounds of King Mackerel from the Florida East Coast commercial fishery (in hundreds of thousands)



	Year	Brevard	Indian River	St. Lucie	Martin	Palm Beach	Handline Total	Total with Driftnet
	79	67,511	169,395	372,962	33,483	639,594	1,282,945	
	80	101,332	279,551	344,658	66,498	796,715	1,588,754	
	81	42,818	232,480	383,059	57,431	616,397	1,332,185	
	82	60,343	170,368	428,619	89,436	1,488,629	2,237,395	
	83	20,889	128,613	381,861	70,929	574,486	1,176,778	
	84	23,728	70,394	340,283	48,392	446,258	929,055	
	85	29,819	91,530	341,056	98,330	618,731	1,179,466	
	86	37,074	83,499	205,020	45,254	687,727	1,058,574	1,267,128
	87	64,449	81,886	178,980	19,757	305,972	651,044	1,416,270
driftnet	86			113,499	95,055			
driftnet	87			362,056	403,170			

(Source:Ernie Snell, NMFS Miami, FL; personal communication)

Figure 3. Atlantic migratory group King Mackerel cumulative commercial landings by month for various fishing years (Source:NMFS[1]).



SUMMED MONTHLY CATCH

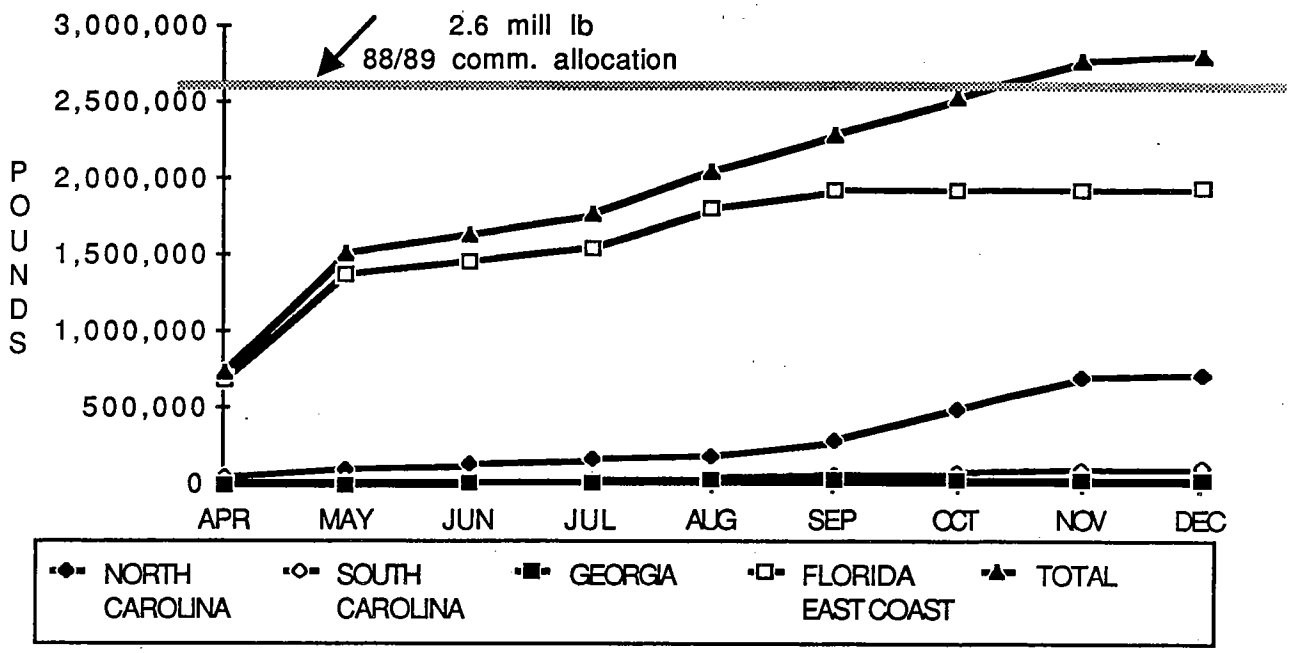
	79/80-85/86	86/87	87/88[2]	88/89[3]
APR	245,523	318,684	376,631	746,339
MAY	861,222	879,164	934,881	1,505,649
JUN	1,045,228	1,012,069	1,170,037	1,630,837
JUL	1,240,476	1,285,763	1,481,383	1,764,561
AUG	1,630,450	1,718,246	1,844,895	2,053,730
SEP	1,835,056	2,031,960	2,190,166	2,294,831
OCT	2,111,887	2,373,177	2,587,676	2,534,858
NOV	2,381,853	2,551,004	2,997,372	2,766,885
DEC	2,474,468	2,648,646	3,052,328	2,809,058
JAN	2,485,292	2,664,857	3,105,872	
FEB	2,492,943	2,677,284	3,137,444	
MAR	2,516,961	2,773,998	3,224,563	

[1]1988/89 NC and SC monthly summed catch approximated from NMFS computerized tracking program; GA from G. Rogers (GA DNR); FLEC from G. Davenport (SEFC).

[2]does not include Florida Jan-Mar 88 landings.

[3]1989 data not available

Figure 4. Atlantic migratory group King Mackerel cumulative commercial landings by state by month for the 1988/89 fishing year.



SUMMED MONTHLY CATCH

	NC	SC	GA	FL EAST COAST	TOTAL
APR	46,980	8,383	1,625	689,351	746,339
MAY	102,017	17,510	5,702	1,380,420	1,505,649
JUN	131,742	23,147	9,208	1,466,740	1,630,837
JUL	164,301	30,872	12,649	1,556,739	1,764,561
AUG	181,249	44,445	25,480	1,802,556	2,053,730
SEP	281,970	64,739	26,669	1,921,453	2,294,831
OCT	493,931	78,411	27,928	1,934,588	2,534,858
NOV	696,442	105,653	29,360	1,935,430	2,766,885
DEC	723,122	117,212	29,360	1,939,364	2,809,058

[1]1988/89 NC and SC monthly summed catch approximated from NMFS computerized tracking program; GA from G. Rogers (GA DNR); FLEC from G. Davenport (SEFC).

[2]does not include Florida Jan-Mar 88 landings.

[3]1989 data not available

APPENDIX A

TABLE 1. ATLANTIC MIGRATORY GROUP SPANISH MACKEREL QUOTAS, BAG LIMITS, CATCHES, AND CLOSURES.

	MILLIONS OF POUNDS ABC	TAC	ALLOCATIONS	QUOTA	BAG LIMITS (per person per trip)	SEASON BEGAN	REPORTED CATCHES	PERCENT OF QUOTA	REPORTED THROUGH	DATE CLOSED
FISHING YEAR = 1987/88										
SPANISH MACKEREL										
MSY = 18.0 mill lb										
Atlantic Migratory Group	1.7 - 3.1	3.1								
Atlantic Recreational			24%	740,000	4 FL	4/1/88	1,596,170	216%	12/31/87	9/17/87
Atlantic Commercial			76%	2,360,000	10 NC, SC AND GA	4/1/88	2,515,300	107%	12/28/87	12/28/87
FISHING YEAR = 1988/89										
SPANISH MACKEREL										
MSY = 18.0 mill lb										
Atlantic Migratory Group	1.3 - 5.5	4								
Atlantic Recreational			24%	960,000	4 FL	4/1/88	2,450,000	255%	10/30/88	10/3/88
Atlantic Commercial			76%	3,040,000	10 NC, SC AND GA	4/1/88	3,046,200	100%	12/30/88	12/30/88

Table 2. King Mackerel Atlantic Stock Catch Summary (April-March fishing year).

Number of fish (thousands)

1_/ FISHING YEAR	COM	REC	TOTAL
79	216	249	465
80	373	1238	1611
81	305	611	916
82	456	564	1020
83	238	1049	1287
84	188	980	1168
85	296	840	1136
86	298	555	853
87	294	482	776

Thousands of Pounds

1_/ FISHING YEAR	COM	REC	TOTAL
79	2157	2166	4323
80	3088	9260	12348
81	2568	5885	8453
82	4230	5458	9688
83	2597	9765	12362
84	1943	8071	10014
85	2480	7868	10348
86	2823	4924	7747
87	2533	3434	5967

1_/ Fishing year 79 begins on 1 April 1979 and ends on 31 March 1980. Fishing year 87 data through October 1987 only and should be considered preliminary.

SOURCE: 1988 Stock Assessment Report.

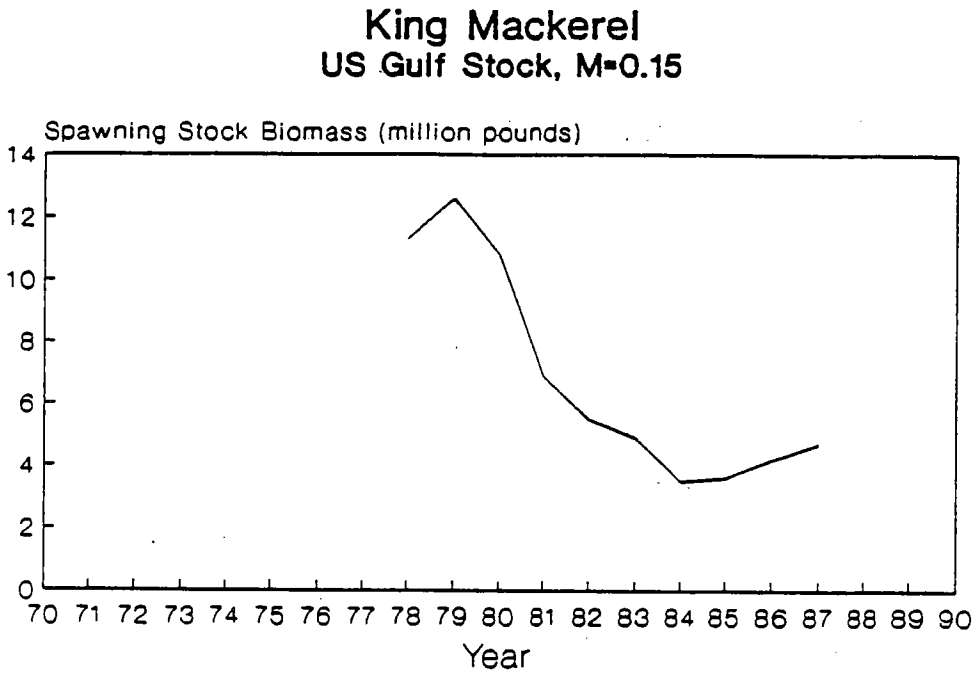


Figure 1. Estimated female spawning stock biomass of US Gulf Migratory Group king mackerel from 1978-87. Natural mortality rate M=0.15.

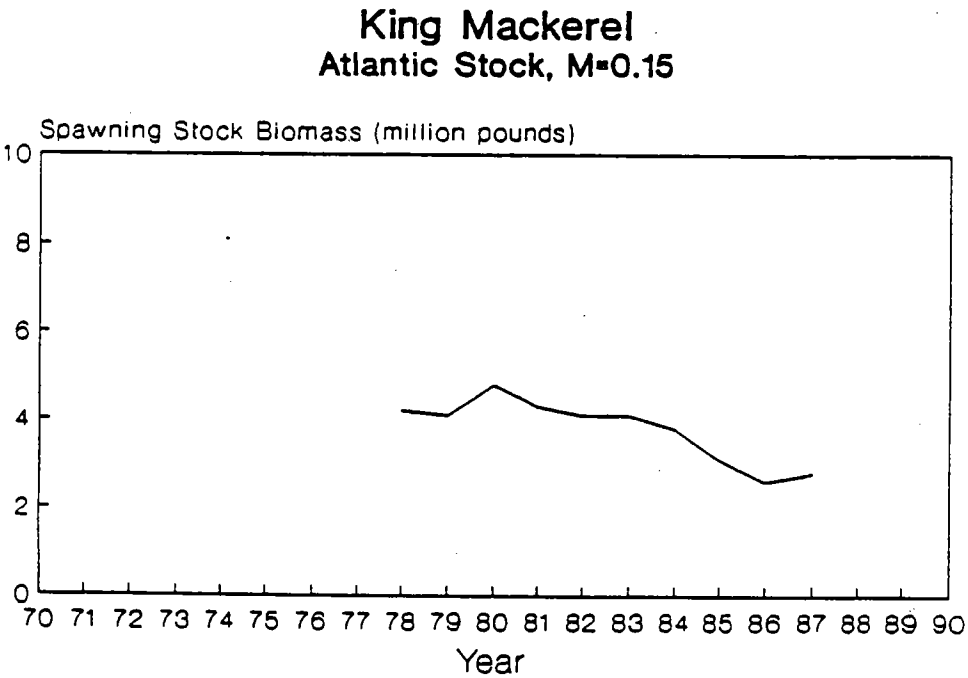
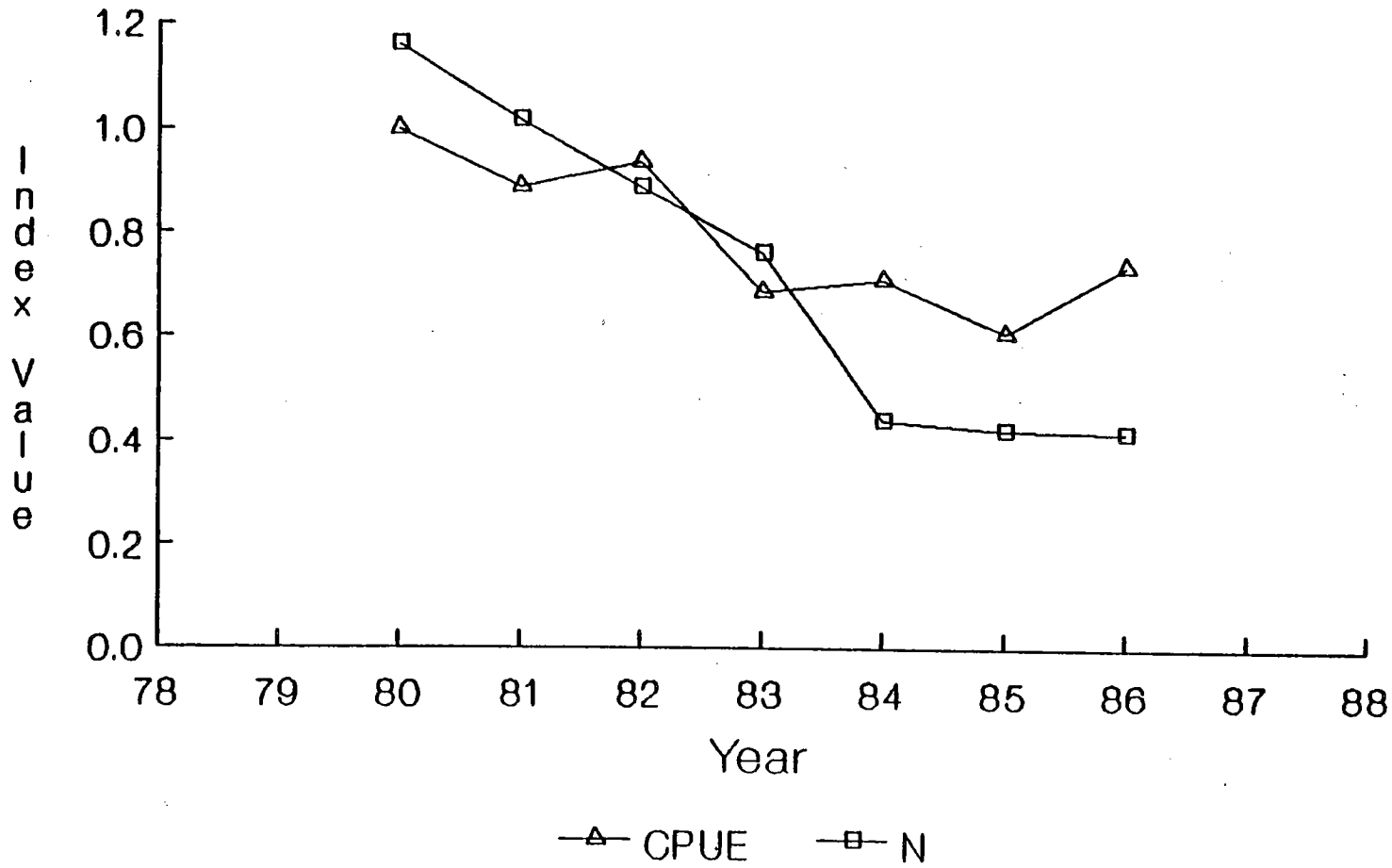


Figure 2. Estimated female spawning stock biomass of Atlantic Migratory Group king mackerel from 1978-87. Natural mortality rate M=0.15.

SOURCE: 1988 Stock Assessment Report.

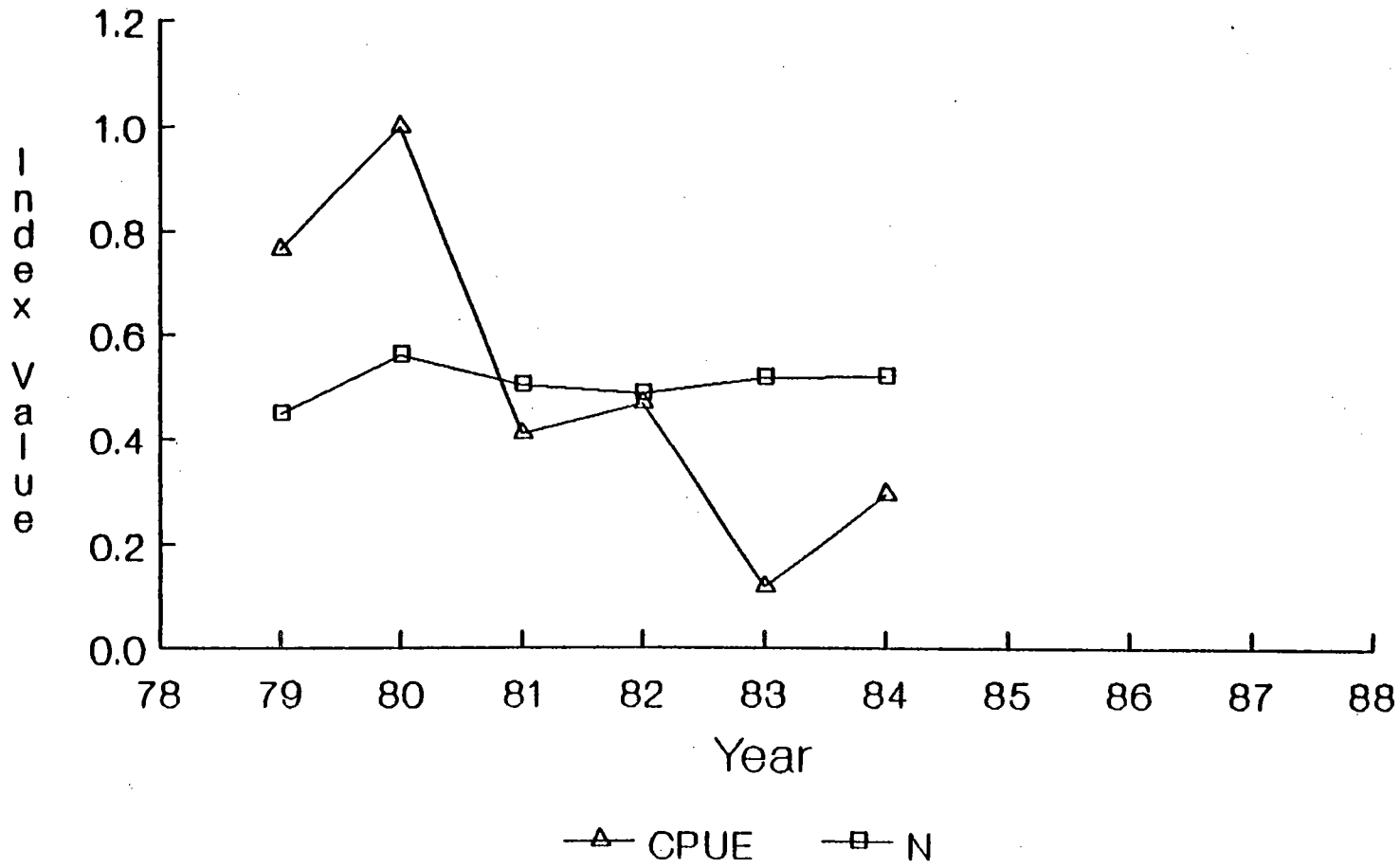
King Mackerel, Atlantic Stock
M=0.15



CPUE set 21

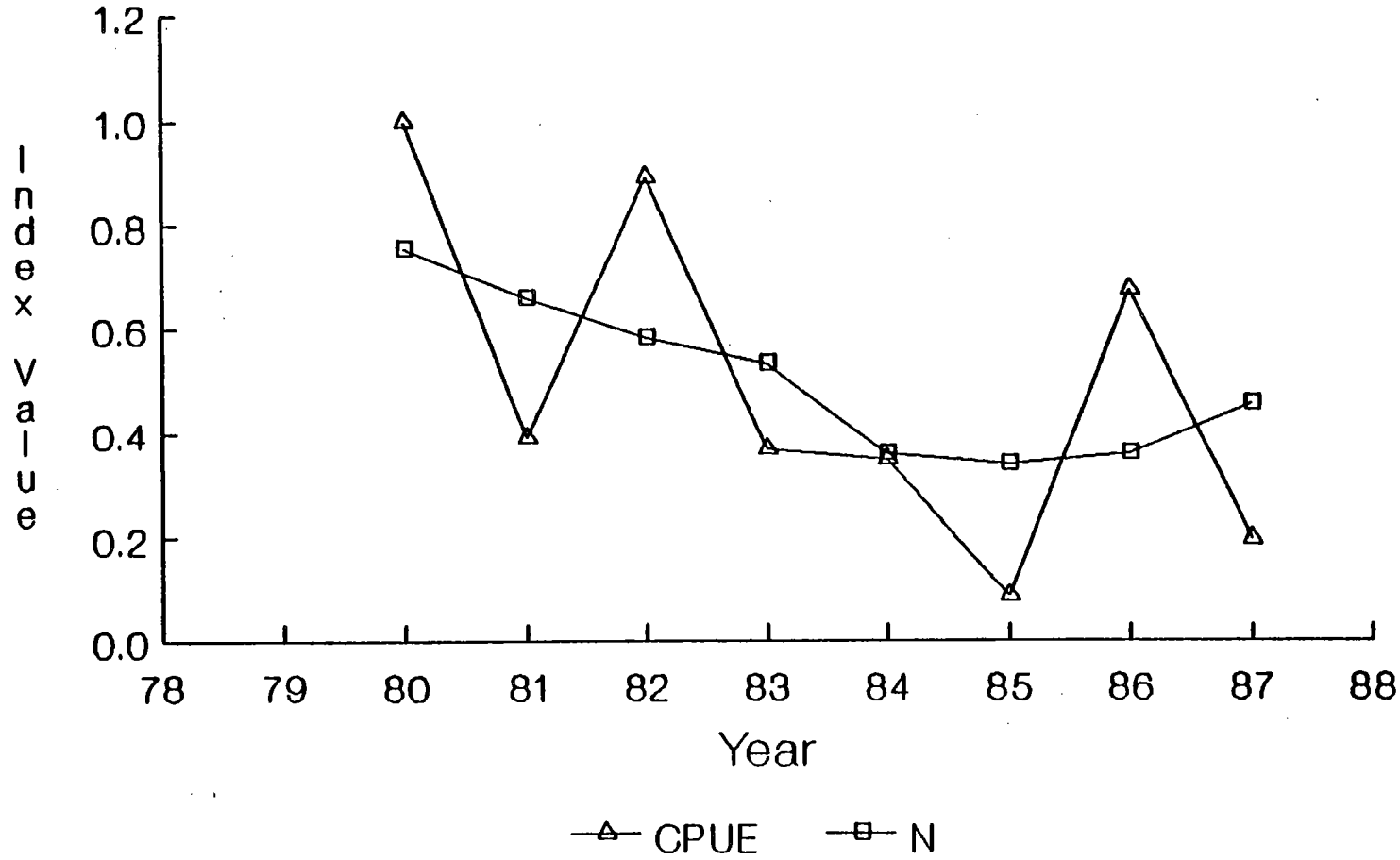
ATLANTIC HEADBOAT (SOURCE: Powers et al., 1988)

King Mackerel, Atlantic Stock
M=0.15



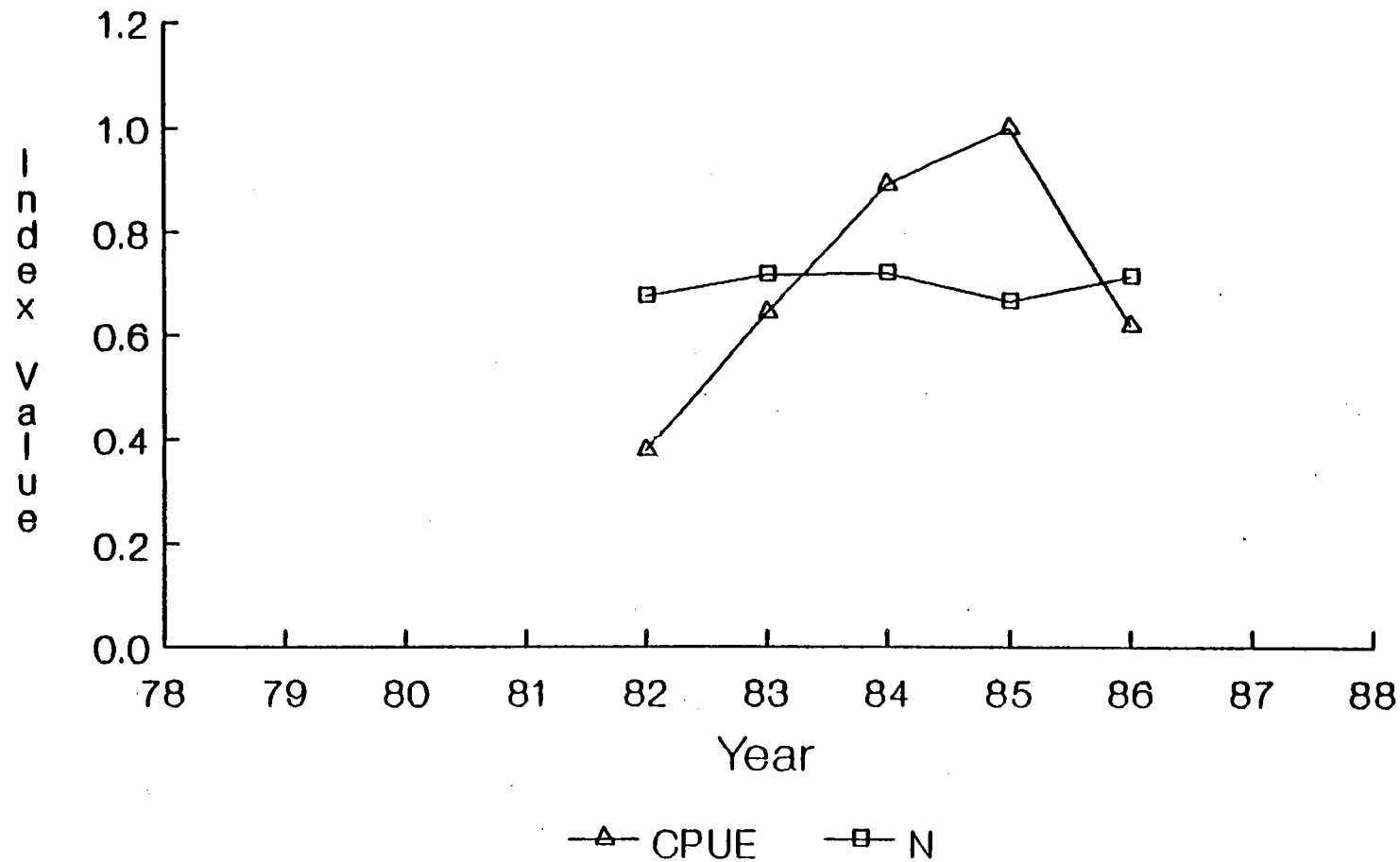
CPUE set 22 · CHARTERBOAT LOGBOOK DATA (SOURCE: Powers et al., 1988)

King Mackerel, Atlantic Stock
M=0.15



CPUE set 24 FLORIDA EAST COAST PRIVATE VESSELS (SOURCE: Powers et al., 1988)

King Mackerel, Atlantic Stock
M=0.15



CPUE set 23 PANAMA CITY LOGBOOK DATA FOR VESSELS FROM GA - NC (SOURCE: Powers et al., 1988)

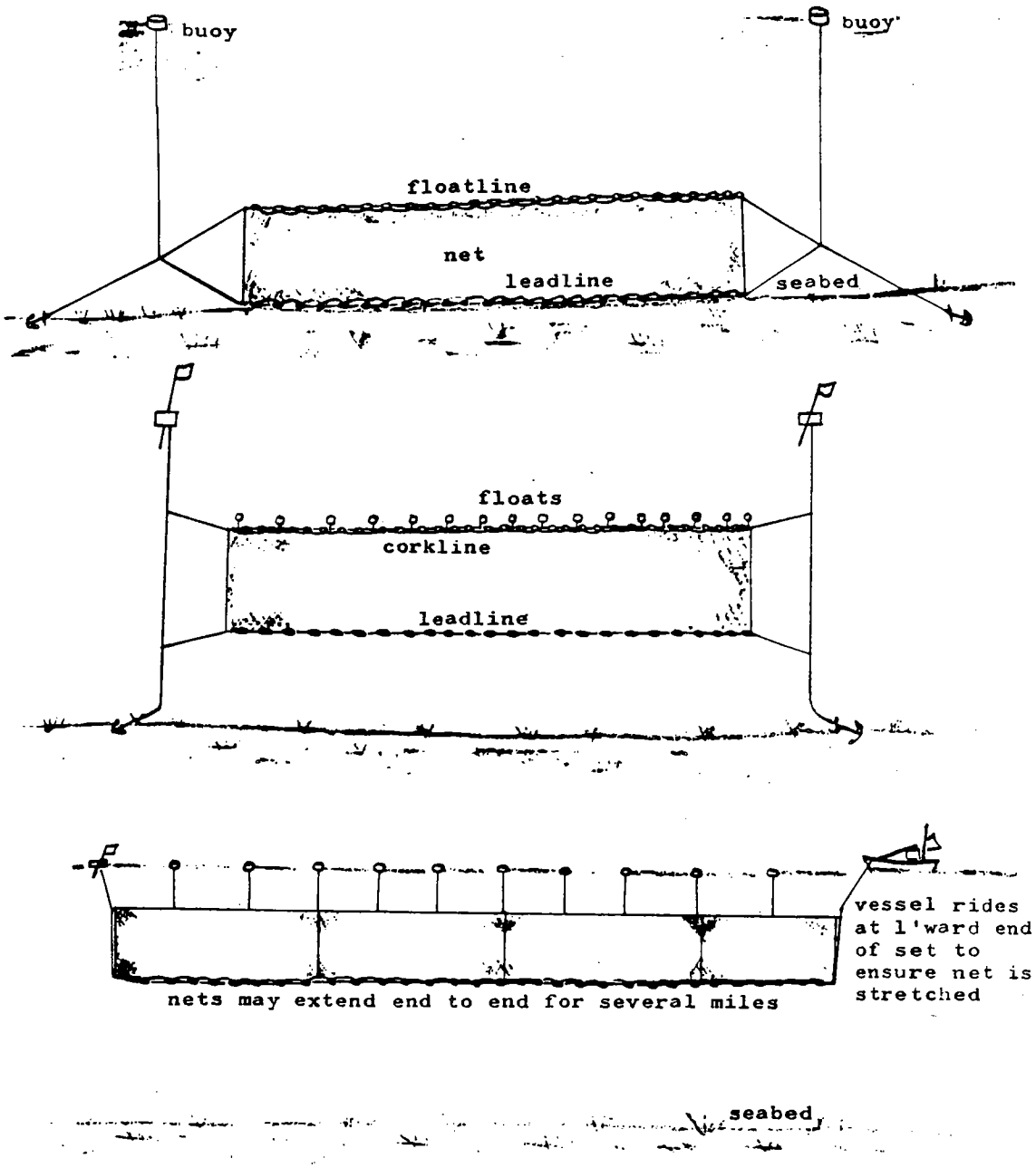


Fig. 85. Various methods of setting gillnets.
Top: bottom gillnet.
Middle: mid-water gillnet.
Bottom: drift net; surface gillnet.

SOURCE: Commercial Fishing Methods - an intorduction to vessels and gears by John C. Sainsbury. Fishing News (Books) Ltd., 23 Rosemount Avenue, West Byfleet, Surrey. First printed in 1971. Second printing in 1975.

APPENDIX B

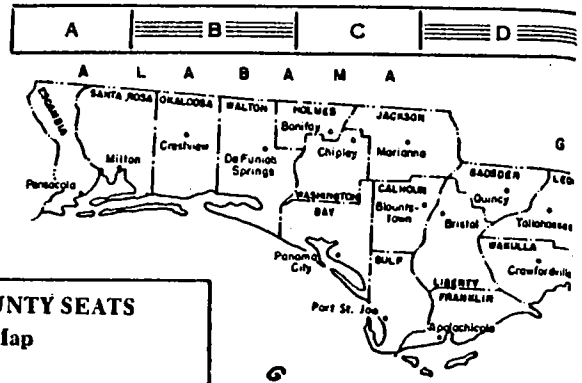
GENERAL FORMULA FOR THE COASTAL MIGRATORY PELAGIC PERMITS IS AABBD-XXXX-YY WHERE:

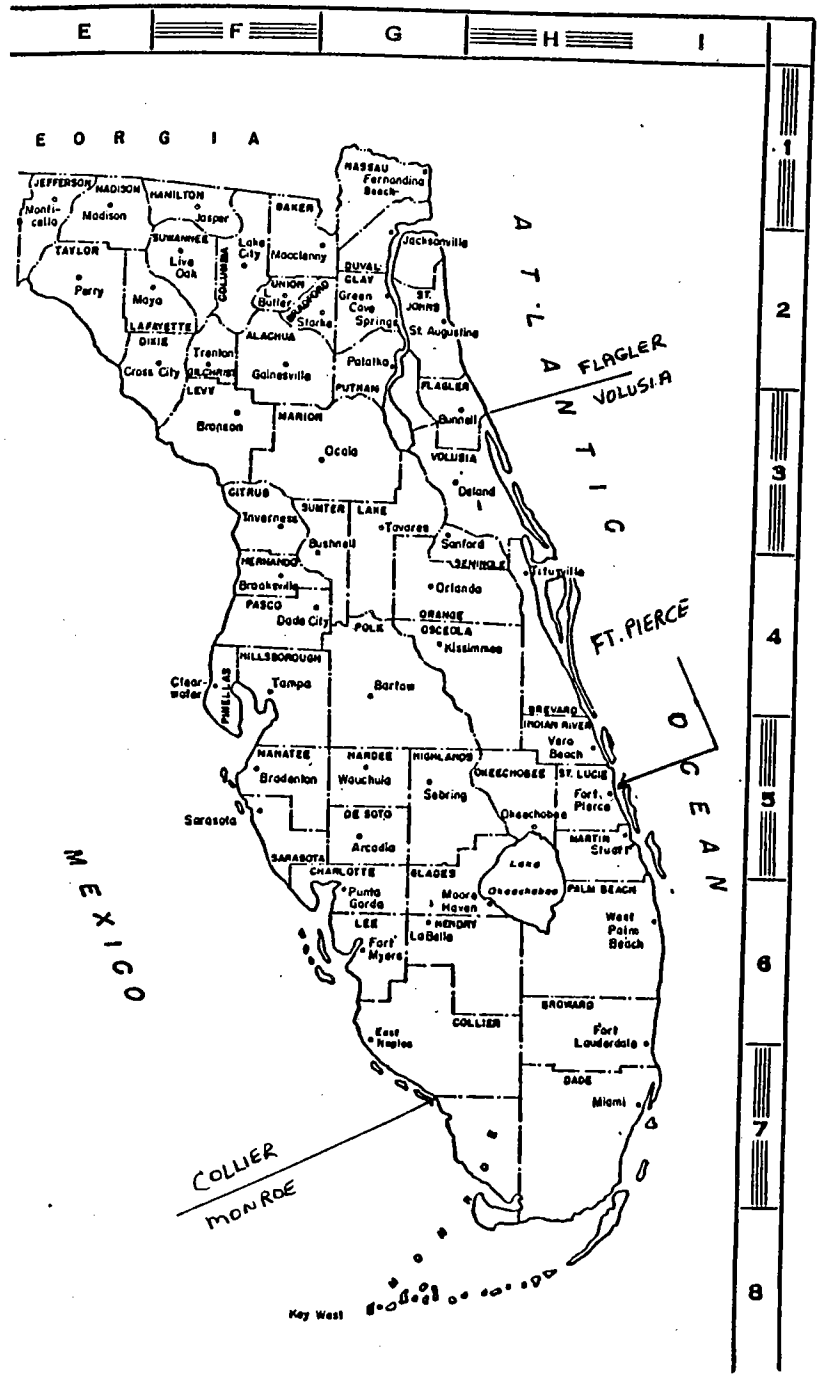
AA = KA	Atlantic migratory group of king mackerel.
AA = KG	Gulf of Mexico migratory group of king mackerel.
AA = KB	Atlantic and Gulf of Mexico migratory groups of king mackerel.
AA = KN	Neither migratory group of king mackerel.
BB = SA	Atlantic migratory groups of Spanish mackerel.
BB = SG	Gulf of Mexico migratory groups of Spanish mackerel.
BB = SB	Atlantic and Gulf of Mexico migratory groups of Spanish mackerel.
BB = SN	Neither migratory group of Spanish mackerel.
D = N	Non charter.
D = C	Coastal migratory pelagic charter.
XXXX =	4 digit permit number.
YY =	2 digits of the permit year. All permits are issued for the period April 1 - March 31.

UP TO 64 DIFFERENT COMBINATIONS ARE POSSIBLE.

NUMCODE DESCRIPTIONS

NUMCODE	DESCRIPTION
AM	ATLANTIC MACKEREL; KING (OBSOLETE)
GM	GULF MACKEREL; KING (OBSOLETE)
KASAC	KING ATLANTIC; SPANISH ATLANTIC; CHARTER
KASAN	" " ; " "; NO CHARTER
KASNN	" "; SPANISH NO; NO CHARTER
KBSAN	KING, BOTH ATL. & GULF; SPAN. ATL.; NO CHARTER
KBSBC	KING, BOTH ATL. & GULF; SPAN., BOTH ATL. & GULF; CHARTER
KBSBN	KING, BOTH ATL. & GULF; SPAN., BOTH ATL. & GULF; NO CHARTER
KBSNN	KING, BOTH ATL. & GULF; SPAN. NO; NO CHARTER
KGSGC	KING GULF; SPAN. GULF; CHARTER
KGSGN	KING GULF; SPAN. GULF; NO CHARTER
KNSBN	KING NO; SPAN., BOTH GULF & ATL.; NO CHARTER
KNSNC	KING NO; SPAN. NO; CHARTER





COUNTIES AND COUNTY SEATS with Key to Map

State Capital
Tallahassee—D-1

Alachua, *Gainesville*—F-2
Baker, *Macclenny*—F-2
Bay, *Panama City*—C-2
Bradford, *Starke*—G-2
Brevard, *Titusville*—H-4
Broward, *Fort Lauderdale*—I-7
Calhoun, *Blountstown*—C-1
Charlotte, *Punta Gorda*—G-6
Citrus, *Inverness*—F-3
Clay, *Green Cove Springs*—G-2
Collier, *East Naples*—G-7
Columbia, *Lake City*—F-2
Dade, *Miami*—I-7
DeSoto, *Arcadia*—G-5
Dixie, *Cross City*—F-2
Duval, *Jacksonville*—G-2
Escambia, *Pensacola*—A-1
Flagler, *Bunnell*—H-3
Franklin, *Apalachicola*—D-2
Gadsden, *Quincy*—D-1
Gilchrist, *Trenton*—F-2
Glades, *Moore Haven*—H-6
Gulf, *Port St. Joe*—C-2
Hamilton, *Jasper*—F-1
Hardee, *Wauchula*—G-5
Hendry, *LaBelle*—H-6
Hernando, *Brooksville*—F-4
Highlands, *Sebring*—H-5
Hillsborough, *Tampa*—F-4
Holmes, *Bonifay*—C-1
Indian River, *Vero Beach*—H-5
Jackson, *Marianna*—C-1
Jefferson, *Monticello*—E-1
Lafayette, *Mayo*—F-2
Lake, *Tavares*—G-3
Lee, *Fort Myers*—G-6
Leon, *Tallahassee* D-1
Levy, *Bronson*—F-3
Liberty, *Bristol*—D-2
Madison, *Madison*—E-1
Manatee, *Bradenton*—F-5
Marion, *Ocala*—G-3
Martin, *Stuart*—I-5
Monroe, *Key West*—G-8
Nassau, *Fernandina Beach*—G-1
Okaloosa, *Crestview*—B-1
Okeechobee, *Okeechobee*—H-5
Orange, *Orlando*—G-4
Osceola, *Kissimmee*—H-4
Palm Beach, *West Palm Beach*—I-6
Pasco, *Dade City*—G-4
Pinellas, *Clearwater*—F-4
Polk, *Bartow*—G-4
Putnam, *Palatka*—G-2
St. Johns, *St. Augustine*—G-2
St. Lucie, *Fort Pierce*—I-5
Santa Rosa, *Milton*—A-1
Sarasota, *Sarasota*—F-5
Seminole, *Sanford*—H-4
Sumter, *Bushnell*—G-4
Suwannee, *Live Oak*—F-2
Taylor, *Perry*—E-2
Union, *Lake Butler*—F-2
Volusia, *DeLand* H-3
Wakulla, *Crawfordville*—D-2
Walton, *DeFuniak Springs*—B-1
Washington, *Chipley*—C-1

Florida Facts

Total area—58,560 square miles
Total land area—54,136 square miles
Total water area—4,424 square miles
Population 1950 federal census—2,771,305
Rank among states in 1950 population—20th
Population 1960 federal census—4,951,560
Rank among states in 1960 population—10th
Increase of 1960 population over 1950—78.7 per cent
Population 1970 federal census—6,791,418
Increase of 1970 population over 1960—37.1 per cent
Rank among states in 1970 population—9th
Estimated population July 1, 1978 8,966,395
Increase of 1978 population over 1970—32.03 per cent
Rank among states in 1978 population—8th
Length north and south (St. Marys river to Key West)—447 miles
Width east and west (Atlantic ocean to Perdido river)—361 miles
Highest known natural point—hill of 345 feet near Lakewood in northeast Walton county
Geographic center—12 miles west of north of Brooksville in Citrus county
Population center—Polk county, near Bartow, in 1970. 27°51'49" N, 81°43'32" W.
Number of counties—67
Number of communities in 1970—387 incorporated as cities, towns, or villages; 168 unincorporated places of 1,000 inhabitants or more
First colonization—Pensacola Bay, by Spaniards, 1559. Settlement abandoned after two years
Oldest permanent settlement—St. Augustine, by Spaniards in 1565 (also oldest in United States)
Acquired by United States—from Spain, by treaty in 1821
Admitted to Union as State—March 3, 1845
Rank among states of admission—27th
State Motto—In God We Trust
State Nickname—The Sunshine State
State bird—Mockingbird
State Flower—Orange Blossom
State song—Old Folks at Home
State tree—Sabal Palm
State day—April 2
State beverage—orange juice

TABLE 1. NUMBER OF VESSELS WITH CHARTER PERMITS FROM APRIL 1, 1988 TO JULY 22, 1988 BY STATE OF HOME PORT

STATE	NUMBER
AL	48
FL	472
GA	5
LA	27
MO	1
MS	33
NC	187
NJ	1
PA	2
SC	64
TX	54
VA	2
TOTAL	896

TABLE 2. TOTAL COMMERCIAL PERMITS ISSUED BY STATE OF HOMEPORT, BY GEAR TYPE FROM APRIL 1, 1988 TO JULY 22, 1988 FOR THE ATLANTIC MIGRATORY GROUP OF SPANISH MACKEREL

STATES	GEAR TYPE								
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
AL	1				1				
CT	1							1	
FL	590		1	3	1	41	93	449	2
GA	4							4	
LA	3							3	
MS	3				3				
NC	322			2		1	73	241	5
NJ	4						1	3	
PA	1							1	
SC	34					1	1	31	1
TX	2						1	1	
VA	10						1	9	
	975	0	1	5	5	44	166	743	8

BLANK SPACE INDICATES GEAR TYPE NOT USED.

TABLE 3. TOTAL COMMERCIAL PERMITS ISSUED BY STATE OF HOMEPORT, BY GEAR TYPE FROM APRIL 1, 1988 TO JULY 22, 1988 FOR THE GULF MIGRATORY GROUP OF SPANISH MACKEREL

STATES	GEAR TYPE								
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
AL	2				1			1	
FL	538		1	3		38	91	403	2
GA	2							2	
LA	38							37	1
MS	11				3	6	1	1	
NC	28			2			8	18	
NJ	3						1	2	
SC	6						1	5	
TX	5							5	
VA	1						1		
	634		1	5	4	44	103	474	3

BLANK SPACE INDICATES GEAR TYPE NOT USED.

TABLE 4. TOTAL COMMERCIAL PERMITS ISSUED BY STATE OF HOMEPORT, BY GEAR TYPE FROM APRIL 1, 1988 TO JULY 22, 1988 FOR THE ATLANTIC MIGRATORY GROUP OF KING MACKEREL

STATES	GEAR TYPE								
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
AL	2				1			1	
CT	1							1	
DE	1							1	
FL	794		1	3	1	42	98	647	2
GA	5							5	
LA	4							4	
MS	4				3		1		
NC	382			2		2	81	291	6
NJ	5						1	4	
PA	1							1	
SC	42					1	2	36	3
TX	2					1		1	
VA	12						1	11	
	1255	0	1	5	5	46	184	1003	11

BLANK SPACE INDICATES GEAR TYPE NOT USED.

TABLE 5. TOTAL COMMERCIAL PERMITS ISSUED BY STATE OF HOMEPORT, BY GEAR TYPE FROM APRIL 1, 1988 TO JULY 22, 1988 FOR THE GULF MIGRATORY GROUP OF KING MACKEREL

STATES	GEAR TYPE								
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
AL	3				1			2	
DE	1							1	
FL	708		1	3	1	39	97	567	
GA	2							2	
LA	57							56	1
MS	11				3	6	1	1	
NC	29			2			8	19	
NJ	3						1	2	
SC	6							6	
TX	10							10	
VA	1					1	1		
	831	0	1	5	5	45	108	666	1

BLANK SPACE INDICATES GEAR TYPE NOT USED.

TABLE 6 CHARTER VESSEL PERMIT HOLDERS BY COUNTY OF HOME PORT FOR FLORIDA FROM APRIL 1, 1988, TO JULY 22, 1988

	COUNTY	NUMBER VESSELS
GULF OF MEXICO		
	Santa Rosa	27
	Okaloosa	54
	Bay	57
	Dixie	1
	Citrus	3
	Pasco	1
	Pinellas	36
	Hillsborough	6
	Manatee	2
	Sarasota	11
	Charlotte	4
	Lee	7
	Collier	14
	Monroe	82
	Total	305
ATLANTIC		
	Duval	27
	St. Johns	16
	Volusia	28
	Brevard	7
	Indian River	2
	St. Lucie	5
	Martin	7
	Palm Beach	34
	Broward	14
	Dade	27
	Total	167
	Grand Total	472

TABLE 7. TOTAL COMMERCIAL PERMITS ISSUED BY COUNTY OF HOMEPORT FOR FLORIDA, BY GEAR TYPE FROM APRIL 1, 1988 TO JULY 22, 1988 FOR THE ATLANTIC MIGRATORY GROUP OF SPANISH MACKEREL

COUNTY	GEAR TYPE								
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
GULF OF MEXICO									
GULF	1					1			
FRANKLIN	1					1			
CITRUS	2							2	
HERNANDO	1							1	
PINELLAS	5						1	4	
CHARLOTT	1						1		
LEE	2					1		1	
COLLIER	6						1	5	
MONROE	132			1		5	25	99	1
TOTAL	151	0	0	1	0	8	29	112	1
ATLANTIC									
NASSAU	1							1	
DUVAL	19							19	
ST. JOHNS	1							1	
VOLUSIA	24			1		1		22	
BREVARD	17						4	13	
INDIAN RIVER	47					2	2	43	
ST. LUCIE	66					11	18	37	
MARTIN	35		1			13	12	9	
PALM BEACH	129			1	1		25	101	1
OKEECHOBEE	1							1	
BROWARD	11							11	
DADE	88					6	3	79	
TOTAL	439	0	1	2	1	33	64	337	1
GRAND TOTAL	590	0	1	3	1	41	93	449	2

BLANK SPACE INDICATES GEAR TYPE NOT USED.

TABLE 8. TOTAL COMMERCIAL PERMITS ISSUED BY COUNTY OF HOMEPORT FOR FLORIDA, BY GEAR TYPE FROM APRIL 1, 1988 TO JULY 22, 1988 FOR THE GULF OF MEXICO MIGRATORY GROUP OF SPANISH MACKEREL

COUNTY	GEAR TYPE								
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
GULF OF MEXICO									
SANTA ROSA	1							1	
OKALOOSE	2							2	
BAY	7							7	
GULF	1					1			
FRANKLIN	1					1			
CITRUS	2							2	
HERNANDO	1							1	
PINELLAS	12						1	11	
MANTEE	1					1			
SARASOTA	2							2	
CHARLOTT	1						1		
LEE	4					2	1	1	
COLLIER	7					1	1	5	
MONROE	138			1		5	26	106	
TOTAL	180	0	0	1	0	11	30	138	0
ATLANTIC									
NASSAU	1							1	
DUVAL	7							7	
VOLUSIA	18			1		2		15	
BREVARD	14						4	10	
INDIAN RIVER	44					2	2	40	
ST. LUCIE	59					10	17	32	
OKEECHOBEE	1							1	
MARTIN	28		1			11	11	5	
PALM BEACH	113			1			25	87	
BROWARD	10							10	
DADE	63					2	3	58	
TOTAL	358	0	1	2	0	27	62	266	0
GRAND TOTAL	538	0	1	3	0	38	92	404	0

BLANK SPACE INDICATES GEAR TYPE NOT USED.

TABLE 9. TOTAL COMMERCIAL PERMITS ISSUED BY COUNTY OF HOMEPORT FOR FLORIDA, BY GEAR TYPE FROM APRIL 1, 1988 TO JULY 22, 1988 FOR THE GULF OF MEXICO MIGRATORY GROUP OF KING MACKEREL

COUNTY	GEAR TYPE								
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
GULF OF MEXICO									
SANTA ROSA	1							1	
OKALOOSE	3							3	
BAY	3							13	
GULF	1					1			
FRANKLIN	1					1			
CITRUS	2							2	
HERNANDO	1							1	
PINELLAS	12						1	11	
MANTEE	1					1			
SARASOTA	3							3	
CHARLOTT	1						1		
LEE	5					2	1	2	
COLLIER	11					2	1	8	
MONROE	173			1		5	28	139	
TOTAL	228	0	0	1	0	12	32	183	0
ATLANTIC									
NASSAU	1							1	
DUVAL	10							10	
OKEECHOBEE	1							1	
VOLUSIA	32			1		2		29	
BREVARD	30						4	26	
INDIAN RIVER	54					2	3	49	
ST. LUCIE	72					10	19	43	
MARTIN	34		1			11	11	11	
PALM BEACH	161			1	1		25	134	
BROWARD	16							16	
DADE	69					2	3	64	
TOTAL	480	0	1	2	1	27	65	384	0
GRAND TOTAL	708	0	1	3	1	39	97	567	0

BLANK SPACE INDICATES GEAR TYPE NOT USED.

TABLE 10. TOTAL COMMERCIAL PERMITS ISSUED BY COUNTY OF HOMEPORT FOR FLORIDA, BY GEAR TYPE FROM APRIL 1, 1988 TO JULY 22, 1988 FOR THE ATLANTIC MIGRATORY GROUP OF KING MACKEREL

COUNTY	GEAR TYPE								
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
GULF OF MEXICO									
BAY	4							4	
GULF	1					1			
FRANKLIN	1					1			
CITRUS	2							2	
HERNANDO	1							1	
PINELLAS	6						1	5	
CHARLOTT	1						1		
LEE	4					2		2	
COLLIER	9						1	8	
MONROE	172			1		5	27	138	1
TOTAL	201	0	0	1	0	9	30	160	1
ATLANTIC									
NASSAU	2							2	
DUVAL	34							34	
ST. JOHNS	1							1	
VOLUSIA	39			1		1		37	
BREVARD	34						4	30	
INDIAN RIVER	56					2	3	51	
ST. LUCIE	80					11	20	49	
MARTIN	41		1			13	13	14	
PALM BEACH	194			1	1		25	166	1
BROWARD	18							18	
DADE	94					6	3	85	
TOTAL	593	0	1	2	1	33	68	487	1
GRAND TOTAL	794	0	1	3	1	42	98	647	2

BLANK SPACE INDICATES GEAR TYPE NOT USED.

TABLE 11. NUMBER OF COASTAL MIGRATORY PELAGIC PERMITS BY NUMCODE FROM APRIL 1, 1988 TO JULY 22, 1988

Numcode	Consolidated number of Permits	Individual Fisheries	Total Permits
KASAC	110	3	330
KASAN	300	2	600
KASGN	2	2	4
KASNC	8	2	16
KASNN	112	1	112
KBSAC	1	4	4
KBSAN	13	3	39
KBSBC	86	5	430
KBSBN	462	4	1848
KBSGN	5	3	15
KBSNC	11	3	33
KBSNN	145	2	290
KGSBN	2	3	6
KGSGC	24	3	72
KGSGN	52	2	104
KGSNC	4	2	8
KGSNN	26	1	26
KNSBN	1	2	2
KNSNC	652	1	652
Total Vessels	2016	---	---
Ave # Permits Per Vessel		2.28	---
Total Permits			4591

TABLE 12. NUMBER OF PERMITS ISSUED BY COASTAL MIGRATORY PELAGIC FMP FOR PERMIT YEAR 1988

Numcode	Consolidated number of Permits	Individual Fisheries	Total Permits
AM	794	1	794
GM	519	1	519
KASAC	60	3	180
KASAN	74	2	148
KASNN	4	1	148
KBSAN	6	3	18
KBSBC	36	5	180
KBSBN	217	4	868
KBSNN	2	2	4
KGSGC	8	3	24
KGSGN	32	2	64
KNSBN	1	2	2
KNSGN	1	1	1
KNSNC	566	1	566
Total Vessels	2320	--	--
Average # Permits Per Vessel		1.45	--
Total Permits			3372

TABLE 13. TOTAL CHARTER PERMITS BY STATE OF HOMEPORT ISSUED AS OF MARCH 31, 1988

GEAR TYPE

STATE	NUMBER
AL	29
DE	1
FL	337
GA	4
LA	8
MS	3
NC	137
NJ	2
PA	4
SC	59
TX	49
TOTAL	670

TABLE 14. TOTAL COMMERCIAL PERMITS BY STATE OF HOMEPORT ISSUED AS OF MARCH 31, 1988 FOR THE ATLANTIC MIGRATORY GROUP OF SPANISH MACKEREL

STATES		GEAR TYPE							
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
AL	1			1					
FL	252		7	4	1	42	34	164	
LA	1							1	
MI	1							1	
MS	3			3					
NC	125					1	17	107	
NJ	2							2	
PA	1							1	
SC	7						1	6	
VA	1	—	—	—	—	—	1	—	—
	394	0	7	8	1	43	53	282	0

BLANK SPACE INDICATES GEAR TYPE NOT USED.

TABLE 15. TOTAL COMMERCIAL PERMITS BY STATE OF HOMEPORT ISSUED AS OF MARCH 31, 1988 FOR THE GULF MIGRATORY GROUP OF KING MACKEREL

STATES	GEAR TYPE								
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
AL	4			1				3	
FL	702	1	7	6	1	56	55	576	
LA	55							55	
MI	1							1	
MS	7	1		3				3	
NC	28						7	21	
NJ	5							5	
PA	1							1	
SC	6							6	
TX	9							9	
VA	1						1		
	819	2	7	10	1	56	63	680	0

BLANK SPACE INDICATES GEAR TYPE NOT USED.

TABLE 16. TOTAL COMMERCIAL PERMITS BY STATE OF HOMEPORT ISSUED AS OF MARCH 31, 1988 FOR THE GULF MIGRATORY GROUP OF SPANISH MACKEREL

STATES	GEAR TYPE								
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
AL	1			1					
FL	253		7	4	1	39	34	168	
LA	11							11	
MI	1							1	
MS	3			3					
NC	15						3	12	
NJ	2							2	
PA	1							1	
TX	7						1	6	
VA	1						1		
	295	0	7	8	1	39	39	201	0

BLANK SPACE INDICATES GEAR TYPE NOT USED.

TABLE 17. TOTAL COMMERCIAL PERMITS BY STATE OF HOMEPORT ISSUED AS OF MARCH 31, 1988 FOR THE ATLANTIC MIGRATORY GROUP OF KING MACKEREL

STATES	GEAR TYPE								
	TOTAL	PURSE SEINE	P.S./NETS	P.S./NETS/H&L	P.S./H&L	NETS	NETS/H&L	H&L	OTHER
AL	1			1					
DE	1							1	
FL	785	1	7	6	1	55	58	657	
GA	2							2	
LA	18							18	
MI	1							1	
MS	6	1		3				2	
NC	326					2	74	249	1
NJ	6							6	
PA	1							1	
SC	40						1	39	
VA	6						3	3	
	1193	2	7	10	1	57	136	979	1

BLANK SPACE INDICATES GEAR TYPE NOT USED.

Billing Code: 3510-22

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration 50 CFR Part 642

[Docket No.]

Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic

AGENCY: National Marine Fisheries Service (NMFS), NOAA, Commerce.

ACTION: Proposed rule.

SUMMARY: NOAA issues this proposed rule to implement Amendment 3 to the Fishery Management Plan for the Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic (FMP) and to remove inconsistencies that have developed in implementing Amendment 2. This proposed rule would (1) prohibit the use of purse seines for the Atlantic migratory group of king mackerel, a prohibition already in effect for the Gulf of Mexico migratory group of king mackerel and Atlantic and Gulf migratory groups of Spanish mackerel, (2) prohibit the use of drift gill nets for all coastal migratory pelagic species, (3) prohibit the use of run-around gill nets for the Atlantic migratory group of king mackerel, (4) state more clearly the scope of each management measure, (5) clearly differentiate between commercial and recreational fisheries, (6) make minor changes that are necessary to reflect the previous implementation of Amendment 2 to the FMP, and (7) clarify or correct minor ambiguities, inconsistencies, and errors in the regulations. The intended effects of this proposed rule are to prevent the adverse impacts on the users of traditional hook and line gear of early closures of the commercial fisheries, such closures being the

likely result of allowing the use of purse seines, run-around gill nets, and drift gill nets in the commercial fisheries; and to clarify the regulations.

DATE: Written comments must be received on or before [Insert date 30 days after date of publication in the FEDERAL REGISTER].

ADDRESS: Comments may be sent to, and copies of the draft Environmental Assessment/Regulatory Impact Review may be obtained from, Mark F. Godcharles, Southeast Region, National Marine Fisheries Service, 9450 Koger Boulevard, St. Petersburg, FL 33702.

FOR FURTHER INFORMATION CONTACT: Mark F. Godcharles, 813-893-3722.

SUPPLEMENTARY INFORMATION: The fishery for coastal migratory pelagic fish (king mackerel, Spanish mackerel, cero, cobia, little tunny, dolphin, and, in the Gulf of Mexico only, bluefish) is managed under the FMP, prepared by the Gulf of Mexico and South Atlantic Fishery Management Councils (Councils), and its implementing regulations at 50 CFR Part 642, under the authority of the Magnuson Fishery Conservation and Management Act (Magnuson Act).

Recent reduction of the total allowable catch (TAC) of Atlantic migratory group king mackerel has increased the risk of early closure of the commercial fishery. Early closures cause adverse economic impacts to traditional hook and line commercial fishermen. Amendment 3 proposes to ameliorate this potential problem by prohibiting the use of newly introduced net gears that are highly efficient and capable of capturing a substantial portion of the reduced commercial allocation quickly. Prohibition of purse seines, run-around gill nets, and drift gill nets from the commercial fishery for Atlantic migratory group king mackerel would reduce the potential for early closure and, thus, would protect users of

traditional hook and line gear. Further, to reduce bycatch and waste, Amendment 3 would prohibit the use of drift gill nets in all fisheries for coastal migratory pelagic species.

Draft Amendment 3 was prepared and distributed to interested parties in September and October, 1988. Public hearings were held in 10 cities from Key West, FL to Manteo, NC in October 1988. After considering comments received at the public hearings and Council meetings, written public comments, and comments from their Scientific and Statistical Committees and Advisory Panels, the Councils made their final selection of preferred options at the November/December 1988 joint meeting. The issues, their impacts, and the rationale for the Councils' preferred options are summarized below. A more complete analysis appears in Amendment 3, the availability of which was published in the FEDERAL REGISTER (53 FR ;).

Background

According to the 1988 mackerel stock assessment,the status of Atlantic migratory group king mackerel changed is as follows: (1) spawning stock biomass remained relatively constant through 1984, after which a decrease may have occurred; (2) fishing mortality rates appear to be at or slightly above rates of full exploitation; (3) catches were high and variable from 1980 to 1985, but catches from 1986 and 1987 declined; and (4) four of five data sets of catch per unit effort indicate declines in abundance. These results led the Councils to conclude that the Atlantic migratory group of king mackerel is overfished.

Based on the 1988 assessment, the Councils reduced TAC from 9.68 million pounds to 7.0 million pounds (28 percent reduction). This

reduction was based on the Councils' concern for the apparent declining stock and their decision to be conservative rather than risk continued overfishing. The resulting commercial allocation was reduced from 3.59 to 2.6 million pounds. This allocation was exceeded in November 1988 because of the catches of purse seines, drift gill nets, and run-around gill nets. The quota having been exceeded would have resulted in the early closure of the commercial fishery which negatively impacts traditional hook and line commercial participants However, the fishery was kept open by court order until February, 1989. If these net gears continue to be allowed in the Atlantic migratory group king mackerel fishery, early closures and resulting negative impacts are expected to occur each year.

The Councils are also concerned about waste and bycatch in the recently developed drift gill net fishery. Allowing the use of drift gill net gear in the coastal migratory pelagics fishery will result in continued waste and bycatch in the fishery.

Issue 1. Purse Seines in the Atlantic Migratory Group King Mackerel Fishery.

Current regulations prohibit the use of purse seines for Gulf group king mackerel and Atlantic and Gulf migratory groups of Spanish mackerel because they are overfished and the existing commercial allocations are fully utilized by historical commercial gear types. For these species/migratory groups, the users of historical gear have had seasonal closures. Commercial allocations for the Atlantic migratory group of king mackerel had not been filled in the past, though the harvest was approaching TAC. During the 1988/89 fishing season, however, the commercial allocation was

reached and the fishery was to be closed on November 23, 1988 but remained open until February 23, 1989 through court order. In addition, the Councils are concerned there may be a shift of effort onto the Atlantic migratory group as fishermen are restricted from fishing other groups of mackerel.

The Councils considered three options: Option 1 (status quo) — continue a separate allowance (currently 400,000 pounds) for purse seines on the Atlantic migratory group of king mackerel; Option 2 — not specify a separate allowance for purse seines but allow them to continue to fish under the commercial allocation; and Option 3 — prohibit the use of purse seines on the Atlantic migratory group of king mackerel.

The Councils selected Option 3 because:

1. The Atlantic migratory group of king mackerel is currently overfished.
2. Allowing a new user group into an overfished fishery when existing, historic users are forced to reduce catches is imprudent and unfair. When stocks recover and traditional commercial fishermen do not take the allocation, this issue will be reconsidered.
3. The use of purse seines in the fishery for Atlantic migratory group king mackerel is of recent origin and limited in number. There is no record of a purse seine fishery on Atlantic migratory group king mackerel before April 1988 in the Ft. Pierce, FL area. Catches at that time may have been on Gulf migratory group king mackerel that had remained in the area due to unusually cool weather. Purse seine and run-around gill nets together caught approximately 340,000 pounds of king mackerel.

4. Allocating the resource to the users of traditional fishing gears benefits the greatest number of fishermen.

5. Prohibiting the use of purse seines for mackerel is consistent with the management procedures in all adjacent State waters.

6. The marginal value of a fish allocated to the traditional commercial fishery is higher than that of a fish allocated to the purse seine fishery.

The number of purse seine vessels that participated in the Atlantic migratory group king mackerel fishery for the first time in April 1988 was very small. The number of vessels was so small that purse seine catches must be combined with run-around gill net catches for presentation to avoid confidentiality problems. Using the combined purse seine and run-around gill net catches, the prohibition would impact the affected fishermen by preventing the harvest of approximately 340,000 pounds of king mackerel.

Issue 2. Drift Gillnets in the Coastal Migratory Pelagics Fishery.

Currently, no federal regulations specifically address this newly developed fishery. Drift entanglement nets were first tried in 1980, initially fishing the Ft. Pierce, FL area, with little success due to problems with sharks damaging catch and gear.

By 1987 and 1988, 13 boats were using drift gill nets with catches in 1987 of 800,000 pounds of Atlantic migratory group king mackerel. Preliminary catch figures for 1988 are 808,000 pounds with final figures expected to be higher. Nets are made of #9 nylon webbing, have 5 inch stretch mesh, are about 50 feet deep, and range from 1,200 to 5,000 yards long with most full-time boats using at least 3,000 years. During an observer program, no marine mammals or birds were observed tangled in the nets on any trip. Porpoises and

sea turtles were observed in the vicinity of the nets on haulback on numerous trips. One leatherback turtle was observed in the net at haulback by a fishermen; however, by the time the observer reached the stern, the turtle freed itself and swam away. Reports from the observer study indicate that little tunny made up 23 percent of the total catch and 67 percent of the discarded bycatch, by number; barracuda comprised 4 percent of the total catch and 11 percent of the discarded bycatch; and other species comprised less than 1.2 percent and 3.6 percent respectively. There were 22 sailfish caught on observed trips for an average of 0.58 per trip. If this is expanded for the total number of trips in 1987, the total sailfish bycatch would be 419 per year. Approximately 14 percent of the total bycatch is landed and sold.

The Councils considered eight options for regulating drift gill nets ranging from no action to a total prohibition. The Councils chose to prohibit the use of drift gillnet gear in directed fisheries for all coastal migratory pelagic resources in the South Atlantic and Gulf of Mexico and to prohibit the retention of these species in other drift gill net fisheries. The Councils are concerned that they cannot adequately protect overfished king and Spanish mackerel resources if they are allowed to be taken as a bycatch in drift gill net fisheries for other coastal pelagic species. Currently, there is no directed drift gill net fishing for cobia, cero, little tunny, dolphin, or bluefish. Because drift gill nets are an indiscriminate gear, they cannot exclusively fish for any of these coastal pelagic species without taking a bycatch of king and Spanish mackerel. The shark drift net fishery is the only fishery, of which the Councils are aware, that will be impacted by

the prohibition on retention of all coastal migratory pelagic resources. The Councils do not have sufficient information about this fishery to evaluate the level of impact.

Impacts on Commercial Hook and Line Fisheries

Based on drift gill net catches in 1987, a prohibition on use of drift gill nets would potentially make an additional 765,226 pounds of king mackerel available for harvest by the traditional commercial hook and line fisheries. How this additional catch would be distributed geographically is unknown, but in all probability the catches in the area of Ft. Pierce and southward would increase due to increased local availability. Also, highly valued recreational species taken incidentally to the mackerel drift gill net fishery would become available to the recreational fishery. The addition of 765,226 pounds of king mackerel if caught entirely by the commercial hook and line fishery, would produce revenues of $1,078,969.

Impacts on the Drift Gill Net Fishery

Data for 1987 and preliminary data for 1988 indicate that 13 vessels and between 39 and 52 fishermen were engaged in the drift gill net fishery for Atlantic migratory group king mackerel. These vessels and fishermen also fish (1) in the run-around gill net fishery for Gulf migratory group king mackerel and Gulf and Atlantic migratory group Spanish mackerel and (2) the shark drift gill net fishery. Periodically they also fish smaller gill net boats (outboards) in the Indian River and outside the inlets. As of September 1987 there was a total of approximately 38,000 yards (22 miles) of gill net gear in the fishery worth between $194,000 and $232,800 when new. Prohibiting this gear for coastal migratory pelagic species would result in foregone catches of king mackerel of

765,226 pounds, based on drift gill net catches in 1987. The revenue produced by this catch is estimated at $925,923. The range of losses to the individual drift gill net vessels would be from 3,968 to 122,987 pounds with revenues from $4,801 to $148,814. In addition, loss from other species that are landed and sold would total approximately 65,755 pounds with an estimated revenue of $65,755 for the fishery as a whole. Loss in value of gill nets is unknown because of uncertainties as to age and the amount that would not be convertible to other fisheries.

The Councils selected the option of total prohibition of drift gill nets because:

1. It most appropriately meets the objectives of the FMP, is least burdensome, and has the greatest likelihood or correcting the problem of early closure of the commercial fishery, which adversely affects traditional hook and line fishermen.
2. When the quantified and non-quantified benefits are combined, a net benefit to society results.
3. It is in agreement with Florida's regulations, thereby easing enforcement.

Issue 3. Run-around Gill Nets in the Atlantic Migratory Group King Mackerel Fishery.

The Councils considered two options: Option 1 (status quo) — continue to allow the use of run-around gill nets on Atlantic migratory group king mackerel and Option 2 — prohibit the use of run-around gill nets to take Atlantic migratory group king mackerel.

Run-around gill nets have only been used sporadically to harvest Atlantic migratory group king mackerel. The only recent catches were taken during April 1988. The Councils reviewed available

information and chose to prohibit run-around gillnets for taking Atlantic migratory group king mackerel because of the overfished status of this group and because allowing the use of run-around gillnets will likely result in early closure of the commercial fishery which would adversely impact traditional hook and line commercial participants. Further, run-around gill net gear is not considered a traditional gear in the Atlantic migratory group king mackerel fishery. This prohibition is not being applied to Atlantic or Gulf migratory group Spanish mackerel or Gulf migratory group king mackerel because run-around gill nets are considered traditional gear in those fisheries.

The number of run-around gill net vessels that participated in the Atlantic migratory group king mackerel fishery for the first recorded time in April 1988 was very small. The number of vessels was so small that run-around gill net catches must be combined with purse seine catches for presentation to avoid confidentiality problems. Using the combined run-around gill net and purse seine catches, the prohibition would impact the affected fishermen by preventing the harvest of approximately 340,000 pounds of king mackerel.

In this proposed rule, a drift gill net is defined by the length of its float line and, in the alternative, by how it is used. Length was chosen as a determinant because of its relative ease of discernment ashore. The length of 1,000 yards was selected because the vast majority of drift gill nets exceed that length. The use determinant will be employed only for gill nets that are 1,000 yards or less in length. Drift gill nets are not, per se, prohibited -- only their use to fish for coastal migratory pelagic fish or the

possession of such fish aboard a vessel with a drift gill net aboard.

In addition to the above issues, Amendment 3 also does the following:

1. Adds an objective to the FMP to minimize waste and bycatch in the fishery. Waste includes both discarded catch and economic waste due to product quality.
2. Adds to the FMP the most recent information available to the Councils concerning habitat.
3. Adds to the FMP an evaluation of the FMP's effects on vessel safety.

Additional Changes

In addition to the regulatory changes associated with Amendment 3, NOAA proposes changes necessary to fully reflect the previous implementation of Amendment 2 and to otherwise correct and clarify the regulations.

The purpose and scope section (§642.1) would be modified to express the scope of the regulations in the broadest terms consistent with the FMP. NOAA has determined that the public is better served by a general expression of scope in this section with the specific scope of each general provision or management measure stated in that provision or measure. This approach avoids the possibility of misleading fishermen, dealers, and processors as to the scope of the regulations in this part.

To clarify what constitutes the commercial and recreational fisheries, the definition for Commercial fisherman would be removed and new definitions for Commercial fishery and Recreational fishery would be added. The definition for Charter vessel would be revised

to clarify that (1) a charter vessel holding either a king or Spanish mackerel commercial permit is subject to the criteria specified for establishing when the vessel is under charter and (2) the number of persons aboard is not the sole criterion for determining when a vessel is under charter. Other minor changes to some of the definitions are proposed for clarity and consistency.

The introductory texts for the reporting requirements (§642.5(a),(b), and (c)) would be revised to more succinctly state the geographical extent of fishing for which reports may be required. In §642.5(b), reference is added to the section requiring permits for charter vessels to add emphasis to that requirement. Other changes to these sections and to §642.5(e) are proposed for clarity.

The vessel identification requirements relating to the official number (§642.6(a)) would be restated for clarity and brevity.

Section 642.7(j) would be modified to correct the references in that paragraph.

The prohibition on fishing for, retaining, or having in possession aboard a permitted vessel king mackerel after a closure (§642.7(k)) would be clarified to include in the exceptions reference to the limited incidental catch of king mackerel in the Spanish mackerel gill net fishery (§642.24(c)). Such incidental catch of king mackerel is not excepted from the prohibition on sale (§642.7(l)).

Prohibited activities relating to king or Spanish mackerel under a recreational allocation after reduction of a bag limit to zero (§642.7(r)) would be restated to parallel prohibited activities specified for king or Spanish mackerel harvested or possessed in

excess of a bag limit (§642.7(n)).

The allocations and quotas section (§642.21) would be revised to clarify that both king and Spanish mackerel are counted against a commercial allocation when they are first sold.

To express more clearly the contents of the closures section (§642.22), the heading for that section would be revised by adding reference to bag limit reductions. Section 644.22(b) would be revised to describe the geographical extent of a bag limit reduction in language parallel to the description in the preceding paragraph of the geographical extent of a commercial closure and to clarify that a bag limit reduction applies to the EEZ.

The catch allowance for undersized Spanish mackerel (§642.23(a)(2)) would be revised to clarify that the allowance applies only to the commercial fishery.

To enforce the minimum size limits, the head and fins of Spanish mackerel and cobia must be intact. The present wording of the requirement for head and fins to be intact precludes enforcement of that requirement when a vessel is boarded at sea. Accordingly, §642.23(c) would be revised to require head and fins to be intact on any Spanish mackerel or cobia possessed in the EEZ and, when taken from the EEZ, through landing.

The language regarding gill nets (§642.24(a)) would be revised to clarify that the specified mesh sizes are the minimum allowable sizes.

The purse seine catch allowance (§642.24(d)) would be revised to clarify that the allowance is for incidental catch and the amount of such catch is restated for clarity.

NOAA proposes other minor, technical changes to remove redundant

language and conform to current usage.

Classification

Section 304(a)(1)(D)(ii) of the Magnuson Act, as amended by Pub. L. 99-659, requires the Secretary of Commerce (Secretary) to publish regulations proposed by a Council within 15 days of receipt of an FMP amendment and regulations. At this time, the Secretary has not determined that Amendment 3, which this proposed rule would implement, is consistent with the national standards, other provisions of the Magnuson Act, and other applicable law. The Secretary, in making that determination, will take into account the data, views, and comments received during the comment period.

The Under Secretary for Oceans and Atmosphere, NOAA, determined that this proposed rule is not a "major rule" requiring the preparation of a regulatory impact analysis under E.O. 12291. This proposed rule, if adopted, is not likely to result in an annual effect on the economy of $100 million or more; a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or a significant adverse effect on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises in domestic or export markets.

The Councils prepared a regulatory impact review which concludes that this rule will have the economic effects discussed above in the analysis of the management measures of Amendment 3. A copy of the review may be obtained at the address listed above.

This proposed rule is exempt from the procedures of E.O. 12291 under section 8(a)(2) of that order. It is being reported to the

Director, Office of Management and Budget, with an explanation of why it is not possible to follow the procedures of that order.

The General Counsel of the Department of Commerce certified to the Small Business Administration that this proposed rule, if adopted, will not have a significant economic impact on a substantial number of small entities for the following reasons. An estimated thirteen vessels (small entities) used drift gillnets to fish for Atlantic migratory group king mackerel during the period April—September. Those thirteen vessels, which would be adversely impacted by this proposed rule, constitute less than two percent of the commercial vessels in the coastal migratory pelagics fishery. These fishermen will have some opportunity to replace lost income by engaging in the shark fishery, the Gulf migratory group king mackerel fishery as it rebuilds, and some of the other inshore fisheries. Purse seines and run-around gill net catches were first recorded during the 1988/89 fishing year and involve such a small number of entities that the catch data for these two gear types is confidential and cannot be reported separately. The vessels will have the opportunity to replace lost income in the fisheries which they prosecuted prior to first participating in the Atlantic migratory group king mackerel fishery during April 1988. As a result, a regulatory flexibility analysis was not prepared.

The Councils determined that this rule will be implemented in a manner that is consistent to the maximum extent practicable with the approved coastal zone management programs of North Carolina, South Carolina, Florida, Alabama, Mississippi, and Louisiana. Georgia and Texas do not have approved coastal zone management programs. This determination has been submitted for review by the responsible State

agencies under Section 307 of the Coastal Zone Management Act.

The Councils prepared an environmental assessment (EA) that discusses the impact on the environment and concludes that there will be no significant adverse impact on the human environment as a result of this rule. A copy of the EA may be obtained at the address listed above and comments on it are requested.

This proposed rule does not contain a collection-of-information requirement for purposes of the Paperwork Reduction Act.

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

List of Subjects in 50 CFR Part 642

Fisheries, Fishing.

Dated:

For reasons set forth in the preamble, 50 CFR Part 642 is proposed to be amended as follows:

PART 642 -- COASTAL MIGRATORY PELAGIC RESOURCES OF THE GULF OF MEXICO AND SOUTH ATLANTIC

1. The authority citation for Part 642 continues to read as follows:

Authority: 16 U.S.C. 1801 *et seq*.

2. In §642.1, paragraph (b) is revised to read as follows:

§642.1 Purpose and scope.

* * * * *

(b) This part governs conservation and management of coastal migratory pelagic fish off the Atlantic and Gulf of Mexico coastal States south of the Virginia/North Carolina border and in the Gulf of Mexico.

3. In §642.2, the definition for Commercial fisherman is removed; in the definition for Charter vessel crew, the word "captain" is revised to read "operator"; in the definition for Regional Director, the semicolon after the ZIP code is removed and a comma is added in its place; in the definition for Species, the words "refers to" are removed and the word "means" is added in their place; the definition for Charter vessel is revised; and new definitions for Commercial fishery, Drift gill net, Gill net, Recreational fishery, and Run-around gill net are added in alphabetical order to read as follows:

§642.2 Definitions.

* * * * *

Charter vessel (includes a headboat) means a vessel whose operator is licensed by the U.S. Coast Guard to carry paying passengers and whose passengers fish for a fee. A charter vessel with a permit to fish on a commercial allocation for king or Spanish mackerel is under charter when it carries a passenger who fishes for a fee or when there are more than three persons aboard including operator and crew.

* * * * *

Commercial fishery means the harvesting of king or Spanish mackerel by a person fishing under the annual vessel permit specified in §642.4(a)(1).

* * * * *

Drift gill net means a gill net having a float line that is more than 1,000 yards in length; or any gill net having a float line that is 1,000 yards or less in length, other than a run-around gill net, that, when used, drifts in the water, that is, is not anchored at both ends, whether or not it is attached to a vessel.

* * * * *

Gill net means a wall of netting, suspended vertically in the water by floats along the top and weights along the bottom, that entangles the head, gills, or other body parts of fish that attempt to pass through the meshes.

* * * * *

Recreational fishery means the harvesting of king or Spanish mackerel by a person fishing under a bag limit.

* * * * *

Run-around gill net means a gill net having a float line that is 1,000 yards or less in length that, when used, encloses an area of water.

* * * * *

4. In §642.4, in paragraph (a)(1), the word "which" before "fishes" is revised to read "that" and the phrase "in the EEZ" is added after the word "mackerel"; in paragraph (a)(3) the word "which" before fishes is revised to read "that" and the phrase "in the EEZ" is added after the word "fish"; in paragraphs (b)(3) and (c), the words "or his designee" after "Regional Director" are removed; and in paragraph (a)(2), the second sentence is revised to read as follows:

§642.4 Permits and fees.

(a) * * * .

(2) * * * A charter vessel in the EEZ must adhere to the applicable bag limit while under charter.

* * * * *

5. In §642.5, in paragraph (a)(2), a comma is added after the word "fish" and the words "as defined" are removed; and paragraphs (a) introductory text, (b) introductory text, (c) introductory text, and (e) are revised to read as follows:

§642.5 Recordkeeping and reporting.

(a) Commercial vessel owners and operators. An owner or operator of a fishing vessel that fishes for or lands coastal migratory pelagic fish for sale, trade, or barter in or from the EEZ or adjoining State waters, or whose vessel possesses a permit issued under §642.4(a)(1), and who is selected to report, must provide the following information regarding any fishing trip to the Science and Research Director:

* * * * *

(b) Charter vessel owners and operators. An owner or operator of a charter vessel that fishes for or lands coastal migratory pelagic fish in or from the EEZ or adjoining State waters, or whose vessel possesses a permit issued under §642.4(a)(3), and who is selected to report, must maintain a daily fishing record on forms provided by the Science and Research Director. These forms must be submitted to the Science and Research Director weekly and must provide the following information:

* * * * *

(c) Dealers and processors. A person who receives coastal migratory pelagic fish, or parts thereof, by way of purchase,

barter, trade, or sale from a fishing vessel or person that fishes for or lands such fish, or parts thereof, in or from the EEZ or adjoining State waters, and who is selected to report, must provide the following information to the Science and Research Director at monthly intervals, or more frequently if requested, and on forms provided by the Science and Research Director:

* * * * *

(e) Availability of fish for inspection. An owner or operator of a commercial, charter, or recreational vessel or a dealer or processor shall make any coastal migratory pelagic fish, or parts thereof, available, upon request, for inspection by the Science and Research Director for the collection of additional information or by an authorized officer.

6. In §642.6, paragraph (a) is revised to read as follows:

§642.6 Vessel identification.

(a) Official number. A vessel engaged in fishing for king or Spanish mackerel under a commercial allocation and the permit specified in §642.4(a)(1) must display its official number --

(1) On the port and starboard sides of the deckhouse or hull and on an appropriate weather deck so as to be clearly visible from an enforcement vessel or aircraft;

(2) In block Arabic numerals in contrasting color to the background;

(3) At least 18 inches in height for fishing vessels over 65 feet in length and at least 10 inches in height for all other vessels; and

(4) Permanently affixed to or painted on the vessel.

* * * * *

7. In §642.7, in paragraph (k), a comma is added after the phrase "under a commercial allocation" and the reference and word "§642.24(c) and" are added between the word "in" and the reference "§642.28(c)(2)"; in paragraph (m), a comma is added after the phrase "under a commercial allocation"; in paragraph (n), after the reference to "§642.28", the comma and the phrase "except as provided for under §642.21(a) and (c)" are removed; in paragraph (v), the word "which" is revised to read "that"; paragraphs (e), (g), (j), (q), and (r) are revised; and new paragraphs (x) and (y) are added to read as follows:

§642.7 Prohibitions.

* * * * *

(e) Fish in the EEZ for king or Spanish mackerel from either the Gulf or Atlantic migratory group using a purse seine, as specified in §642.24(b).

* * * * *

(g) Falsify or fail to report information, as specified in §§642.4 and 642.5.

* * * * *

(j) Purchase, sell, barter, trade, or accept in trade king or Spanish mackerel harvested in the EEZ from a specific migratory group or zone for the remainder of the appropriate fishing year, specified in §642.20, after the allocation or quota for that migratory group or zone, as specified in §642.21(a) or (c), has been reached and closure has been invoked, as specified in §642.22(a). (This prohibition does not apply to trade in king of Spanish mackerel harvested, landed, and bartered, traded, or sold prior to the closure and held in cold storage by dealers and processors.)

* * * * *

(q) Possess or land Spanish mackerel or cobia without the head and fins intact, as specified in §642.23(c).

(r) Land, consume at sea, sell or possess, in or from the EEZ, king or Spanish mackerel harvested under a recreational allocation set forth in §642.21(b) or (d) after the bag limit for that recreational allocation has been reduced to zero under §642.22(b).

* * * * *

(x) Fish with a drift gill net for coastal migratory pelagic fish or possess any such fish aboard a vessel with a drift gill net aboard, as specified in §642.24(a)(3).

(y) Fish with a run-around gill net for king mackerel from the Atlantic migratory group or possess any such fish aboard a vessel with a run-around gill net aboard, as specified in §642.24(a)(4).

8. In §642.21, in paragraph (a)(2), the last sentence is removed, and a new paragraph (c)(3) is added to read as follows:

§642.21 Allocations and quotas.

* * * * *

(c) * * *

(3) A fish is counted against the commercial allocation when it is first sold.

* * * * *

9. In §642.22, the heading, the second sentence of paragraph (a), and paragraph (b) are revised to read as follows:

§642.22 Closures and bag limit reductions.

(a) * * * The notice of closure for an allocation or quota specified under §642.21(a) or (c) will also provide that the purchase, barter, trade, and sale of king or Spanish mackerel taken

in the EEZ from the closed area after the closure is prohibited for the remainder of that fishing year. * * *

(b) The Secretary, after consulting with the Councils and by publication of a notice in the FEDERAL REGISTER, will reduce to zero the bag limit for the king or Spanish mackerel recreational fishery in the EEZ for a particular migratory group when the allocation under §642.21(b) or (d) for that migratory group has been reached or is projected to be reached and when that group is overfished. After such reduction, a king or Spanish mackerel caught in the EEZ from that group must be returned immediately to the sea and possession of king or Spanish mackerel of that group in or from the EEZ on board a vessel in the recreational fishery is prohibited.

10. In §642.23, in paragraph (a)(1), the word "or" between the words "recreational" and "commercial" is revised to read "and"; in paragraph (a)(2), the phrase "in the commercial fishery" is added between the words "allowed" and "equal"; and paragraph (c) is revised to read as follows:

§642.23 Size restrictions.

* * * * *

(c) Head and fins intact. A Spanish mackerel or cobia possessed in the EEZ must have head and fins intact and a Spanish mackerel or cobia taken from the EEZ must be landed with the head and fins intact.

11. In §642.24, in the first sentence of paragraphs (a)(1) and (2) the word "allowable" is added after the word "minimum" and the phrase "in the EEZ" is added after the word "fish"; new paragraphs (a)(3) and (4) are added; and paragraphs (b) and (d) are revised to read as follows:

§642.24 Vessel, gear, equipment limitations.

* * * * *

(a) * * *

(3) Drift gill nets. The use of a drift gill net to fish in the EEZ for coastal migratory pelagic fish is prohibited. A vessel in the EEZ or having fished in the EEZ with a drift gill net aboard may not possess any coastal migratory pelagic fish.

(4) Run-around gill nets. The use of a run-around gill net to fish in the EEZ for king mackerel from the Atlantic migratory group is prohibited. A vessel in the EEZ or having fished in the EEZ within the range of king mackerel from the Atlantic migratory group with a run-around gill net aboard may not possess any king mackerel.

(b) Purse seines. Except as provided in paragraph (d) of this section, the use of a purse seine to fish in the EEZ for king or Spanish mackerel is prohibited.

* * * * *

(d) Purse seine incidental catch allowance. A vessel with a purse seine aboard will not be considered as fishing for king mackerel or Spanish mackerel in violation of the prohibition of purse seines under paragraph (b) of this section provided the catch of king mackerel or Spanish mackerel does not exceed one percent or ten percent, respectively, by weight or number (whichever provides the lesser percentage), of the catch of all fish aboard the vessel. Such king or Spanish mackerel will be counted toward the allocations and quotas provided for under §642.21(a) or (c) and are subject to the prohibition of sale under §642.22(a).

12. In §642.28, in paragraph (a) introductory text, the word "incidental" is added between the words "seine" and "catch".