AMENDMENT 4

TO THE FISHERY MANAGEMENT PLAN FOR

SPINY LOBSTER
IN THE GULF OF MEXICO AND
SOUTH ATLANTIC

INCLUDING THE
REGULATORY IMPACT REVIEW
AND
ENVIRONMENTAL ASSESSMENT

prepared by the
South Atlantic and Gulf of Mexico Fishery Management Councils

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REGULATORY IMPACT REVIEW

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Introduction

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

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

Problems and Objectives

The general problems and objectives are found in the fishery management plan, as amended. This amendment proposes to allow greater access to the spiny lobster resource by recreational fishermen in the states north of Florida and on headboats while protecting the biological integrety of the resource. Further exposition of these issues are found in the biological discussions under each action.

Methodology and Framework for Analysis

This RIR analyzes the probable impacts on fishery participants of the proposed amendment to the Fishery Management Plan for the Spiny Lobster Fishery of the Gulf of Mexico and South Atlantic Region (FMP). The discussions for the proposed actions are incorporated in the text under socioeconomic impacts. The basic approach adopted in this RIR is an assessment of management measures from the standpoint of determining the resulting changes in costs and benefits to society. The net effects should be stated in terms of producer surplus to the harvest sector, net profits to the intermediate sector, and consumer surplus to the final users of the resource.

The harvest sector refers to harvesters of spiny lobster and the intermediate sector to processors and dealers of spiny lobster. Final users of the resource are taken to refer to the individuals that derive benefits from consuming spiny lobster. Ideally, all these changes in costs and benefits need to be accounted for in assessing the net economic benefit to society from the management of the spiny lobster fishery. However, lack of data does not allow for this type of analysis. The RIR attempts to determine these changes to the extent possible, albeit in a very qualitative manner.

1.0 PURPOSE AND NEED

Amendment 4 to the Spiny lobster Fishery Management Plan was developed to address the different fishing pattern in the states north of Florida and the rare harvest of spiny lobster by headboats throughout the South Atlantic. The South Atlantic and Gulf of Mexico Fishery Management Councils are concerned about access to the spiny lobster resource by affected fishermen in this area, and is proposing to implement a bag limit year round off the States of North Carolina, South Carolina and Georgia for recreational and commercial fishermen and to allow fishermen on headboats to retain rare catches of spiny lobsters on hook and line gear.

The original management plan (GMFMC and SAFMC, 1982) included a Final Environmental Impact Statement. Amendments 1,2 and 3 included Environmental Assessments. Amendment 4 includes an Environmental Assessment.

Management Objectives

Objectives currently identified in the management plan, as amended, are as follows (GMFMC and SAFMC, 1989):

1. Prrotect long-run yields and prevent depletion of lobster stocks.
2. Increase yield by weight from the fishery.
3. Reduce user group and gear conflicts in the fishery.
4. Acquire the necessary information to manage the fishery.
5. Promote efficiency in the fishery.
6. Provide for a more flexible management system that minimizes regulatory delay to assure more effective, cooperative state and federal management of the fishery.

Objectives addressed in this amendment are presented below.

- Protect long-run yields and prevent depletion of lobster stocks.
- Reduce user group and gear conflicts in the fishery.

Issues/Problems to be Considered

Problems/issues currently identified in the management plan, as amended, are as follows (GMFMC and SAFMC, 1989):

1. The number of undersize lobster taken or sold illegally continues to be a problem.
2. Whereas the present practices involving the use of undersize lobsters as attractants is causing significant mortality to undersize lobsters and subsequent loss in yield to the fishery, there is controversy over the methods to reduce the mortality of undersize lobsters used as attractants in traps.
3. There is an excessive number of traps in the fishery.

4. Incompatible federal and state regulations hinder effective management and enforcement and delay in implementing federal rules compatible with those of the state exacerbates this problem.

5. Abandonment of traps creates some ghost fishing mortality that represents loss in yield to the fishery.

6. The major user groups of the resource are not adequately defined to insure fair and equitable treatment. The existing Florida permit system is not sufficient in identifying major user groups resulting in an inability to properly assess the impacts of alternative management measures on the users of the resource. While tagging studies indicate that recreational harvest is likely to be about ten percent of the commercial harvest, additional data on the recreational harvest is needed. Existing data sources will need to be supplemented, especially as future allocations of the resource are considered. (Note: By current state rule, commercial fishermen must have both permit and products license.)

7. The increasing recreational harvest, especially in the special season, may be impacting the resource and needs to be evaluated as to amount of harvest and impacts on handling and short mortality.

Issues/problems addressed in this amendment are as follows.

Fair and Equitable Treatment of Major User Groups

- What is the most equitable method to provide access to the spiny lobster resource by recreational fishermen north of Florida and headboat fishermen in the South Atlantic?

Increasing Recreational Harvest

- What steps should be taken to prevent impacting the spiny lobster resource?

History of Management

The Fishery Management Plan for the Spiny Fishery of the Gulf of Mexico and South Atlantic was prepared by the Gulf of Mexico and South Atlantic Fishery Management Councils (GMFMC and SAFMC, 1982) to protect long-run yields and prevent depletion of lobster stocks, increase yield, reduce user group and gear conflicts, acquire the necessary information to manage the fishery and to promote efficiency in the fishery. Amendment 1 (GMFMC and SAFMC, 1987) required a commercial permit, limited possession of undersized lobsters as attractants and required a live well, modified recreational possession and season regulations, modified closed season regulations, required the immediate release of egg-bearing lobsters, modified the minimum size limit, required a permit to separate the tail at sea and prohibited possession or stripping of egg-bearing slipper lobsters. Amendment 2 (GMFMC and SAFMC, 1989) modified the problems/issues and objectives of the fishery management plan, modified the statement of optimum yield, established a protocol and procedure for an enhanced cooperative management system, and added to the vessel

safety and habitat sections of the fishery management plan. A definition of overfishing and clarification that the National Marine Fisheries Service (NMFS) may charge the administrative cost of issuing permits was added in Amendment 3 (GMFMC and SAFMC, 1990).

Issues/Problems Requiring Amendment 4

- **Fair and Equitable Treatment of Major User Groups** - The Councils want to provide access to the spiny lobster resource for recreational fishermen north of Florida and headboat fishermen in the South Atlantic without undue hardship on the commercial sector or damage to the spiny lobster resource.
- **Increasing Recreational Harvest** - The Councils are concerned about the potential impacts on the resource from an increasing recreational harvest.

The original Spiny Lobster Fishery Management Plan (GMFMC and SAFMC, 1982) established a management program for the spiny lobster resource in the Gulf of Mexico and South Atlantic which included a minimum size limit, gear limitations, possession limits and seasonal restrictions. The most recent assessment of the status of the spiny lobster fishery was prepared by the National Marine Fisheries Service, Miami Laboratory (Harper, 1993). The summary is presented below:

> "Total Florida spiny lobster commercial landings have averaged around 6.1 million pounds since 1975 while lobster landings in states excluding Florida have been very small and inconsequential. During the 1992 season, which included the passage of hurricane Andrew through south Florida on August 24, commercial fishermen harvested 5.3 million pounds of spiny lobster or about 1.7 million pounds less than in the 1991 season. The spiny lobster became the most valuable species landed in Florida for 1991 and 1992 surpassing the pink shrimp which had previously ranked as Florida's top commercial species. In the 1992 season, the estimated number of traps in the spiny lobster fishery reached a record high of 977,000, and seasonal catch per trap, which has been declining slightly since 1975, reached a record low of approximately 5.5 pounds. For the last three seasons, mean catch per seasonal and monthly trip based on FMTTS data has remained fairly stable, despite the use of more traps. The general upward trend in mean carapace size for spiny lobster harvested by commercial and recreational fishermen continued into the 1992 season for most statistical regions, although mean carapace length varied significantly within regions between years. Catch per commercial fishing trip was essentially the same in 1992 when compared to 1991, while the number of trips and therefore total commercial landings declined in 1992. This decline in number of commercial spiny lobster fishing trips and landings is probably the result of Hurricane Andrew's devastating impact on the south Florida commercial fishing industry."

The Council conducted four scoping meetings on issues facing fishermen north of Florida (Atlantic Beach, North Carolina - November 3, 1993; St. Augustine, Florida - February 7, 1994; Brunswick, Georgia - April 20, 1994; and Duck Key (Marathon), Florida - June 20, 1994) and also convened their advisory panel (Miami, Florida - April 21, 1992 and Duck Key, Florida - June 20, 1994). Recreational fishermen indicated that they only have access to the resource during the summer and early fall when the weather is calm and the water warm. This also coincides with the closed season for spiny lobsters. In addition, hook and line recreational fishermen on headboats occasionally catch spiny lobsters and want to keep this rare catch.

2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

Section 2.0 summarizes Section 4.0 Environmental Consequences. Matrices are used to contrast each of the management alternatives with the issues/problems. It is intended that each matrix provide the reader with an overview of the alternatives considered and resulting impacts for each management measure.

Management measures (proposed actions) are intended to address the management objectives and issues discussed above. Each management measure has a number of alternatives that have been considered by the Council. The following tables summarize the alternatives and how they address the problems/issues identified by the Council. Management alternatives are presented in the rows and issues/problems in the columns.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES
(Effects of Alternatives on the Issues/Problems)

ACTION 1. MODIFY THE RECREATIONAL SEASON AND BAG LIMIT:

ISSUES/PROBLEMS

Alternatives	**Fair & Equitable Treatment of Major User Groups**	**Increasing Recreational Harvest**
2-lobsters/person per day for all fishermen all year long north of Florida	Allocates equally for all fishermen north of Florida	Controls harvest levels north of Florida
No Action	Does not address problem	Does not address problem
2-lobsters/person per day for all fishermen all year long north of Cape Canaveral or northeast FL	Allocates equally for all fishermen north of FL but impacts commercial	Controls harvest levels north of northeast FL
Recreational harvest of 1-lobster per person per day during April, May, June & July north of Florida	Provides some access to recreational fishermen	Does not limit recreational catch during rest of year
Recreational harvest of 1-lobster per person/day year-round north of FL	Provides some access to recreational fishermen	Controls harvest levels north of Florida
1-lobster/person (rec & com) year-round north of FL & framework	Allocates equally for all fishermen north of FL	Controls harvest levels north of Florida
Consider including northeast Florida	Fair to northeast Florida fishermen	Limit catch in northeast Florida
Trip limit per boat per day	Could allocates equally	Could controls harvest

SUMMARY OF ENVIRONMENTAL CONSEQUENCES
(Effects of Alternatives on the Issues/Problems)

ACTION 2. HEADBOAT INCIDENTAL CATCH:

ISSUES/PROBLEMS

Alternatives	Fair & Equitable Treatment of Major User Groups	Increasing Recreational Harvest
Provide exemption for hook & line headboat fishermen up to 5-lobsters per headboat per day	Provides access for fishermen in South Atlantic	Controls harvest in South Atlantic
No Action	Does not address problem	Does not address problem
Provide exemption for hook & line headboat fishermen up to 5-lobsters per headboat per day north of FL	Provides access for fishermen north of Florida	Controls harvest north of Florida
Provide exemption for hook & line recreational &headboat fishermen up to 5-lobsters per vessel per day north of FL or entire South Atlantic	Provides access for more fishermen	Less control on harvest
Provide exemption for all recreational vessels up to 5-lobsters per vessel per day north of FL or entire South Atlantic	Provides access for all recreational fishermen	Less control on harvest

3.0 AFFECTED ENVIRONMENT

The following information contains a description of the existing environment for the spiny lobster fishery. The original Fishery Management Plan (GMFMC and SAFMC, 1982) and Amendment 1 (GMFMC and SAFMC, 1987) describe the fishery, utilization patterns and condition of the stock. In summary [directly from Amendment 3 (GMFMC and SAFMC, 1990)], this information indicates that (1) the fishery is heavily overcapitalized with excess fishing capacity (traps) well beyond that needed to harvest the resource; (2) although landings have been stable and no recruitment overfishing is occurring, growth overfishing is occurring partially as a result of mortality of sublegal lobsters from fishing practices; (3) the fishery landings are dependent on recruitment of small lobster each year, i.e. no multiple age class structure; (4) source of larval recruitment to the fishery has not been resolved, i.e., pan-Caribbean or Gulf or local or a combination of sources; and (5) an effort reduction limited entry system has been developed by industry, the state of Florida, and the Gulf of Mexico and South Atlantic Councils for future implementation. (Note: The effort reduction program is now in place.)

Appendix B in Amendment 2 (GMFMC and SAFMC, 1989) contains the Council's habitat concerns.

A. Optimum Yield

Optimum yield (OY) is all spiny lobster with carapace or tail lengths equal to or larger than the minimum legal lengths that are harvested legally under the provisions of the FMP. OY is estimated at 9.5 million pounds. (GMFMC and SAFMC, 1989). The current legal size specified in the regulations is 3.0 inches.

B. Definition of Overfishing

Overfishing was defined in Amendment 3 as follows (GMFMC and SAFMC, 1990): "Overfishing exists when the eggs per recruit ratio of the exploited population to the unexploited population is reduced below five percent and recruitment of small lobsters into the fishery has declined for three consecutive fishing years. Overfishing will be avoided when the eggs per recruit ratio of exploited to unexploited populations is maintained above five percent."

Should overfishing occur, the Councils and State of Florida will take one or more of the following actions by regulatory amendment as authorized under this measure: (1) modify season length, (2) increase minimum carapace length, (3) limits on use of shorts, (4) require escape gaps, and (5) reduce number of traps.

C. Commercial Fishery

Information is from Harper (1993), Vondruska (1992) and Harris et al. (1993 and 1994). Harper (1993) provided the most recent description of the commercial fishery (Tables and Figures cited refer to Harper's paper and are not included in this amendment):

"Seasonal total Florida spiny lobster landings since 1975 have fluctuated, averaging about 6.1 million pounds through 1992 with a range of 4.3 to 7.9 million pounds. In recent seasons, an increase from 5.4 million pounds in 1986 to 7.8 million pounds in 1989 is noted. The **preliminary** estimated harvest for the 1992 season is 5.3 million pounds or about 1.7 million pounds less than the 7.0 million pounds landed during the 1991 season.

After 1985, number of craft has increased rapidly from a low of 517 in 1985 to a record high of 825 in 1992. The primary fishing gear for lobster in the commercial fishery is the wooden slat trap. The number of traps in the fishery has fluctuated, yet has maintained a steadily increasing trend from a low of 52,000 in 1961 to a maximum of 977,000 in 1992; and averaged 879,000 traps during the 1987-1992 seasons.

Commercial lobster landings by gear type from U.S. southeastern states other than Florida for 1980-1992 obtained from the NMFS Accumulated Landings database are shown in Table 3. During this time period, Alabama had reported landings of 5,652 pounds followed by South Carolina with 1,356 pounds. No landings were reported from North Carolina or Louisiana.

Seasonal catch per trap exceeded 25 pounds, from 1960 to 1974 (Fig. 4). A sharp decline in pounds harvested per trap from 43.6 pounds to 12.1 pounds occurred from 1972 through 1975. Since 1975, seasonal catch per trap has steadily declined with a record low 5.5 pounds per trap estimated for the 1992 season.

The general trend of increased mean lobster size in the commercial landings from the Florida Keys since 1987 as reported by Harper (1992) continued into the 1992 season. The one exception to this general trend can be seen in the data from FDEP area 7 (Key West-Dry Tortugas). With the inclusion of 1992 data, Area 7 is the only statistical area in the Florida Keys to exhibit a decreasing trend in mean lobster size. The sharp increase in mean lobster size seen in NMFS Grid 2.0 (Fig 10) is the result of a shifting of fishing effort and sampling data collection into the lobster fishing ground west of the Dry Tortugas."

Vondruska (1992) updated previous economic assessments of the spiny lobster fishery of the southeastern continental United States, which now occurs mostly on the southern tip of Florida. Vondruska's assessment was for the commercial fishery given the scant data on the recreational fishery.

Divers in the snapper grouper fishery also harvest lobsters. Data is available for 1992 and 1993 (Harris et al., 1993 and 1994). The catch of spiny lobsters was estimated to be 95,840 pounds

during 1992 and 48,789 pounds during 1993. The catch of slipper lobster was 202 pounds and 51 pounds during 1992 and 1993. This data indicated that during 1992 only 0.3% of the 95,840 pounds of spiny lobster was harvested north of Florida (the harvest was from North Carolina). Of the 1993 catches, the only harvest north of Florida was 1,334 pounds of spiny lobster in South Carolina.

D. Recreational Fishery

Harper (1993) provided the most recent description of the recreational fishery (Tables and Figures cited refer to Harper's paper and are not included in this amendment):

"Summaries and analysis of results from the lobster shellfishing questionnaire conducted during the 1991 MRFSS telephone survey for the southeastern U.S. coastal states were reported by Harper (1992) and Jones (1993). In U.S. southeastern states other than Florida (excluding Texas which was not included in MRFSS telephone survey), the number of households that participated in recreational lobster fishing was small, as measured in this survey. In Florida, the seasonal pattern of recreational lobstering activity was as expected, with more directed trips in the late summer than in the remainder of the year. Although no lobstering trips were reported by households contacted in the states of Georgia and South Carolina during the 1991 MRFSS telephone survey, an informal telephone survey of dive clubs and dive shops by NMFS during late March and early April 1993 did indicate at least some spiny lobster were harvested by recreational divers in these states (Schmied 1993). Schmied (1993) also reported that over the last two years, general diver interest in targeting spiny lobster seems to be on the increase in North Carolina but is staying relatively flat in South Carolina, Georgia, and Louisiana. In all states, outside of Florida, recreational lobster harvest levels appear small.

The MRFSS program conducted 178 intercept surveys of the spiny lobster fishery in south Florida between July 25, and August 20, 1992. Table 5 summarizes data for number of interviews conducted, hours fished per trip, and lobster catch per fishing party and fisherman from these surveys during the Federal mini-season, the state mini-season and the regular lobster fishing season. The mean number of lobster landed per fisherman was lowest for the Federal mini-season (1.84) and highest for the regular lobster season (5.01). Interview sites were located in Dade (25 interviews) and Monroe (153 interviews) counties. County of residence was reported as Dade county for 23 of 25 (92.0%) of the interviews conducted in Dade, while only 13 of 147 (8.5%) fishermen interview in Monroe lived in Monroe county. In Monroe county, the most frequently reported counties of residence were: Dade (18 interviews, 11.8%), Blowhard (17 interviews, 11.1%) and Palm Beach (13 interviews, 8.5%). All 178 interviews recorded mode of fishing as private/rental boats.

Mean sizes of measured lobster carapace lengths (mm) from recreational trips sampled during the intercept surveys conducted by National Park Service personnel from boat ramps within and adjacent to the Biscayne National Park, south Dade County, Florida from 1976 through 1992 were examined (Figure 12). Overall the mean carapace length was 84.4 mm (range = 65 to 168 mm; sd = 7.48) from a total of 20,245 lobster measurements recorded during this Biscayne National Park Creel Census. Most of these data were obtained during the special two-day sport lobster season which precedes the regular lobster season. Although there was much variation in mean carapace length over time, there is a slight bias toward increased mean lobster size in these recreational harvests (Fig. 12). The large decrease in mean lobster carapace length recorded during the 1983-4 season may be the result of an El Nino event which occurred during 1983.

The FDEP utilized a mail survey to estimate recreational spiny lobster harvest during the two-day Special Sport Season (July 27-28) and the first month of the regular lobster season during 1991 (Bertelsen and Hunt, 1991). The estimated statewide harvest during the two-day season was 403,002 lobsters (435,240 pounds); and 1,188,322 lobsters (1,283,388 pounds) during the first month of the regular season. Approximately 80% of these harvests came from the Florida Keys. Preliminary estimates of the first month of the 1992 regular lobster season indicate that statewide 719,487 lobsters were harvested with 472,765 lobsters taken in the Keys (Hunt, pers. comm.). These preliminary 1992 estimates indicated decreases of 60.5% statewide and 49.4% from the Florida Keys for comparable 1991 recreational spiny lobster harvests."

Information on the fishery north of Florida is lacking. The following information was provided during the scoping meeting in North Carolina (November 3, 1993):

Mr. Hartig said as the first item during the scoping meeting, Mr. Mansfield would give a briefing on spiny lobster and what the northern range of the Atlantic fishermen wanted to do with the lobster regulations.

Mr. Mansfield's presentation consisted of slides and information relative to spiny lobster, the geographic area off North Carolina, and habitat. He said the wave ledges were scarps from old shorelines and riverbeds. These go all the way up the coast to Raleigh, N.C. The ones the fishermen are interested in are about 30 miles out and in at least 100 feet of water. He said some of the ledges are as high as 15 to 20 feet. The hard substrate attracts invertebrates that form a tropical community. The erosion over the years has cut into the ledges and they break apart. The rock falls to the hard substrate and is a living area for the spiny lobster. He showed pictures of the habitat showing sponges, seafans, and algal growth. He said he tries to tell people what the regulations are although most of the people take the lobsters during the summer season which is illegal.

Mr. Spitsbergen asked what was the depth of the area he was showing.

Mr. Mansfield said the depth was around 110 feet. He explained that when the ledges break off and drops off onto the sand, the lobster environment is created. The lobsters live up in the cracks of the ledges. Slipper lobsters live in this area as well which is very well camoflaged. He said there were not very many small lobsters in the N.C. area as they are around 2-3 pounds or larger; none are of illegal size. He said the spiny lobsters cluster together. He said when talking about a 15 pound lobster they are massive and disproportionate when they are this large plus very strong. The lobsters

have to be dragged out from the ledges. He showed a picture of a 15-16 pound fully grown spiny lobster. He said it was illegal to take these lobsters during the diving season in the summer months. He gave a species profile which covered spawning and other aspects of the spiny lobster. He said he wanted to present some facts to the committee on the species profile. The lobster eggs drift in the water for a long time. He said no one is sure how long the eggs drift but it is suspected to be 6 to 12 months. He said the spiny lobsters have a long larval stage. It is not known if the spiny lobsters make a complete circuit and end up in the Keys. The legal size averages out at about the 21 months time frame and that is with optimum temperature and conditions as determined with the lobsters in Florida. The lobsters spawn at about 75 degrees. When the temperature gets between 50 and 60 degrees the lobsters start to get sluggish and could possibly die. He showed a picture of a spiny lobster community in N.C. waters with a depth of about 100 feet, approximately 30 miles offshore and the Gulf Stream may be there depending upon the temperature or could be 20-30 miles away. He said this is where the coastal waters get the warming influence and possibly this is where the larvae comes from. He said the larvae could drop out of the Gulf Stream and grow into adults. He showed the temperature graph which reflected in January they are in the 60 degree range and by February the graph reflected it as the coldest month. The lobsters during this period are on the verge of dying. When they find the lobsters during the colder months they are sluggish. He stated that the breeding season did not come until July because of the water temperature. He said the divers have seen egg breeding lobsters up to September and early October. He said this is not the same as in Florida and this relates to the water temperature. The breeding season is different off the N.C. coast than in Florida. He said he could graph per month the number of dives he has completed and all were effectively during the summer months. He said the fishermen would like to figure out a way to manage the lobster fishery and get better access to the lobsters without hurting the lobsters' survival.

LCDR Sinnett asked if everyone was diving with regular compressed air or had anyone used or talked about using nitrox.

Mr. Mansfield answered the only people doing that are federal and some state people were doing studies with the universities. He said there was no sport use of nitrox at fishery at this time. He said it is hard to tell someone in July who has taken paying passengers out on a headboat that he has to throw the 15 pound lobster back into the water when it doesn't have eggs. He said North Carolinians wanted access to the lobsters without doing them in and without getting arrested.

Mr. Spitsbergen asked Mr. Mansfield if he had heard of anyone using Clorox.

Mr. Mansfield said no and he was surprised when he read about this. He said several years earlier people used a chemical called quinoline to catch fish. He said the fishermen and divers realized it would have the same stunning impact on lobsters and invertebrates. But he did not believe anyone would use that and then eat the lobsters. To his knowledge a chemical has never been used in his area.

Mr. Spitsbergen asked Mr. Mansfield if he knew about anyone using spears, bang sticks or was that a rumor that this was happening?

Mr. Mansfield said it was not a rumor and the problem he had was poaching. He said he didn't get a picture or slide of the 15 dead lobsters that were speared in one day in the middle of summer last year. He said he remembered talking to Mr. Spitsbergen about this last summer after it happened because it bothered him. He said not much could be done about that unless we use the Coast Guard. He said if you send a Coast Guard boat out to a lobster ledge one day you would change a lot of lives. But other than that most were trying to do it right.

Mr. Spitsbergen said the taking of the 15 lobsters was a multiple illegal, over the limit, out of season, and using something other than hands to catch the lobsters situation.

Mr. Mansfield said it was illegal because the four people involved had speared 15 lobsters that might have had eggs.

Mr. Hartig asked Mr. Mansfield when he dives what was the success rate and how many lobsters can be caught? He said the terrain appeared rough and hard to get to and he didn't know what type of holes the lobsters had to get up into.

Mr. Mansfield said this is why the lobsters get shot a lot. He explained if the lobsters are up underneath a rock that has eight or nine feet of undercut you cannot reach the lobsters. He said the only way to properly catch the lobsters is with your hands. He said the divers see a lot more lobsters than what is brought back because of the terrain. He said some of the proposals, even though at face value, look like these would put a hardship on the population. He stated that no one on the average brings back one lobster per dive and he had gotten only one this year. He said the people shoot the lobsters because they are frustrated and they can't outwit or out muscle the lobsters; so they kill them. He said this was unfortunate and he was not sure how this was going to be stopped. He said possibly education and attitude would help but the Coast Guard boat would help a lot.

Mr. Brownlee asked if anyone was enforcing that on the docks?

Mr. Mansfield said he knew of only two tickets that had been handed out so far this year and they were for out of season catches.

Mr. Brownlee asked if the tickets were for spearing?

Mr. Mansfield responded that the tickets were for out of season not spearing.

Mr. Brownlee asked for clarification that the tickets were not for the divers using spears.

Mr. Mansfield said he could not provide an answer to the question of spears being used.

Capt. Drake said he was the Captain of the Carolina Princess a headboat out of Morehead City, N.C. He said when the party is out fishing they are not going for lobster but there are 12 to 15 lobsters caught per year on his boat. Most of the lobsters caught are in the 7-15 pound range. He said it seemed a shame to the fishermen that such an exotic catch could not be kept and had to be thrown back. He said the most caught on the headboat in one day was three and most of the time it was about one lobster a month. He said it would be nice for the fishermen when they come up with that exotic catch, because this normally would be too expensive for the fishermen to buy, that they could keep the lobsters.

Mr. Spitsbergen asked Capt. Drake was there any time when they caught more than others? He said like if you were looking at a six month period, was there a preference like May through October. He asked would that be preferable because that would be when most of his headboating would be done?

Capt. Drake said May through November was when they did most of their fishing. He said they only catch a few and they do not have any records of the catch. He said they may catch one then go a month or two before another was caught. He said it was hard to throw the ones they had caught back into the water. He said sometimes they had been able to keep the lobsters. He said everyone was always wanting exemptions but so few are caught that it was a shame to throw them back into the water anytime of the year. He said catching a lobster on the hook and line was something that isn't done very often.

Mr. Spitsbergen asked Capt. Drake are they hooked or just tangled in the line and how were the lobsters brought up?

Capt. Drake said really both ways. He said sometimes you hook them and sometimes you bring them up and getting one on board is something else. He said after they get to the top of the water the fishermen get excited trying to get the lobsters on board. He said it was such a rarity but he knew the people wanted their picture taken so they could brag and show the lobsters off. He said he was given one of the lobsters and they are good eating but the quality doesn't have that much meat in them for a 15 pound lobster.

Mr. Jimmy Smith said he was a local diver from Wilmington, N.C. He said he wanted to point out that if you are at 100 feet of water most of the time when harvesting these and looking at the Navy dive tables at 100 feet, you are getting 25 minutes and with the newer improved PADI dive tables, you are getting 22 to 25 minutes. And this could be reduced depending on the actual location. He said at 120 feet of water according to PADI you have 15 minutes on the bottom. He said as you look at a dive trip your actual time for harvesting, hunting, finding, and getting is a very short time and this needed to be kept in mind when setting some regulations. He said a typical dive trip offshore nets you a little over 1/2 hour total search time. He said where in Florida and 40 feet of water you would be talking about 200 minutes of bottom time depending on whatever air you have. He said in 60 feet of water you can run 60 minutes. He said the lobsters are not found in 60 feet of water in this area and this area presents a different ball game. He would liketo see spiny lobster illegal to sell, trap, and harvest because it would take away the motivation to commercialize this fishery. He said there was a small number and were hard to get and it is not worth getting into a commercial market. Additionally as in the slide show presentation, the lobsters are in the 10-15 pound range with a tail that is 10-12 inches long and 5 inches wide. He said the typical way to freeze or keep them is to freeze the lobsters in water and this takes up a lot of freezer space. He said there was not a motivation to get 15 lobsters in his opinion. The fellows that caught 15 at one time went overboard and was not typical. He said in looking over the agenda he saw a note where bleach was used. He said there was a question on it being used and he was concerned over regulations and their wording. He asked the committee to be careful how the regulations were worded. He said fishermen did not catch fish with quinoline and this was the first he had ever heard of it to sedate fish for trapping or of it being used for lobster. He said at the same time he was a boat owner and he keeps bleach on his boat to keep the decks clean and white. He said he would hate to get ticketed because he had bleach in his cleaning supplies and a lobster on board in a cooler. He would hate to follow the letter and intent of the law and come into this meeting to set the law then become a victim of that law. He said his input would be to be careful on how that was worded.

LCDR Sinnett asked if anyone had stayed out through a surface interval and complete a second dive?

Mr. Smith answered yes. He gave the following typical profile: leave at 7 A.M. and run two hours out with decent sea conditions, run about 30 miles out, taking two hours to get there, 1 hour to 1 1/2 hours, 15- 20 minutes to find your spot, get suited up and go; you are out of the water at 10:30 or so, take 2 1/2 hour surface interval, which if you look at the Navy dive tables that would give you some remaining bottom time, and diving the standard tables, your second dive would be around ten or eleven minutes. He said the second dive would be pretty low. He said the computers give the diver more credit back for a quicker surface interval. He had only heard of a few people doing more than two dives per day and that was typically around the Frying Pan Tower area where there were shoals and they were talking 60 feet of water. He said the conditions were different there.

Mr. Peace asked Mr. Smith when he is out did he see any directed commercial fishing for the lobsters?

Mr. Smith said he had never seen a commercial person fishing for lobsters. He had never checked traps or any other thing of that nature to identify which was a fish trap versus a lobster trap. He had seen pictures of the Maine lobster traps and things like that but that was about the extent of his knowledge of how to identify a trap. But he had not seen any type of commercialization nor heard of any sales of the lobsters.

Mr. Peace said there are some commercial divers for snapper/grouper and he thought they might be after some lobsters too if they were in the same neighborhood.

Mr. Smith said there might not be a market for them. He said if regulations were put together to keep a market shut out then that might help the fishery from becoming commercialized.

Mr. Spitsbergen asked, with the short time on bottom, does the panel need to look at bag limits? He said it seemed like if you can only go down a couple of times that bag limits would not be necessary.

Mr. Smith said that had a lot of merit in this area because of depths and bottom times. He said Mr. Spitsbergen was talking about the opportunity to search, hunt, recover and capture in the bag, and return to the boat in a total of 30 minutes so that was one point of contention that would need to be thrown into the equation when writing your regulation.

Mr. Spitsbergen said however, if the divers were spearing the lobsters which was illegal according to the present plan, this would make a difference. He asked could several be speared and be sent up on a stringer?

Mr. Smith said this would not be out of the question. If the lobsters could be found quickly yes. But on the typical dive, divers head to bottom, check anchor, you go out 20-40 yards from the anchor, spot a lobster, try and figure out how to get the lobster out from the over-cropping or hole, and you have approximately 11 minutes left.

Mr. Spitsbergen said to possibly solve the problem since spearing is illegal but to assure that would not go on, could a bag limit save one or two of the lobsters. He said the committee had talked about one and rethinking possibly two might be a more reasonable bag limit. He asked was this a reasonable way of going about it?

Mr. Smith said yes and he would agree with two being an appropriate limit and that would essentially say one per dive if you get lucky and could get two in a particular dive. He said then the diver would be ineligible. He said this was acceptable. He was in favor of maintaining the nonspearing and he said there had been stories of situations where people speared them and they turned out to be females. He asked then what do you do? He said that was the exact reason for the regulation and he understood that and was in favor.

Mr. Spitsbergen said Mr. Mansfield said he did not see anything smaller than a 3 pound lobster and didn't see any shorts at all.

Mr. Smith said this was true in his experience and he had seen but a few small lobsters. He said this one story he had was where he saw an outlying situation and to his disappointment he didn't see any that were of the large variety. This happened one time in his 150 dives off the coast of N.C. He was 25 miles offshore or better and saw shorts. In this instance he saw 10 lobsters and all were around the 1- 1/2 pound range. He said he collected one and checked it out. Then he saw a nice shell he wanted. He said the shell was fairly large and he debated on which one to take because he had the lobster in the bag. He took the lobster out and put the shell in and measured the lobster with his knife and he was 3 1/4 inches so he let him go. He said there were multiples of those and he did not see any of the large lobsters. This was one outlying situation and he had been diving off N.C. for eight years. He said it was odd and strange that they do not see any small lobsters out there but typically 30-35 miles offshore all you see are eight pounds or higher.

Mr. Hartig said that Mr. Smith mentioned he did not want to see bleach prohibited from his boat. He asked if the council put a limit on the amount of bleach the vessel could have, how much would he be comfortable with?

Mr. Smith said that would be hard to say. He asked Mr. Hartig if he was saying bleach bottles? He said hypothetically, say I had just gone to the store and put a full bottle on my boat because the other one was down to a cup full. He would not throw that cup full out and would wait until the next time he needed it and use the last cup. But at this time he needed 2 full cups. He said he would use the leftover one cup and then take an other cup from the new bottle. He said it would look like he had two gallons on the boat.

Mr. Brownlee asked Mr. Smith say we limit it to one gallon?

Mr. Smith said that would be his answer but what about the situation he gave. He said another situation would be he just finished one gallon off and used the empty jug as a marker. He said they throw out a marker jug and use an old milk jug, empty antifreeze jug or spent oil jug (all capped) with a fishline or string and weight sufficient to reach the bottom. He said he marks the ledge and goes across and finds the other areas, marks his line of ledge, traverses it, and finds the best place or spot. He said here goes your twenty minutes looking for the spot as is typically done. He said it would make people be careful on what kind of jugs they had in their boat. But he said there were opportunities and you know that this is the law that you cannot have a Clorox jug as a buoy.

Mr. Brownlee asked Mr. Smith why did he carry the bleach on the boat and not leave it at the dock?

Mr. Smith answered because he didn't have a dock box and didn't live at the beach but in town. He said he left all his gear with the boat at the beach and cleans everything up right there at the beach. He said he did not want to carry this stuff back home with him. He said he leaves his rods, electronics and everything there. He said he was usually in a wet slip and all he has to do is hop on the boat and go because he does not transport all this back and forth.

Mr. Brownlee said it seemed to him that granting an exemption for an amount of bleach was patiently a bad idea. He didn't see why the bleach couldn't be thrown in the truck while Mr. Smith went fishing. He said he would not support any exemption for bleach. He understood this was a cheap way to keep the boat clean but said this would open a Pandora's box.

Mr. Hartig agreed with this regarding the bleach.

Mr. Smith asked did he mean throwing empty bleach jugs offshore?

Mr. Brownlee said he was talking about bleaching reefs. He said if the council allowed a certain amount of bleach on the boat to clean, you cannot say a certain amount. He added then the council would have to get into how much was needed to bleach a reef which is not a large amount. He said in south Florida it was done with a reasonably small amount of bleach. He thought they should continue with the prohibition of no bleach on the boat and have people put the bleach somewhere else away from the boat.

Mr. Smith said he had not heard of anyone in this area using bleach. But, he added, since the council sets the rules and regulations and no bleach was the rule, everyone would learn to abide by them. He asked if it could be worded and set up in such a way to limit quantity? He understood the hesitations. He said but at the same time to have some people who were honest Joes and not aware of the bleach regulation, then to have on board the bag limit with the beach and all posted regulations, and receive a citation would be bad.

Mr. Lindall asked Mr. Smith if he had been diving about eight years off the Carolinas and had he noticed any changes in the abundance of the large lobsters or changes in the size or anything?

Mr. Smith said he can't say that he had. He said the number of trips he had made into eligible water this year was three and one of those was being the weekend of the sportsmen season and of the other two, one was since the season opened and the other before. Two trips he said were eligible hunting trips but he had not noticed any degradation in the size or quantity.

E. Status of the Stocks

The spiny lobster resource is not overfished but the exploitation rate is high. The abundance of lobsters north of Florida is unknown.

4.0 ENVIRONMENTAL CONSEQUENCES

A. Introduction

This section is divided into two major parts. The first part addresses management measures and alternatives considered by the Council. The second depicts the consequences of management. The regulatory impact review (RIR) analysis and information for analyses required by the Regulatory Flexibility Act are incorporated into the discussion under each of the proposed action items.

The Regulatory Impact Review (RIR) is part of the process of developing and reviewing fishery management plans and amendments and is prepared by the Regional Fishery Management Councils with assistance from the National Marine Fisheries Service, as necessary. The regulatory impact review provides a comprehensive review of the level and incidence of economic impact associated with the proposed regulatory actions. The purpose of the analysis is to ensure that the regulatory agency or Council systematically considers all available alternatives so that public welfare can be enhanced in the most efficient and cost effective way.

The regulatory impact review also serves as the basis for determining if the proposed regulations are major under Executive Order 12866 and whether the proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Act of 1980 (RFA). The purpose of the Regulatory Flexibility Act is to relieve small businesses, small organizations, and small governmental entities from burdensome regulations and record-keeping requirements, to the extent possible.

Each Action is followed by four subheadings: Biological Impacts, Enforcement Impacts, Socioeconomic Impacts, and Conclusion. These are self explanatory with the first three presenting the impacts of each measure considered. The Council's rationale is presented under the heading "Conclusion".

B. Management Measures

ACTION 1. MODIFY THE RECREATIONAL SEASON AND BAG LIMITS

Allow the harvest of two lobsters per person per day for all fishermen all year long but only north of the Florida/Georgia border. This measure would be added to the framework procedure so that future potential changes to the limit would not require a plan amendment.

Biological Impacts

The importance of larvae spawned north of Florida to the U.S. fishery is unknown. There is scientific debate over the issue of recruitment with some scientists concluding that these lobster larvae are lost to the fishery. That is, the larvae drift north and do not subsequently settle to grow as adult lobsters. There are other scientists who believe that these larvae may settle in Bermuda and may also survive to sebsequently settle in the Caribbean and possibly Florida.

Enforcement Impacts

The States north of Florida would have to adopt similar regulations to result in dockside enforcement. Having the same regulations in state and federal waters will enhance voluntary compliance. Treating all fishermen equally will simplify enforcement.

Socioeconomic Impacts

This action will only affect spiny lobster commercial and recreational fishermen in North Carolina, South Carolina and Georgia. There has been no report of commercial landings of spiny lobster in North Carolina. The latest report of spiny lobster landings in South Carolina was in 1989 when 85 pounds were landed by divers. In Georgia, 33 pounds and 45 pounds were landed in 1991 and 1992 respectively (Harper, 1993). No lobstering trips were reported by households contacted in the states of Georgia and South Carolina during the 1991 MRFSS telephone survey. However, an informal telephone survey of dive clubs and dive shops by NMFS during late March and early April 1993 indicates that at least some spiny lobster were harvested by recreational divers in these states (Schmied, 1993). Also, Schmied (1993) reports that over the last two years, general diver interest in targeting spiny lobster seems to be on the increase in North Carolina and Georgia.

Given the minimal quantity of spiny lobster production by fishermen in the states north of the Florida Georgia border, the two lobsters per person per day for all fishermen all year long will have little or no effect on fishermen or on the status of the spiny lobster stock. In the long term, it will impose a limit on harvest if the level of effort should increase in the fishery.

Conclusion

The Council concluded that the benefits resulting from allowing a controlled level of access to the spiny lobster resource for all fishermen north of Florida outweigh any negative impacts on recruitment to the fishery. The Council concluded that any contribution to the U.S. fishery, or any other fishery, is likely low if there is any contribution at all. Adopting this measure increases the likelihood of the States north of Florida adopting similar measures and compatible state/federal regulations increase the effectiveness of enforcement. In addition, the bag limit will provide a cap on potential recreational harvest thereby providing some biological protection.

Rejected Options for Action 1

Rejected Option 1. No action.

Biological Impacts

The potential exists for recreational harvest to increase given the six lobster bag limit and the availability of lobsters north of Florida could be rapidly reduced.

Enforcement Impacts

This option would leave current regulations in place and would reduce voluntary compliance.

Socioeconomic Impacts

Taking no action would prevent recreational and headboat fishermen from retaining spiny lobsters when they appear in their catches. Testimonies at scoping meetings indicated that spiny lobsters do appear occasionally in the catches of these groups. Since the quantities of spiny lobsters that appear in these catches are minimal, their retention would not hurt the fishery. Thus, a no action option will diminish the utility obtained by recreational fishermen from their fishing activities and the pleasure of having spiny lobsters in their priced collections.

Conclusion

The Council rejected taking no action because it would continue to limit access to fishermen north of Florida.

Rejected Option 2. Allow the harvest of two lobsters per person per day for all fishermen all year long but only north of Cape Canaveral or some other boundary in the northeast Florida area. This measure would be added to the framework procedure so that future potential changes to the limit would not require a plan amendment.

Biological Impacts

See proposed action.

Enforcement Impacts

See proposed action. Including the northeast Florida area would result in incompatible State and Federal regulations unless the State of Florida adopted similar regulations.

Socioeconomic Impacts

In addition to spiny lobster fishermen in the states of North Carolina, South Carolina and Georgia, fishermen in Florida whose spiny lobster activities are concentrated in the area north of Cape Canaveral will also be affected by this action. Harper (1993) indicates that the mean catch per trip by commercial fishermen between 1984 and 1992 was 182.2 pounds. Assuming that mean catch per trip in the area north of Cape Canaveral is identical to that of the state of Florida, that the mean weight of spiny lobster in this area is approximately 10 pounds and that three fishermen are onboard a lobster boat, the mean number of spiny lobsters caught per person per trip is estimated at 6. This action would reduce the mean catch per person per trip for commercial fishermen in the area north of Cape Canaveral by over 65 percent.

The MRFSS intercept survey of spiny lobster fishery in south Florida (August 6 through August 20, 1992) indicates that the mean catch per person per trip was 0.61 lobster (federal waters only). Thus, this action will not impose any restriction on the catches on recreational fishermen in the area north of Cape Canaveral.

Conclusion

Portions of this option are included in the proposed action. The Council rejected this option for the northeast Florida area because of the increased enforcement difficulty and because of the impact on commercial divers in the northeast Florida area.

Rejected Option 3. Allow recreational harvest of one lobster per person per day during the months of April, May, June and July (one or more of these months to be selected based on input from public hearings indicating which are important to the recreational dive and headboat industries) but only north of the Florida Georgia border. The recreational bag limit would remain at six per person per day during the open season.

Biological Impacts

See proposed action.

Enforcement Impacts

See proposed action.

Socioeconomic Impacts

Currently, the state of Florida enforces a closed season for the spiny lobster fishery from April through July. This action will limit the taking of spiny lobster north of florida by recreational fishermen when the Florida closure is in effect. At the same time it will allow recreational fishermen north of Florida to catch spiny lobster during the months when the weather is favorable in their area. (Recreational fishermen north of Florida do not fish for spiny lobster during the winter months because of bad weather conditions.) However, the quantity of spiny lobster landed by recreational fishermen in Georgia, South Carolina and North Carolina is very minimal and this option would not impact their activities.

Conclusion

The Council rejected this option because it would not have provided sufficient access for fishermen north of Florida and because it would not have limited commercial harvest.

Rejected Option 4. Allow the recreational harvest of one lobster per person per day year-round north of the Florida/Georgia border.

Biological Impacts

See proposed action.

Enforcement Impacts

See proposed action.

Socioeconomic Impacts

This option will allow recreational fishermen north of the Florida/Georgia border to retain spiny lobster. However, both commercial and recreational fishermen indicated at scoping meetings that some times when they go out they would come up with two lobsters and at other times they would come up with none. Thus, they would like to retain the two lobsters whenever they are

fortunate to catch them. Thus, restricting catch to one per person per trip will some times impact their activities negatively.

Conclusion

The Council rejected this option because it would not have provided sufficient access for fishermen north of Florida and because it would not have limited commercial harvest.

Rejected Option 5. Allow the harvest of one lobster per person (recreational and commercial) per day year-round north of the Florida/Georgia border and establish a framework procedure to modify the bag limit as data becomes available.

Biological Impacts

See proposed action.

Enforcement Impacts

See proposed action.

Socioeconomic Impacts

See discussion under Rejected Option 4.

Conclusion

The Council rejected this option because it would not have provided sufficient access for fishermen north of Florida.

Rejected Option 6. Consider the northeast Florida area (e.g., north of Cape Canaveral or some other boundary) for inclusion in these alternatives.

Biological Impacts

See proposed action.

Enforcement Impacts

See proposed action.

Socioeconomic Impacts

See discussion under Rejected Option 2. Fishermen in this area testified that such restrictions will impose severe hardship on them.

Conclusion

The Council did not include the northeast Florida area because of enforcement concerns and because of the potential impact on commercial divers.

Rejected Option 7. Consider some level of limit per boat per day.

Biological Impacts

See proposed action.

Enforcement Impacts

Trip limits can be enforced dockside and would require that all states adopt similar regulations.

Socioeconomic Impacts

The number of persons per boat varies according to the size of the boat. This is particularly true for the recreational fishery. Headboats in particular will need separate allocation to make the measure equitable. There is not enough information at present to make this type of allocation.

Conclusion

The Council rejected trip limits in favor of a low bag limit per fisherman.

ACTION 2. HEADBOAT INCIDENTAL CATCH

Provide an exemption for the incidental catch of spiny lobsters by headboat hook and line vessels and limit them to five lobsters per headboat per day. This measure is to apply throughout the entire South Atlantic Council's area of jurisdiction.

Biological Impacts

The importance of larvae spawned north of Florida to the U.S. fishery is unknown. There is scientific debate over the issue of recruitment with some scientists concluding that these lobster larvae are lost to the fishery. That is, the larvae drift north and do not subsequently settle to grow as adult lobsters. There are other scientists who believe that these larvae may settle in Bermuda and may also survive to sebsequently settle in the Caribbean and possibly Florida.

The level of mortality from this exemption is expected to be low and inconsequential to the status of spiny lobster.

Enforcement Impacts

The states will have to adopt similar regulations so that enforcement could be accomplished dockside.

Socioeconomic Impacts

Testimony by Capt. Drake at scoping meeting in Atlanti Beach, North Carolina (November, 1993) indicated that recreational fishermen on headboats do have incidental catches of spiny lobster. This averages about 12 to 15 per year on his boat. The most that has been caught in one trip was three and usually it averages about one lobster per month. This action will enable these fishermen to retain incidental catches of lobster and hence add to the benefits from their fishing experience. Because of the low level of incidental catches, this action is not expected to have any adverse affect on the stock.

Conclusion

The Council concluded that the benefits from allowing retention of the rare catch of a spiny lobster on hook-and-line headboats outweigh any increased enforcement costs and will not result in any significant fishing mortality.

Rejected Options for Action 2

Rejected Option 1. No action.

Biological Impacts

This option would not allow retention of the rare catch of spiny lobsters on headboats and would release any such lobsters to be caught again.

Enforcement Impacts

Prohibiting retention of the rare catch by hook-and-line headboat fishermen would reduce voluntary compliance.

Socioeconomic Impacts

The no action option will prevent recreational fishermen from retaining spiny lobster in their incidental catches. This will decrease the welfare obtained from their fishing experience while not providing any significant benefit to the stock.

Conclusion

The Council rejected taking no action because it would not provide hook-and-line headboat fishermen access to the spiny lobster resource.

Rejected Option 2. Provide an exemption for the incidental catch of spiny lobsters by headboat hook and line vessels and limit them to five lobsters per headboat per day. This measure is to apply only north of the Florida/Georgia border.

Biological Impacts

See proposed action.

Enforcement Impacts

See proposed action.

Socioeconomic Impacts

See discussion under Action 2. This option would not affect headboat hook and line vessels in Florida. They will be able to operate under the two spiny lobsters per person per trip.

Conclusion

The Council rejected limiting the exemption to fishermen north of Florida because it would not provide access to the resource by fishermen off Florida.

Rejected Option 3. Provide an exemption for the incidental catch of spiny lobsters by recreational and headboat hook and line vessels and limit them to five lobsters per headboat per day. This measure is to apply throughout the entire South Atlantic Council's area of jurisdiction or only north of the Florida/Georgia border.

Biological Impacts

See proposed action.

Enforcement Impacts

See proposed action.

Socioeconomic Impacts

See discussions under Action 2 and Rejected Option 2.

Conclusion

The Council rejected this option because recreational fishermen have not indicated that this is a problem and because an exemption for recreational fishermen could have resulted in a larger harvest.

Rejected Option 4. Provide an exemption for the incidental catch of spiny lobsters by all recreational vessels regardless of gear used and limit them to five lobsters per headboat per day. This measure is to apply throughout the entire South Atlantic Council's area of jurisdiction or only north of the Florida/Georgia border.

Biological Impacts

See proposed action.

Enforcement Impacts

Implementation of this option would have resulted in higher enforcement costs in order to prevent fishermen using hand held hooks to harvest lobsters illegally and then saying that they were caught on hook and line gear.

Socioeconomic Impacts

This option will encourage some headboat fishermen to direct effort on spiny lobster. This could have adverse effect on the stock. The magnitude of the impact cannot be determined because of lack of data.

Conclusion

The Council concluded that the proposed action provides sufficient access at this time and rejected this option in favor of the proposed action.

C. Unavoidable Adverse Effects

Without management, recreational fishing effort would increase and catches in the spiny lobster fishery north of Florida would decline. In the absence of additional management measures limiting fishing mortality rates, such declines would be expected to continue and could reach such low levels that the recreational spiny lobster fishery would no longer be feasible.

Implementation of the bag limit on all fishermen and the exemption for hook and line headboats will have minimal impacts on fishermen. The bag limit will reduce commercial catches.

D. Relationship of Short-term Uses and Long-term Productivity

Short-term uses will be impacted slightly. This level of reduction is necessary to ensure the long-term productivity of these important species. Without such reductions, the long-term yield would be jeopardized.

The Council weighed the short-term losses to fishermen against the long-term yield and stability of these species and concluded that the proposed actions would result in net benefits to society.

E. Irreversible and Irretrievable Commitments of Resources

There are no irreversible or irretrievable commitments of resources associated with the proposed actions. If the Council had not taken action to reduce fishing mortality on these overfished species and to establish the other regulations, substantial reductions in catches and future net benefits would be expected.

F. Effects of the Fishery on the Environment

Damage to Ocean and Coastal Habitats

The proposed actions, and their alternatives, are not expected to have any adverse effect on the ocean and coastal habitats. Habitat concerns are included in Appendix B in Spiny Lobster Amendment 2.

The fishery, as presently prosecuted, does not substantially impact the live bottom habitat that is essential to the reef species under Council management. The Council will continue to monitor the fishery and if it becomes apparent that a particular gear or fishing practice results in habitat damage, action will be proposed through the framework procedures to mitigate or minimize damage.

Public Health and Safety

The proposed actions, and their alternatives, are not expected to have any substantial adverse impact on public health or safety. The Council's proposed bag limit year-round will allow fishermen to harvest during better weather condictions and will not have any substantial adverse risk on public health or safety.

Endangered Species and Marine Mammals

The proposed actions, and their alternatives, are not expected to affect adversely any endangered or threatened species or marine mammal population.

Cumulative Effects

The proposed actions, and their alternatives, are not expected to result in cumulative adverse effects that could have a substantial effect on the spiny lobster resource or any related stocks, including sea turtles.

G. Summary of Expected Changes in Net Benefits (Summary of Regulatory Impact Review-RIR)

ACTION	POSITIVE IMPACTS	NEGATIVE IMPACTS	NET IMPACTS
ACTION 1:BAG LIMITS	Positive for recreational fishermen north of Florida	None	Positive
REJECTED OPTION 1	None	Some negative impacts on recreational fishermen north of Florida	Negative
REJECTED OPTION 2	Positive for fishermen north of Florida	Negative impact for fishermen in north east Florida	Unknown
REJECTED OPTION 3	Some positive effect	None	Positive
REJECTED OPTION 4	None	Some negative impact	Negative
REJECTED OPTION 5	None	Some negative impact	Negative
REJECTED OPTION 6	Unknown	negative	Unkown
REJECTED OPTION 7	Unknown	Unknown	Unknown
ACTION 2: HEADBOAT INCIDENTAL CATCH	Positive	None	Positive
REJECTED OPTION 1	None	Negative	Negative
REJECTED OPTION 2	None	Negative	Negative
REJECTED OPTION 3	None	Negative	Negative
REJECTED OPTION 4	None	Negative	Negative

H. Public and Private Costs

The preparation, implementation, enforcement and monitoring of this and any federal action involves expenditure of public and private resources which can be expressed as costs associated with the regulation. The costs associated with specific actions in this amendment are shown below:

Council costs of document preparation, meetings, public hearings and information dissemination	$10,000
NMFS administrative costs of document preparation, meetings and review	$2,500
Total	$12,500

I. Effects on Small Businesses

Introduction

The purpose of the Regulatory Flexibility Act is to relieve small businesses, small organizations, and small governmental entities from burdensome regulations and record keeping requirements. The category of small entities likely to be affected by the proposed plan is that of recreational spiny lobster fishermen and commercial spiny lobster fishermen. The impacts of the proposed action on these entities have been discussed under each action in Section 4. The following discussion of impacts focuses specifically on the consequences of the proposed actions on the mentioned business entities. A "threshold-type analysis" is done to determine whether the impacts would have a "significant or non-significant economic impact on a substantial number of small entities." If impacts are determined to be significant, then an Initial Regulatory Flexibility Analysis (IRFA) is conducted to analyze impacts of the proposed action and alternatives on individual business entities. In addition to analyses conducted for the Regulatory Impact Review (RIR), the IRFA provides an estimate of the number of small businesses affected, a description of the small businesses affected, and a discussion of the nature and size of the impacts.

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

In general, a "substantial number" of small entities is more than 20 percent of those small entities engaged in the fishery (NMFS, 1991). For the 1993 fishing season, the most recent year for which data on numbers of commercial participants are available for all south Atlantic states, there were 830 individuals and corporations holding spiny lobster permits. The Small Business Administration (SBA) defines a small business in the commercial fishing activity as a firm with receipts of up to $2.0 million annually. All 830 holders of spiny lobster permits readily fall within

the definition of small business. Since the proposed action will directly and indirectly affect many of these permittees, the "substantial number" criterion will be met.

Economic impacts on small business entities are considered to be "significant" if the proposed action would result in any of the following: a) reduction in annual gross revenues by more than 5%; b) increase in total costs of production by more than 5% as a result of an increase in compliance costs; c) compliance costs as a percent of sales for small entities are at least 10% higher than compliance costs as a percent of sales for large entities; d) capital costs of compliance represent a significant portion of capital available to small entities, considering internal cash flow and external financing capabilities; or e) as a rule of thumb, 2% of small business entities being forced to cease business operations (NMFS, 1991).

The Council examined the following actions and alternatives: (1) Spiny lobster bag limit of two per person per day year-round (page 17) and (2). Exemption for hook and line headboats (page 22).

Given that for each action (a) any impact would be equivalent to much less than a 5% reduction in annual gross revenues, (b) any increase in compliance costs would be much less than a 5% increase in total costs of production, (c) all entities involved are small entities, (d) capital costs of compliance represent a very small portion of capital, and (e) no entities are expected to be forced to cease business operations, the Council determined that the resulting impacts will not have a significant economic impact on a substantial number of small entities.

Explanation of Why the Action is Being Considered

Refer to Section 1.0, Purpose and Need (pages 1-4). Basically, this amendment addresses preventing overfishing of spiny lobster and increasing access to the resource by recreational fishermen in the states north of Florida and by all hook and line headboat fishermen.

Objectives and Legal Basis for the Rule

Refer to Section 1.0 (page 1) for the Management Objectives. Objectives addressed in this amendment are: (1) Protect long-run yields and prvent depletion of lobster stocks and (2) Reduce user group and gear conflicts in the fishery. The Magnuson Fishery Conservation and Management Act of 1976 as amended provides the legal basis for the rule.

Demographic Analysis

Refer to the original fishery management plan (GMFMC and SAFMC, 1982), Amendment 1 (GMFMC and SAFMC, 1987) and Section 3.0 (pages 7-16) of this amendment. Data on fishermen is very limited.

Cost Analysis

Refer to the summary of the impacts (Section 4.0, Subsections F and G; pages 25-26) and the summary of government costs (Section 4.0, Subsection H; page 27). The Council concluded that the benefits of the preferred alternatives outweigh the costs.

Competitive Effects Analysis

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

Identification of Overlapping Regulations

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

Conclusion

The proposed measures will not have a significant effect on small businesses.

5.0 LIST OF PREPARERS

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Dr. Theophilus R. Brainerd, Fishery Economist, South Atlantic Fishery Management Council
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The work of the Council's Scientific and Statistical Committee and Advisory Panel is recognized. Members are as follows:

Scientific and Statistical Committee
Dr. James Easley (Chairman), North Carolina State University
Dr. Robert G. Muller (Vice-Chairman), Florida Department of Environmental Protection
Dr. Charles M. Adams, University of Florida
Dr. Nelson Ehrhardt, RSMAS, University of Miami
Dr. Don Hayne, Retired
Frank "Stu" Kennedy, Florida Department of Environmental Protection
Dr. Linda Mercer, North Carolina Division Marine Resources
Dr. James C. Sabella, University of North Carolina
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Advisory Panel
Bill Mansfield, North Carolina
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The 1992 and 1993 logbook program and final reports were extremely useful. Thanks are due many persons, including the fishermen completing the logbooks, the NMFS SERO for issuing permits, the NMFS SEFSC for issuing the logbooks and in particular Ken Harris and Alex Chester for their work in developing the 1992 and 1993 logbook reports.

The monitoring report prepared by Doug Harper of the NMFS Miami Lab was very useful in preparing this amendment.

6.0 LIST OF AGENCIES AND ORGANIZATIONS

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List of Agencies and Persons Consulted:
Atlantic Coast Conservation Association
Atlantic States Marine Fisheries Commission
SAFMC Law Enforcement Advisory Panel
SAFMC Snapper Grouper Advisory Panel
SAFMC Scientific and Statistical Committee
SAFMC Snapper Grouper Plan Development Team
North Carolina Coastal Zone Management Program
South Carolina Coastal Zone Management Program
Florida Coastal Zone Management Program
Florida Department of Natural Resources
Florida Marine Fisheries Commission
Georgia Department of Natural Resources
South Carolina Department of Natural Resources
Marine Fish Conservation Network
North Carolina Department of Environment, Health, and Natural Resources
National Marine Fisheries Service
- Southeast Region
- Southeast Center

United States Coast Guard
United States Environmental Protection Agency, Region IV
Center for Marine Conservation
Gulf of Mexico & Mid-Atlantic Fishery Management Councils
Florida League of Anglers
South Atlantic Fisheries Development Foundation
Marine Advisory Agents
National Coalition for Marine Conservation
North Carolina Fisheries Association, Inc.
Southeastern NC Waterman's Association
Organized Fishermen of Florida
Southeastern Fisheries Association
Sportfishing Institute

7.0 APPLICABLE LAW

A. VESSEL SAFETY CONSIDERATIONS

PL. 99-659 amended the Magnuson Act to require that a fishery management plan or amendment must consider, and may provide for, temporary adjustments (after consultation with the U.S. 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 management regulations set forth in this amendment to the Spiny Lobster Fishery Management Plan. Therefore, no management adjustments for fishery access will be provided.

There are no fishery conditions, management measures, or regulations contained in this amendment which would result in the loss of harvesting opportunity because of crew and vessel safety effects of adverse weather or ocean conditions. No concerns have been raised by people engaged in the fishery or the Coast Guard that the proposed management measures directly or indirectly pose a hazard to crew or vessel safety under adverse weather or ocean conditions. Therefore, there are no procedures for making management adjustments in this amendment due to vessel safety problems because no person will be precluded from a fair or equitable harvesting opportunity by the management measures set forth.

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

B. COASTAL ZONE CONSISTENCY

Section 307(c)(1) of the Federal Coastal Zone Management Act of 1972 requires that all federal activities which directly affect the coastal zone be consistent with approved State coastal zone management programs to the maximum extent practicable. While it is the goal of the Council to have complementary management measures with those of the states, federal and state administrative procedures vary and regulatory changes are unlikely to be fully instituted at the same time. Based upon the assessment of this amendment's impacts in previous sections, the Council has concluded that this amendment is an improvement to the federal management measures for the spiny lobster fishery.

This determination has been submitted to the responsible state agencies for their review.

C. ENDANGERED SPECIES AND MARINE MAMMAL ACTS

The following information summarizes the Section 7 consultation process under the Endangered Species Act on this biological assessment of the spiny lobster fishery of the Gulf of Mexico and South Atlantic Region and the proposed management measures contained in Amendment 4 to the Fishery Management Plan for the Spiny Lobster Fishery of the Gulf of Mexico and South Atlantic Region. (Source: Memorandum from Georgia Cranmore to Chuck Oravetz dated March 16, 1993)

1.0 Spiny Lobster Fishery of the Gulf of Mexico and South Atlantic

1.1 Description of the Fishery

The fishery management unit includes the spiny lobster (*Panulirus argus*) and the slipper (Spanish) lobster (*Scyllarides nodifer*) in the coastal waters and the exclusive economic zone (EEZ) of the U.S. Gulf of Mexico and South Atlantic from the Texas/Mexico border to the Virginia/North Carolina border. Commercial and recreational fisheries for spiny lobster are limited primarily to southeastern Florida and the Florida Keys. Slipper lobster are taken incidentally by shrimp trawls in the EEZ off west Florida and the Florida Panhandle.

Most spiny lobster are landed in Monroe County. Traps made of wood slats and wore mesh are the principle gear in the commercial fishery. Lobster are also taken by hand by recreational and commercial divers. Trawls are not allowed in the directed fishery. Most divers use SCUBA in the channels under the Overseas Highway and in other shallow habitats between the Florida Keys and the offshore reef tract. Significant commercial diving occurs in Florida Bay south of the Everglades National Park and into the Gulf of Mexico. A small amount of recreational catch is taken with lights and bully nets at night on shallow flats and bays.

Little fishing effort for spiny lobster occurs north of Monroe County on the west coast of Florida. The majority of lobsters caught outside Monroe County come from the east coast, off Dade and Broward Counties. Commercial harvest by diving is not common in Dade County. Commercial trapping is sharply curtailed north of Broward County. Limited diving effort, primarily recreational, occurs as far north as the West Palm Beach area.

The commercial and recreational fishing season in the EEZ begins on August 6 and ends on March 31. Currently, a 2-day special recreational season is scheduled for the last full weekend in July. Landings ranged from 4.5 million pounds (MP) in 1983 to 7.8 MP in 1989. The number of traps used in the fishery increased from 74,000 in 1960 to 675,000 in 1984 and a trap reduction program is currently underway in Florida. The current estimate of the number of traps in use is 650,000-850,000 (1991). In 1989, the average number of traps per vessel was 1,368.

Productivity in terms of pounds landed per trap per year has remained relatively stable during the 1980s, but pounds per vessel increased due to an increase in the number of traps fished per

vessel. The commercial sector is estimated at about 1,300 individuals. Monroe County and the Miami area accounted for about 75% of the commercial license holders and 75% of the lobster landings.

The fishery has a large recreational component, which accounts for about 41% of total landings during the first month of the 1991-92 regular season and about 29% of the 1990-91 total commercial harvest. The 1991 harvest of lobsters during the 2-day special season was an estimated 403,000 lobsters (about 435,240 lbs). The Florida Keys accounted for 78% (315,795 lobsters) A smaller but significant recreational harvest occurred along the Florida east coast (82,930 or 21%). Catch rates (lobsters caught per day) in the Florida Keys were more than twice those of other areas in Florida.

According to a 1991 mail survey of recreational lobster fishermen conduced by Florida Department of Natural Resources, the size of groups diving for lobsters during the 2-day season averages 4.1 (Palm Beach to the Florida Keys), but the catch rate per group (measured as lobsters caught per day) was 19.6 in the Florida Keys and only 9.8 on the southeast coast of Florida. Thus, each fisherman averages 4.8 lobsters per day during the 2-day season in the Keys, and 2.4 lobsters per day outside the Keys. It appears that the 6-lobster bag limit is not affecting catch rates in either area. A proposed increase to a 12-lobster bag limit in the Florida EEZ outside Monroe County is not expected to increase catch rates overall but may redistribute effort away from the Florida Keys.

1.2 Interactions with Endangered Species

The habitats of five species of threatened or endangered sea turtles are known to overlap with the habitat of the spiny lobster in the U.S. South Atlantic and the Gulf of Mexico: Kemp's ridley (*Lepidochelys kempii*), loggerhead (*Caretta caretta*), green (*Chelonia mydas*), hawksbill (*Eretmochelys imbricata*), and leatherback (*Dermochelys coriacea*).

Loggerhead turtles eat spiny lobsters and are known to damage spiny lobster traps. Florida Keys fishermen claim that they must reinforce their traps with wire mesh to prevent turtle damage. This attraction to the traps could result in sea turtle entanglement in buoys or trap lines. Anecdotal information indicates that there is some unknown level of sea turtle mortality associated with entanglement in lobster trap lines. (Some species of marine mammals are known to entangle in lobster pot lines in Maine fisheries.) Recreational and commercial fishermen who dive for lobsters are not known to have any significant conflict or interaction with sea turtles.

No directed trawl fishery for spiny or slipper lobster is allowed; however, trawlers take lobsters incidental to shrimp operations. There is a catch limit of 5% by weight of all fish aboard for this incidental harvest. The potential for incidental takes of endangered and threatened sea turtles in the shrimp fishery is the subject of Section 7 consultations on the FMPs for the shrimp fisheries of the Gulf of Mexico and the South Atlantic.

Increased boating activities associated with trap and dive fisheries for spiny lobster in shallow habitats, especially surrounding the Florida Keys, could increase the risk of vessel collisions with sea turtles (and marine mammals). Water pollution associated with the operation or storage of lobster vessels, including the large number of recreational vessels that assemble for the sport season in the Florida Keys, could adversely impact sea turtle (and marine mammals). The extent to which vessel activities associated with this fishery affect endangered and threatened sea turtles and their impact on the status of theses populations is presently unknown.

1.3 Federal and State Regulatory Jurisdictions

Spiny lobster are managed under Federal regulations (50 CFR Part 640) and under regulations of the Florida Marine Fisheries Commission (Chapter 46-24, F.A.C.). Other states, from North Carolina through Texas in the southeastern U.S., have no appreciable commercial or recreational landings and not state regulations on spiny lobster. The Federal EEZ extends from 3 to 200 nautical miles in the U.S. South Atlantic and the Gulf of Mexico, except for Florida (and Texas) where state waters on the Gulf coast extend out to 9 nautical miles.

1.4 Proposed Amendment 4

Amendment 4 will allow the harvest of two lobsters per person per day for all fishermen all year long but only north of the Florida/Georgia border and will exempt the incidental catch of spiny lobsters by headboat hook-and-line vessels while limiting them to five lobsters per headboat per day (applies throughout the entire South Atlantic Council's area of jurisdiction). These measures are proposed to provide increased access to the spiny lobster resource by recreational fishermen north of Florida and headboat fishermen in the South Atlantic.

1.5 Previous Section 7 Consultations

All previous consultations on this FMP and its amendments have concluded that management actions are not likely to jeopardize the continued existence of threatened or endangered sea turtles or marine mammals, or result in the destruction, or adverse modification, of habitat that may be critical to these species. Section 7 consultations were held on the FMP (1980; 1989), on Plan Amendment 2 (1989) and 3 (1990), and on Regulatory Amendment 1 (1992) and 2 (1993).

1.6 Conclusion

Insofar as we can determine, neither the directed fisheries nor the proposed Amendment for spiny lobster will adversely affect the recovery of endangered or threatened species, or their critical habitat.

D. PAPERWORK REDUCTION ACT

The purpose of the Paperwork Reduction Act is to control paperwork requirements imposed on the public by the federal government. The authority to manage information collection and record keeping requirements is vested with the Director of the Office of Management and Budget. This authority encompasses establishment of guidelines and policies, approval of information collection requests, and reduction of paperwork burdens and duplications.

The Council does not propose additional permit and data collection programs within this amendment.

E. FEDERALISM

No federalism issues have been identified relative to the actions proposed in this amendment and associated regulations. The affected state have been closely involved in developing the proposed management measures and the principal state officials responsible for fisheries management in their respective states have not expressed federalism related opposition to adoption of this amendment.

F. NATIONAL ENVIRONMENTAL POLICY ACT — FINDINGS OF NO SIGNIFICANT IMPACT (FONSI)

The discussion of the need for this amendment, proposed actions and alternatives, and their environmental impacts are contained in Sections 1.0 and 2.0 of this amendment/environmental assessment. A description of the affected environment is contained in Section 3.0.

The proposed amendment is not a major action having significant impact on the quality of the marine or human environment of the South Atlantic. The proposed action is an adjustment of the original regulations of the fishery management plan to provide greater access by recreational fishermen while protecting the spiny lobster resource from depletion. The proposed action should not result in impacts significantly different in context or intensity from those described in the Environmental Impact Statement (EIS) published with the initial regulations implementing the approved fishery management plan. The preparation of a formal Supplemental Environmental Impact Statement (SEIS) is not required for this amendment by Section 102(2)(c)(c) of the National Environmental Policy Act or its implementation regulations.

Mitigating measures related to proposed actions are unnecessary. No unavoidable adverse impacts on protected species, wetlands, or the marine environment are expected to result from the proposed management measures in this amendment.

The proposed regulations will protect the resource from depletion, better achieve the objectives of the fishery management plan, and lessen the environmental impacts of the fishery. Overall, the benefits to the nation resulting from implementation of this amendment are greater than management costs.

Finding of No Significant Environmental Impact (FONSI)

The Council's preferred action is to provide greater access to recreational fishermen with a year-round bag limit and exemption for hook-and-line headboat fishermen. Section 4.0 describes the Council's management measures in detail.

Section 1508.27 of the CEQ Regulations list 10 points to be considered in determining whether or not impacts are significant. Impacts of these actions are relative to the individuals that will be required to forego catches in the short-term and to the individuals, and society, in the long-term, because higher and more stable catches will be maintained. The analyses presented below are based on the detailed information contained in Section 4.0 Environmental Consequences including the Regulatory Impact Review and Regulatory Flexibility Determination.

Beneficial and Adverse Impacts

There are beneficial and adverse impacts from the proposed actions. The impacts are described for each action in Section 4.0 (See Section 4.0, Items G. Summary of Impacts and I. Effects on Small Businesses) and summarized in Section 2.0. Overall, the adverse impacts of the minimum size limits are expected to be minor. Beneficial impacts are unquantifiable but preventing overfishing will ensure the long-term economic viability of the recreational and commercial fisheries.

The beneficial and adverse impacts as analyzed in Section 4.0 are not significant.

Public Health or Safety

The proposed actions are not expected to have any significant adverse impact on public health or safety.

Unique Characteristics

The proposed actions are not expected to have any significant adverse impact on unique characteristics of the area such as proximity to historic or cultural resources, park lands, wetlands, or ecologically critical areas. Appendix B in Spiny Lobster Amendment 2 contains information on habitat concerns. The Council's positions on a number of habitat related issues are presented in that appendix. The Council evaluated the effects of the fishery on the environment (Section 4.0, Item F) and concluded that the fishery, as presently prosecuted, does not significantly impact the live bottom habitat that is essential to spiny lobster under Council management.

Controversial Effects

The proposed actions are not expected to have any significant controversial issues. The Council has provided for extensive input by the public through committee and Council meetings that are open to the public, by providing copies of the amendment to the list of agencies and organizations

listed in Section 6.0, through meetings with the spiny lobster advisory panel, by holding 4 scoping meetings, through public hearings and by providing the opportunity for interested persons to provide written comments. During development of this amendment, the Council has incorporated suggestions from the public, and the final document well address all comments and suggestions received.

Uncertainty or Unique/Unknown Risks

The proposed actions are not expected to have any significant effects on the human environment that are highly uncertain or involve unique or unknown risks. Benefits from management cannot be quantified but the direction and relative magnitude are known and are positive. If the proposed actions were not implemented there would be a high level of uncertainty as to the future status of the species being managed.

Precedent/Principle Setting

The proposed actions are not expected to have any significant effects by establishing precedent and do not include actions which would represent a decision in principle about a future consideration.

Relationship/Cumulative Impact

The proposed actions are not expected to have any significant cumulative impacts that could have a substantial effect on the spiny lobster resource or any related stocks, including sea turtles. (See Section 4.0, Item G. Summary of Impacts and I. Effects on Small Businesses).

Historical/Cultural Impacts

The proposed actions are not expected to have any significant effects on historical sites listed in the National Register of Historic Places and will not result in any significant impacts on significant scientific, cultural, or historical resources.

Endangered/Threatened Impacts

The proposed actions are not expected to adversely affect any endangered or threatened species or marine mammal population. (See Section 7, Item C. Endangered Species and Marine Mammal Acts.) A Section 7 consultation was conducted with the NMFS Southeast Regional Office. A biological assessment was prepared which concluded that the proposed actions will not adversely affect any threatened or endangered species or marine mammals.

Interaction With Existing Laws for Habitat Protection

The proposed actions are not expected to have any significant interaction which might threaten a violation of Federal, State or local law or requirements imposed for the protection of the environment. The Council has adopted a number of positions that protect the habitat supporting the spiny lobster resource. These positions are contained in Appendix B. Habitat Concerns (Spiny Lobster Amendment 2).

Additional points analyzed by the Council in determining that a SEIS was not necessary are presented below. The Council will be preparing a SEIS as a part of the next amendment to the spiny lobster fishery management plan.

Effects of the Fishery on the Environment

Appendix B (Spiny Lobster Amendment 2) contains information on habitat concerns. The Council's positions on a number of habitat related issues are presented in this appendix. The Council evaluated the effects of the fishery on the environment (Section 4.0, Item F) and concluded that the fishery, as presently prosecuted, does not significantly impact the live bottom habitat that is essential to the reef species under Council management.

Bycatch

The measures in this Amendment will not impact bycatch and do not have bycatch considerations.

Having reviewed the environmental assessment and the available information relating to the proposed actions, I have determined that there will be no significant environmental impact resulting from the proposed actions.

Approved: _____

Assistant Administrator for Fisheries Date

8.0 REFERENCES

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Harris, K.C., A.J. Chester, G.N. Johnson, and C.W. Krouse. 1993. The 1992 South Atlantic snapper-grouper logbook survey. NMFS/SEFSC Beaufort Laboratory, 101 Pivers Island Road, Beaufort, NC 28516. June 1993. 27 pp. plus tables and figures.

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NMFS. 1991. Operational guidelines: fishery management plan process. October 1992.

Jones, A.C. 1993. Examination of spiny lobster directed fishing effort data as contained in the 1991 Marine Recreational Fishery Statistics Survey. NOAA/NMFS/SEFSC Miami Laboratory, 75 Virginia Beach Drive, Miami, FL 33149. 17 pp.

Schmied, R.L. 1993. A characterization of the directed and incidental take of spiny lobster by sport divers in offshore waters of the southeastern United states. NMFS/SERO, 9721 Executive Center Drive, North, St. Petersburg, Florida 33702. 4 pp.

Vondruska, J. 1992. Economic assessment, Florida spiny lobster fishery. NMFS/SERO, 9721 Executive Center Drive, North, St. Petersburg, Florida 33702. July 31, 1992. 28 pp.