

**DRAFT OPTIONS DOCUMENT
AMENDMENT 10
TO THE FISHERY MANGEMENT PLAN FOR SPINY LOBSTER
IN THE GULF OF MEXICO AND SOUTH ATLANTIC**

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ABBREVIATIONS USED IN THIS DOCUMENT

ABC	Acceptable biological catch
ACL	Annual catch limit
ACT	Annual catch target
AM	Accountability measure
EC	Ecosystem component species
EEZ	Exclusive economic zone
ESA	Endangered Species Act
F	Fishing mortality
FCZ	Fishery Conservation Zone
FMP	Fishery management plan
FMU	Fishery management unit
FWC	Florida Fish and Wildlife Conservation Commission
GMFMC	Gulf of Mexico Fishery Management Council
MFMT	Maximum fishing mortality threshold (overfishing threshold)
MRFSS	Marine Recreational Fisheries Statistics Survey
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
MSST	Minimum stock size threshold (overfished threshold)
MSY	Maximum sustainable yield
NMFS	NOAA's National Marine Fisheries Service
NS1	National Standard 1 (in the Magnuson-Stevens Act)
OFL	Overfishing limit
OY	Optimum yield
SAFMC	South Atlantic Fishery Management Council
SDC	Status determination criteria
SPR	Spawning potential ratio
SSB	Spawning stock biomass
SSC	Scientific and Statistical Committee
TAC	Total allowable catch

1.0 INTRODUCTION

Explanation of Requirements to Meet National Standard 1 Guidelines

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

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

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

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

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

Amendment 1 to the Fishery Management Plan for Spiny Lobster in the Gulf of Mexico and South Atlantic consisted of the Caribbean spiny lobster, *Panulirus argus*, and other incidental species of spiny lobster (i.e., spotted spiny lobster, *Panulirus guttatus*; smoothtail spiny lobster, *Panulirus laevicauda*; Spanish slipper lobster, *Scyllarides aequinoctialis*, and ridged slipper lobster, *Scyllarides nodifer*) which inhabit or migrate through coastal waters and the fishery conservation zone now named the exclusive economic zone of the Gulf of Mexico and the South Atlantic (GMFMC-SAFMC 1986). Only two of the species, Caribbean spiny lobster and ridged slipper lobster are listed under the Fishery Management Unit. The other species in the Fishery Management Plan (i.e., spotted spiny lobster, smoothtail spiny lobster, and Spanish slipper lobster) may fall under the ecosystem component species.

An annual catch limit for a given stock or stock complex can be established in several ways, either a single annual catch limit for the entire fishery, divided into sector annual catch limits (i.e., recreational and commercial sectors), divided into sector and gear types (i.e., recreational, commercial diving, bully netting, and commercial trapping), or divided into state-federal annual catch limits. In any of these cases, the sum of the annual catch limits cannot exceed the acceptable biological catch.

Current regulations on the Caribbean spiny lobster, *Panulirus argus*, off the Gulf of Mexico and South Atlantic are summarized in Table 1 and defined in 50 CFR 640.2. Ridged slipper lobster, *Scyllarides nodifer* is the other species in the Fishery Management Unit and codified in the regulations in four sections. The regulations specified for ridged slipper lobster, *Scyllarides nodifer*, discuss conservation and management 50 CFR 640.1 (b), define slipper lobster by genus species 640.2, prohibit harvest of a berried (egg-bearing) lobsters 640.21 9(a), and prohibit the use of poisons and explosives to take slipper lobster in the exclusive economic zone (640.22 9a)(3). The common name Slipper (Spanish) lobster as *Scyllarides nodifer* in the regulations (i.e., 50 CFR 640.2) is not the correct common name according to Williams et al. (1988) and FAO Fisheries Synopsis (1991) authorities on the correct common names of invertebrate species. For the purposes of this document these will be the common names used throughout the rest of the document.

1.1 Distribution and Habitat Information

Family Palinuridae

Caribbean spiny lobster, *Panulirus argus*, are widely distributed throughout the western Atlantic Ocean as far north as North Carolina to as far south as Brazil including Bermuda, the Bahamas, Caribbean, and Central America (Herrnkind 1980; Figure 1). Analyses of DNA indicate a single stock structure for the Caribbean spiny lobster throughout its range (Lipcius and Cobb 1994; Silberman and Walsh 1994). This species inhabits shallow waters, occasionally as deep as 90 m, possibly even deeper. Caribbean spiny lobster can be found among rocks, on reefs, in grass beds or in any habitat that provides protection. The species is gregarious and migratory. Maximum total body length recorded is 45 cm, but the average total body length for this species is 20 cm (FAO Fisheries Synopsis 1991).



Figure 1. Distribution of Caribbean spiny lobster (Source: FAO Fisheries Synopsis 1991; Joint CFMC-GMFMC-SAFMC Amendment 8 2008).

Spotted spiny lobster, *Panulirus guttatus*, range includes the western Atlantic, Bermuda, Bahamas, South Florida, Belize, Panama, and Venezuela, as well as the Caribbean from Cuba to Trinidad, Curacao, and Bonaire (Figure 2). This species prefers shallow water and inhabits rocky areas, mainly in crevices. Maximum total body length recorded is 20 cm, but the average total body length for this species is 15 cm (FAO Fisheries Synopsis 1991). This species is occasionally caught in traps, typically set for other species, such as the Caribbean spiny lobster (FAO Fisheries Synopsis 1991).

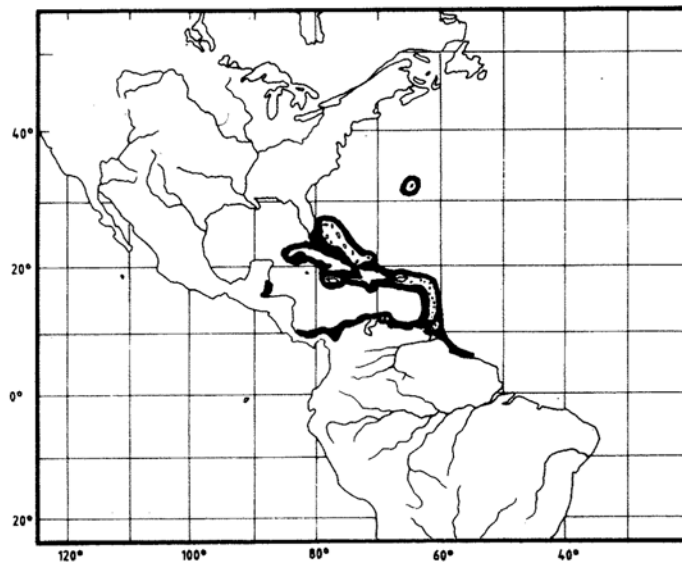


Figure 2. Distribution of spotted spiny lobster, *Panulirus guttatus* (Source: FAO Fisheries Synopsis 1991).

Smoothtail spiny lobster, *Panulirus laeviscauda*, range includes the western Atlantic, Bermuda, South Florida, down into Brazil, as well as Central America, and the Caribbean (Figure 3). This species is found in coastal waters, as deep as 50 m and prefers rock or coral reef substrate as habitat. Maximum total body length recorded is 31 cm, but the average total body length for this species is 20 cm. Sometimes smoothtail spiny lobsters are taken together with Caribbean spiny lobster. The largest yield for this species is in Brazil (FAO Fisheries Synopsis 1991).

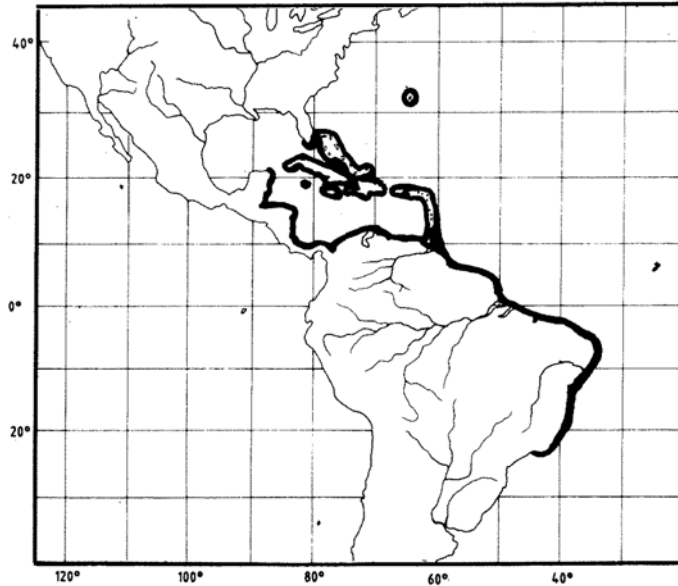


Figure 3. Distribution of smoothtail spiny lobster, *Panulirus laeviscauda* (Source: FAO Fisheries Synopsis 1991).



Photograph 1. From left to right the following species are: Caribbean spiny lobster, smoothtail spiny lobster, spotted spiny lobster (Photograph from Florida FWC website).

Family Scyllaridae

Spanish slipper lobsters, *Scyllarides aequinoctialis*, are distributed in the western Atlantic Ocean, as far north as South Carolina down to Brazil including Bermuda, the Gulf of Mexico, and the Caribbean. This species depth distribution ranges from 0.6 to 180 m, usually between 0.6 and 64 m. This species preferred habitat is sand or rocks, often on high-relief coral reefs in crevices (FAO Fisheries Synopsis 1991; Sharp et al. 2007). The animals are sluggish and nocturnal and feed on algae and detritus. They bury themselves in the sand. Maximum total body length recorded is 30 cm, but average carapace length is 12 cm (FAO Fisheries Synopsis 1991; Sharp et al. 2007).



Figure 4. Distribution and photograph of Spanish slipper lobster, *Scyllarides aequinoctialis* (Source: FAO Fisheries Synopsis 1991; Photograph by J. Hunt 2009).

Ridged slipper lobster, *Scyllarides nodifer*, are distributed throughout the western Atlantic Ocean, south of Cape Lookout, North Carolina, Bermuda, and the entire Gulf of Mexico (Figure 5). This species is typically found in the Florida Keys and Dry Tortugas (FAO Fisheries Synopsis 1991). Ridged slipper lobster depth distribution ranges between 2 and 91 m and prefer sandy substrate, sometimes mixed with mud, shell, or corals. They are often found on low-relief coral reefs and bury themselves in sediments during daylight hours (Sharp et al. 2007). Maximum total body length recorded is 35 cm, but average carapace length is 11 cm (FAO Fisheries Synopsis 1991; Sharp et al. 2007).

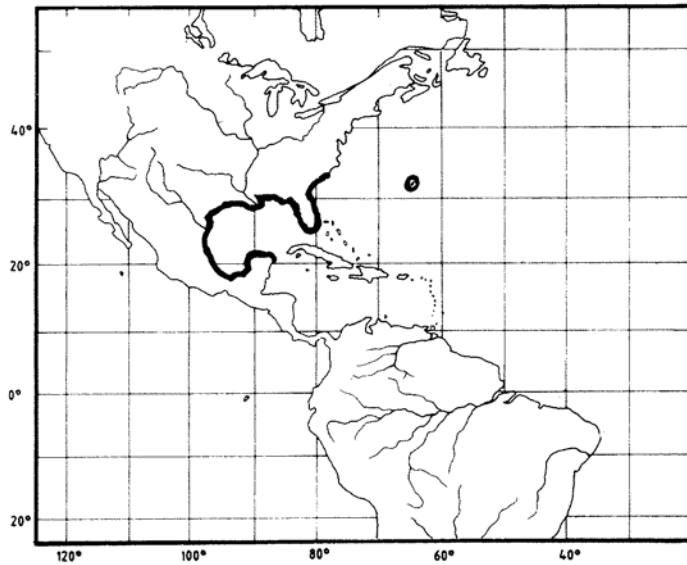


Figure 5. Distribution and photograph of ridged slipper lobster (Source: FAO Fisheries Synopsis 1991; Photograph by J. Hunt 2009).

2.0 PURPOSE AND NEED

Revisions to the Magnuson-Stevens Fisheries Management and Conservation Act (Magnuson-Stevens Act) in 2006 require Fishery Management Plans (FMPs) establish a mechanism for specifying annual catch limits. Annual catch limits must be set at a level that prevents overfishing and does not exceed the recommendations of the respective Councils' Scientific and Statistical Committees or other established peer review processes. Fisheries Management Plans also are required to establish accountability measures, which are management controls that ensure the annual catch limits, are not exceeded or provide corrective measures if overages occur. For stocks determined by the Secretary of Commerce to be subject to overfishing, annual catch limits and accountability measures must be effective in 2010; for all other stocks managed under an FMP, except species with annual life cycles, annual catch limits and accountability measures must be effective in 2011. No species in the Spiny Lobster FMP is undergoing overfishing. The Gulf of Mexico and South Atlantic Fishery Management Councils intend to meet the 2011 deadline through Amendment 10 to the Spiny Lobster FMP.

The highest landings and most federal regulations are for the Caribbean spiny lobster (*Panulirus argus*). One action under consideration would delegate some Caribbean spiny lobster

regulations (e.g., bag/possession limits and size limits) to the Florida Fish and Wildlife Conservation Commission (FWC). The Caribbean spiny lobster fishery occurs mainly off the state of Florida. The commercial fishery for Caribbean spiny lobster landed 59% of their catch from state waters, 6% of their catch from Gulf federal waters, and 35% from Atlantic federal waters from 1999 through 2008 (FWC, Marine Fisheries Information System 2009). Recreational landings, other than the state of Florida are not recorded from state or federal waters by coast. If regulations under the Spiny Lobster FMP are delegated to Florida FWC, NOAA Fisheries Service would still need to meet the annual catch limit and accountability measures requirements of the Magnuson-Stevens Act.

Four other species of lobster are within the Fishery Management Plan for Spiny Lobster in the Gulf of Mexico and South Atlantic: the smoothtail spiny lobster (*Panulirus laeviscaus*), the spotted spiny lobster (*Panulirus guttatus*), the Spanish slipper lobster (*Scyllarides aequinoctialis*), and the ridged slipper lobster (*Scyllarides nodifer*). Only the ridged slipper lobster is specified in the regulations; the other species are in the management unit for data collection purposes only. Landings information is not available on the smoothtail and spotted spiny lobsters. Low numbers of these species may be landed as Caribbean spiny lobster in either the commercial or recreational sector, but no records are available at this time. Spanish and ridged slipper lobsters also occur in federal waters along the west coast of Florida and are landed primarily as bycatch in shrimp trawls. Because landings information is scarce and incomplete, setting annual catch limits would be difficult for these species. The Councils could list these four species as ecosystem components or remove them from the FMP; in either case, annual catch limits and accountability measures would not be required.

Current definitions of maximum sustainable yield, optimum yield, overfishing, and overfished were set for Caribbean spiny lobster in Amendment 6. Currently, the Gulf of Mexico and South Atlantic Council have different definitions for each of criteria. The Councils may modify these definitions based on the results of the upcoming stock assessment and the recommendation of the Scientific and Statistical Committees. A single definition for each biological reference point would simplify management.

The implementation process for a plan amendment can take over a year from initial scoping to final implementation. Framework procedures provide a mechanism for timelier implementation of routine actions such as setting annual catch limit, and a guideline for implementing such actions in a consistent manner. The framework procedure in the Fishery Management Plan for Spiny Lobster of the Gulf of Mexico and South Atlantic was set in Amendment 2 and allows changes to be made to gear and harvest restrictions. Under the reauthorized Magnuson-Stevens Act and the 2008 amended guidelines for National Standard 1 [74 FR 3178], annual catch limits and, if selected by the Council, annual catch targets should also be adjusted by framework. Revision of the current framework procedure would allow such adjustments. Amendment 2 also contains a process for the State of Florida to propose modifications to regulations. This process is now outdated and needs to be updated.

Two current federal regulations may be causing detrimental impacts to the resource as well as creating enforcement problems. First, under certain situations and with a federal tailing permit,

Caribbean spiny lobster tails may be separated from the body onboard a fishing vessel. This allowance creates difficulties for law enforcement in determining if hooks and spears were used to harvest the resource. Second, up to 50 Caribbean spiny lobsters under the minimum size limit may be retained aboard a vessel provided they are held in a live well aboard a vessel. When in a trap, such juveniles or “short” lobsters are used to attract other lobsters for harvest. This regulation increases the fishing mortality on juvenile lobsters and may facilitate their illegal trade. The Council is considering modifying or repealing these two regulations.

On August 27, 2009, an Endangered Species Act biological opinion evaluating the impacts of the continued authorization of the spiny lobster fishery on Endangered Species Act listed species was completed. The opinion concluded the continued authorization of the fishery may adversely affect, but would not jeopardize, the continued existence of elkhorn and staghorn coral, five species of sea turtle (green, hawksbill, Kemp’s ridley, leatherback, and loggerheads), and smalltooth sawfish. The opinion authorized a limited amount of incidental take for these species and prescribed non-discretionary reasonable and prudent measures, to help minimize the impacts of those takes. Specific terms and conditions required to implement the prescribed reasonable and prudent measures include: creating new or expanding existing closed areas to protect coral, allowing the public to remove trap-related marine debris, and implementing trap line-marking requirements. The Councils are considering alternatives to meet these requirements.

3.0 MANAGEMENT ALTERNATIVES

3.1 Action 1: Delegate Management of the Joint Spiny Lobster FMP to Florida FWC

Alternative 1: No Action – Continue the current state and federal management system

Alternative 2: Delegate all management to Florida FWC, but still set an ACL

Alternative 3: Delegate certain management criteria to Florida FWC, and set an ACL

Management criteria to delegate include:

Option a: Numerical specification of ACL and breakdown into sector-specific ACLs based on the definitions later in document

Option b: Commercial quotas and recreational allocations based on the allocations specified later in this document

Option c: Size limits

Option d: Bag limits

Option e: Trip limits

Option f: Permit endorsements

Option g: Fishing seasons

Option h: Application of the AMs, including closing the fishery when a sector reaches its quota and/or allocation

Option i: Rules and regulations traps, including gear marking, tagging, etc.

Option j: Data collection and reporting requirements

Option k: Closed areas

Discussion and Rationale: The Fishery Management Plan for Spiny Lobster has been jointly managed by the two Councils since 1982. In 1989, the Fishery Management Plan was amended to establish compatible regulations between the federal and state fisheries. Thereafter, the Florida FWC has taken the lead in Caribbean spiny lobster fishery management, with NOAA Fisheries Service establishing compatible regulations when applicable. The commercial fishery is currently managed with a trap limitation and permitting program, minimum size limits, closed fishing seasons, gear restrictions, and other prohibitions. The recreational fishery is currently managed with minimum size limits, bag limits, closed fishing seasons, gear restrictions, and other prohibitions (Table 1).

The joint jurisdiction of the two Councils extends from the North Carolina/Virginia border in the South Atlantic to the Texas/Mexico border in the Gulf of Mexico. A majority of the commercial and recreational landings for Caribbean spiny lobster occurs in the waters off Florida (Table 2). Caribbean spiny lobster are also found in waters off other states within the Councils' jurisdiction, but in these areas, low abundance results in low levels of harvest. For example in the Gulf of Mexico, Alabama reported no commercial landings of spiny lobster species (C. Denson, Alabama Marine Resources Division, Alabama Department of Conservation and Natural Resources, personal communication). There were no reported commercial landings for spiny lobster in Mississippi, Louisiana, and Texas and no program currently in place to document recreational landings in any of the states but Florida (Source: http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html).

Table 1. Current commercial and recreational spiny lobster regulations for federal waters of the South Atlantic and the Gulf of Mexico.

	Permits required	Size Limits	Bag/Trip Limits	Closed areas	Closed Season	Gear Restrictions	Other Prohibitions
Commercial	Federal spiny lobster vessel permit except if fishing in federal waters off FL. FL commercial harvester permit required in EEZ off FL. Tailing permit if tailing lobster.	Carapace must be more than 3" measured in the water, separated tails must be at least 5.5"	Off of NC, SC, and GA, 2 per person. 6 lobster bag limit off FL and other Gulf states.	None	FL and other Gulf states: April 1 through August 5 No closed season off NC, SC, or GA.	No spear, hooks, piercing devices, explosives, or poisons. Degradable panel required on non-wooden traps.	Trap tending at night No taking of spiny lobster that are berried.
Recreational	State permit required.	Carapace must be more than 3" measured in the water.	Off of NC, SC, and GA, 2 per person. 6 lobster bag limit off FL and other Gulf states.	None	FL and other Gulf states: April 1 through August 5 Exception off FL: 2-day non-trap mini-season last Wed and Thurs in July* Off other Gulf states: 2-day non-trap mini-season last Sat and Sun in July	No spear, hooks, piercing devices, explosives, or poisons. Degradable panel required on non-wooden traps.	No taking of spiny lobster that are berried.

- During the 2-day mini-season off FL, the bag limit is 12 per person per day, in or from the EEZ off FL, other than Monroe County. Off Monroe County the bag limit is 6 per person.

From the South Atlantic states off Georgia there were no commercial landings of spiny lobster species from state or federal waters for the years 1999-2008 (J. Califf, Commercial Fisheries Statistics Coordinator, Coastal Resources Division, Georgia Department of Natural Resources,

personal communication). Similarly, in the state waters of South Carolina there were no recorded landings of spiny lobster species. In federal waters, commercial landings between 1991 and 2003, there was one year in which 6 pounds were reported, and between 2004 and 2008, there was one year in which 15 pounds were landed by commercial divers (G. Steele, Biological Statistician, South Carolina Department of Natural Resources, personal communication). In the state waters of North Carolina there were no recorded landings of Caribbean spiny lobster. In 1999, 2000, 2002, and 2005 commercial landings for those species were not recorded by the North Carolina Division of Marine Fisheries (NCDMF). Low landings for Caribbean spiny lobster from federal waters off North Carolina were recorded in 2001, 2003, 2004, 2006, 2007, and 2008. The average landings were 100 pounds live whole animal weight or less by commercial divers. The ex-vessel value for Caribbean spiny lobster species during this time period (i.e., 1999-2008) ranged from \$50 to \$3,500 (A. Bianchi, Trip Ticket Coordinator, North Carolina Division of Marine Fisheries, personal communication). For this reason, the federal fishery is currently managed through regulations affecting the exclusive economic zone off states in three areas: the South Atlantic states not including Florida (North Carolina, South Carolina, and Georgia), the State of Florida, and the Gulf of Mexico states not including Florida (Texas, Louisiana, Mississippi, and Alabama). This division of regulations reflects differences in Caribbean spiny lobster abundance and fishing effort in these regions.

Table 2. Average commercial landings of Caribbean spiny lobsters 1999-2008 for Gulf federal waters, South Atlantic federal waters, and state of Florida waters (both coasts). Average pounds landed are live whole animal weight.

Caribbean Spiny Lobster	Gulf federal	Atlantic federal	Florida state waters
Average Pounds	164,912	998,218	1,709,646
Average # Trips	413	2,976	8,903
Average \$ Value	\$828,149	\$4,878,155	\$8,827,990

Source: Florida Fish and Wildlife Conservation Commission, Marine Fisheries Information System 2009. Note: This data is based on the trip ticket program where only one space is available for waters fished. Fishers could fish in both state and federal waters within one day, based on the season and other fishing behaviors. This table should be viewed with some caution, due to the way the data is recorded and analyzed, there could be additional unaccounted for variability.

Alternative 1, no action would continue the current state and federal management system without setting an annual catch limit for Caribbean spiny lobster. If this alternative was selected as the preferred alternative, the National Standard 1 guideline would not be met in 2011. However, **Alternative 2** or **3** would set an annual catch limit for Caribbean spiny lobster so that the National Standard 1 guideline would be met in 2011. Delegation to Florida would require agreement from Florida FWC to accept the responsibility of Caribbean spiny lobster management. **Alternative 2**, would delegate all management of Caribbean spiny lobster to Florida FWC, but still set an annual catch limit (see Action 4, for setting an annual catch limit).

If **Alternative 2** was selected as a preferred alternative, Florida FWC would use various management criteria to maintain the annual catch limit. This method of management is similar to what is occurring presently, Florida FWC has taken the lead in Caribbean spiny lobster fishery management, with NOAA Fisheries Service establishing compatible regulations when applicable through the Council's processes. One modification from the current management process in addition to setting an annual catch limit is establishing accountability measures. If the annual catch limit was exceeded Florida FWC would need to apply accountability measures, compatible in federal waters to account for these overages, under the National Standard 1 guidelines.

Alternative 3 would also set an annual catch limit, but delegate certain management criteria to Florida FWC, such as size limits, bag limits, fishing seasons and trip limits. This alternative could become more complicated, if and when, the annual catch limit was exceeded the NOAA Fisheries Service would need to implement the previously established accountability measures. If Florida FWC only has certain management criteria or vice versa, then the appropriate criteria for management may be split between the Council's and the Florida FWC, making it more difficult to prevent the annual catch limit from being exceeded or by initiating accountability measures, if and when they were exceeded. The public could also become confused, by management changes coming from NOAA Fisheries Service instead of Florida FWC and compatibility with these regulations. Benefits of delegating all or certain management criteria to Florida FWC is that the state can move faster than the federal system when and if, accountability measures need to be implemented. **Alternatives 2 and 3** would still allow the Council's to maintain their joint Amendment 4 and 8 with the Caribbean Council [73 FR 1148]. This newly implemented amendment prohibits importation of undersized Caribbean spiny lobsters into the U.S.

3.2 Action 2: Other Species in the Joint Spiny Lobster FMP

Alternative 1: No Action – Leave other species in the Fishery Management Plan for Spiny Lobster in the Gulf of Mexico and South Atlantic and do not set annual catch limits

Alternative 2: Set annual catch limits and accountability measures for each species using historical landings

Option a: smoothtail spiny lobster, *Panulirus laevicauda*

Option b: spotted spiny lobster, *Panulirus guttatus*

Option c: Spanish slipper lobster, *Scyllarides aequinoctialis*

Option d: ridged slipper lobster, *Scyllarides nodifer*

Alternative 3: List species as ecosystem component species

Option a: smoothtail spiny lobster, *Panulirus laevicauda*

Option b: spotted spiny lobster, *Panulirus guttatus*

Option c: Spanish slipper lobster, *Scyllarides aequinoctialis*

Option d: ridged slipper lobster, *Scyllarides nodifer*

Alternative 4: Remove species from the Joint Spiny Lobster FMP

Option a: smoothtail spiny lobster, *Panulirus laevicauda*

Option b: spotted spiny lobster, *Panulirus guttatus*

Option c: Spanish slipper lobster, *Scyllarides aequinoctialis*

Option d: ridged slipper lobster, *Scyllarides nodifer*

Discussion and Rationale: The action establishes alternatives for other species currently in Fishery Management Plan for Spiny Lobster in the Gulf of Mexico and South Atlantic. Landings and regulations are established for two species of lobster within the fishery management plan, the Caribbean spiny lobster and the ridged slipper lobster. The Marine Recreational Fisheries Statistics Survey (MRFSS) only collects data on finfish and Florida FWC only documents recreational catch of Caribbean spiny lobster landings. Therefore, no data exists for landings or bycatch of the smoothtail or spotted spiny lobster species. However, there is some information on landings and bycatch of slipper lobsters. Florida FWC documents commercial landings of slipper lobster species by family, meaning that they could be either Spanish or ridged slipper lobster. Even though they are not identified to species level when documented, they are primarily composed of ridged slipper lobster, because it is the only species that commonly occurs in the Florida Keys and attains a size sufficient to be exploited for the industry (Sharp et al. 2007). Additional information on slipper lobsters, identified to the species level is available from the shrimp trawl fishery report to SEDAR (Scott-Denton 2004).

In contrast to the total average Caribbean spiny lobsters landings, slipper lobster species are non-targeted and constitute less than 1% of the total average landings in both federal and state waters of the South Atlantic and Gulf of Mexico (Table 2). The majority of the commercial landings for slipper lobsters, both the Spanish and ridged slipper lobsters occur in federal waters off the Gulf coast (Figure 6). The gear types used to harvest these species by trips were 56% by trawl, 23% by diving, and 19% by traps, which was fairly consistent over the 9 year period. Low landings of slipper lobsters were also documented in federal South Atlantic waters and Florida state waters for the combined coasts. In the Florida Keys, slipper lobster species are bycatch in traps for Caribbean spiny lobster (Sharp et al. 2007).

The Gulf States also had some information on slipper lobster landings. Alabama reported total commercial landings of 10,000 pounds or less whole animal weight of slipper lobsters during the 1999-2008 period. Landings records indicate that these species were incidentally caught from shrimp trawls fishing in federal waters off the west coast of Florida (C. Denson, Alabama Marine Resources Division, Alabama Department of Conservation and Natural Resources, personal communication). There were no reported landings for Mississippi, Louisiana, and Texas for slipper lobster species (Source: http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html). From the South Atlantic states, Georgia had no reported commercial landings of slipper lobster species in either state or federal waters for the years 1999-2008 (J. Califf, Commercial Fisheries Statistics Coordinator, Coastal Resources Division, Georgia Department of Natural Resources, personal communication). In South Carolina, there were no recorded landings of slipper lobster species in state or federal waters (G. Steele, Biological Statistician, South Carolina Department of Natural Resources, personal communication). In the state waters of North Carolina there were no recorded landings of slipper lobsters; however, during the years 1999, 2000, 2002, and 2005 commercial landings for slipper or spiny lobster were not recorded by the North Carolina

Division of Marine Fisheries (NCDMF). (A. Bianchi, Trip Ticket Coordinator, North Carolina Division of Marine Fisheries, personal communication)

Table 2. Average commercial landings of slipper lobsters (slipper) in the family Scyllaridae versus Caribbean spiny lobster (spiny) from 1999 through 2008 for Gulf federal waters, South Atlantic federal waters, and state of Florida landings combined for both coasts. Average pounds landed are live whole animal weight (Source: Florida Fish and Wildlife Conservation Commission, Marine Fisheries Information System 2009).

Average	Gulf federal		Atlantic federal		Florida state waters	
	Slipper	Spiny	Slipper	Spiny	Slipper	Spiny
Pounds	6,527	164,912	996	998,218	839	1,709,646
# Trips	69	413	26	2,976	11	8,903
\$ Value	\$26,580	\$828,149	\$4,080	\$4,878,155	\$3,197	\$8,827,990

Note: This data is based on the trip ticket program where only one space is available for waters fished. Fishers could fish in both state and federal waters within one day, based on the season and other fishing behaviors. This table should be viewed with some caution, due to the way the data is recorded and analyzed, there could be additional unaccounted for variability.

Recreational landings for this species are not recorded because the Florida FWC only documents Caribbean spiny lobster landings and Marine Recreational Fisheries Statistics Survey (MRFSS) only captures recreational finfish landings. However, due to the intense recreational fishery for Caribbean spiny lobster it is suggested that some fishers will harvest slipper lobster species if observed (Sharp et al. 2007). After inspection of intensive creel surveys, which were conducted for Caribbean spiny lobster during the peak season, there was no indication that slipper lobsters are targeted by recreational fishers in the State of Florida and due to their cryptic nature it is unlikely that a substantial recreational fishery would develop (Sharp et al. 2007). It should also be noted that due to the lack of data on slipper lobster species life history, growth rates, and reproductive biology, conducting an effective stock assessment would be difficult (Sharp et al. 2007).

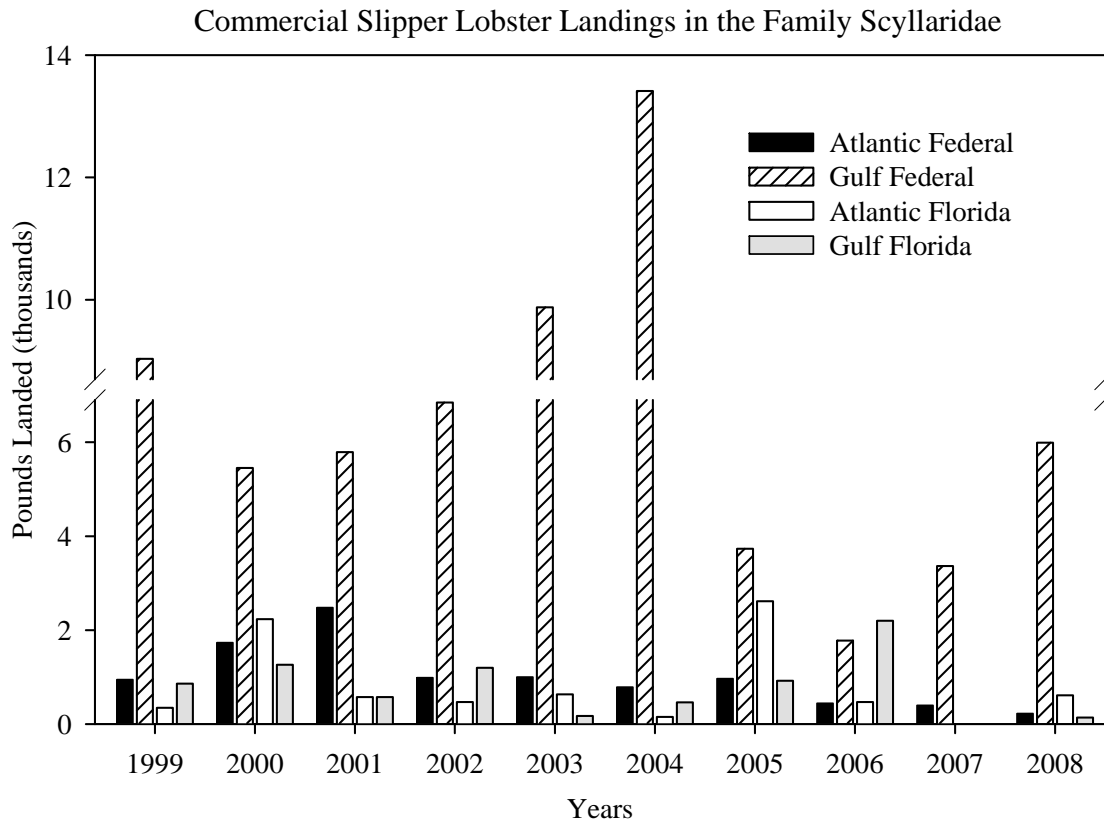


Figure 6. Commercial slipper lobster landings and other species in the family Scyllaridae from 1999 through 2008 by coast in federal and state of Florida waters. (Source: Florida Fish and Wildlife Conservation Commission, Marine Fisheries Information System 2009).

Note: This data is based on the trip ticket program where only one space is available for waters fished. Fishers could fish in both state and federal waters within one day, based on the season and other fishing behaviors. This figure should be viewed with some caution, due to the way the data is recorded and analyzed, there could be additional unaccounted for variability.

In addition, to the commercial landings data from the states on the ridged and Spanish slipper lobster, bycatch information is also available from observer coverage of the U.S. Gulf of Mexico and Southeastern Atlantic Shrimp Fishery (Scott-Denton 2004). The first characterization trip occurred in April 1992 in the Gulf of Mexico, and in June 1992 off the South Atlantic east coast. Bycatch data was collected from one randomly-selected net for each tow. A subsample (approximately 20% of the total catch weight) was processed for species characterization composition. Species weight and number were obtained from the subsample, therefore numbers are for the most part from characterized tows from project “C” and “X” only. During these studies observers did not always specify whether the species was a ridged or Spanish slipper lobster, instead often the family was recorded (i.e., family Scyllaridae). Due to the species being characterized to the family level, one additional species other than the ridged or Spanish slipper lobster was recorded as bycatch, which was the Chace slipper lobster, *Scyllarus chacei*. This species is not currently within the Fishery Management Plan for Spiny Lobster and bycatch of

this species was the lowest of all three species characterized to the species level. Bycatch of all the species characterized, within the fishery management plan is low for both the Gulf of Mexico and South Atlantic waters (Table 3). Ridged slipper lobster was documented more often than Spanish slipper lobster in the Gulf of Mexico, paralleling the State of Alabama and Florida documented landings. The South Atlantic had no historical bycatch recorded of slipper or Caribbean spiny lobsters (1992-1995). Observers also documented low numbers of species in the family Scyllaridae from current landings (2001-2007), with no Caribbean spiny lobster documented as bycatch from South Atlantic waters. A majority of the observer data, from the family Scyllaridae was documented by observers off the west coast of Florida and some off the Louisiana/Texas coast. There was also a low amount of bycatch from the family Scyllaridae documented off the east coast of Florida (Figure 7).

Table. 3. Current and historical bycatch of lobster species documented by observer coverage of the U.S. Gulf of Mexico and Southeastern Atlantic Shrimp Fishery (Source: E. Scott-Denton, NMFS Galveston Laboratory). Species weight and number are obtained from a subsample of tows, characterized in projects “C” and “X” unless the observer had time and expertise to document to the species level.

Lobster species	Gulf (current) (2001-2002)	Atlantic (current) (2001-2007)	Gulf (historical) (1992-1996)	Atlantic (historical) (1992-1995)
Caribbean spiny lobster (<i>Panulirus argus</i>)	19	0	6	0
ridged slipper Lobster (<i>Scyllarides nodifer</i>)	101	1	103	0
Spanish slipper lobster (<i>Scyllarides aequinoctialis</i>)	16	1	41	0
Family Scyllaridae (slipper lobsters: ridged, Spanish or Chace	68	45	0	0
Characterized Tows (Sum)	839	649	1,438	301

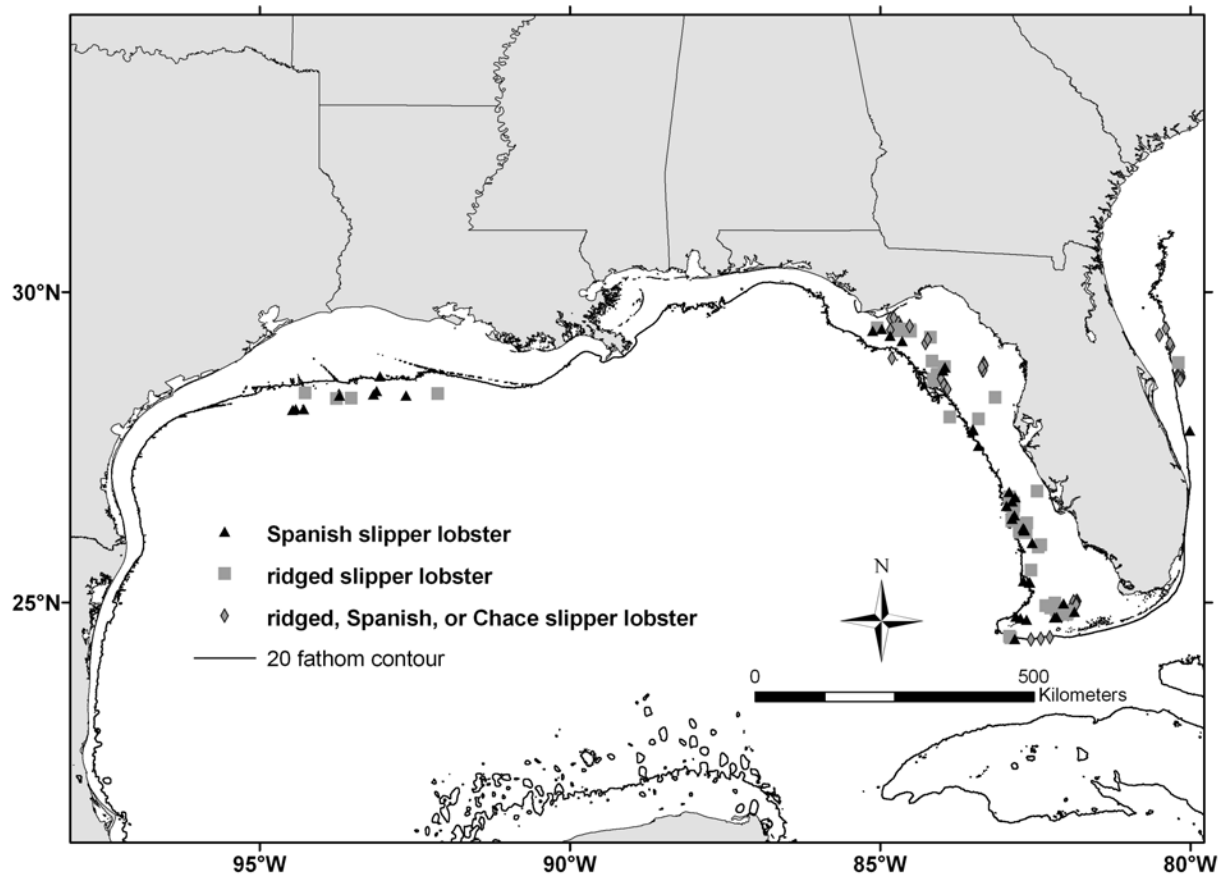


Figure 7. Location of bycatch documented from the observer shrimp trawl coverage of the U.S. Gulf of Mexico and Southeastern Atlantic coast (Source: E. Scott-Denton, NMFS Galveston Laboratory, personal communication).

Alternative 1, no action would leave the other species in the Fishery Management Plan for Spiny Lobster, but not set an annual catch limit. If this alternative was selected as the preferred alternative, the National Standard 1 guidelines would not be met in 2011. **Alternative 2** would set an annual catch limit and accountability measures for each species. Due to there being no historical landings available for two species of spiny lobster, smoothtail and spotted this alternative would be difficult to conduct. However, the other two species of slipper lobsters, Spanish and ridged have commercial landings information, but are not targeted species. **Alternative 3** would list any of the following species as ecosystem component species. The smoothtail and spotted spiny lobsters seem to be good candidates for ecosystem component species, because they are non-targeted, not subject to overfishing or overfish, nor likely to become subject to overfishing or overfished, and not generally retained for sale or personal use. The Spanish and ridged slipper lobsters are non-targeted stocks but do have low average commercial average landings, due to bycatch in the trawl and trap fishery. Florida FWC

estimated that in the last 9 years, 23% of the landings of slipper lobsters have been due to divers. As the Florida FWC trap limitation program proceeds and the commercial dive fishery increases it is possible more of these species might be landed. However, little data exists to suggest commercial divers are targeting them, but instead landing them as well as Caribbean spiny lobsters. Placing these species in the ecosystem component classification, would allow them to remain in the fishery management plan for data collection, but not require setting an annual catch limit. **Alternative 4** would remove any of the following species from the Joint Spiny Lobster Fishery Management Plan. Smoothtail and spotted spiny lobsters have no landings information available and if they do not need to be in the fishery management plan, then it may be appropriate for these species to be removed from the Joint Spiny Lobster FMP.

3.3 Action 3: Modify the Current Definitions of Maximum Sustainable Yield, Optimum Yield, Overfishing Threshold, and Overfished Threshold for Caribbean Spiny Lobster

3.3.1 Maximum Sustainable Yield for Caribbean Spiny Lobster

Alternative 1: No Action- Use the current definitions of maximum sustainable yield as a proxy. The Gulf of Mexico definition: maximum sustainable yield is defined as a harvest strategy that results in at least a 20% transitional SPR (Spawning Stock Biomass per Recruit). The South Atlantic definition: maximum sustainable is defined as a harvest strategy that results in at least a 20% static SPR.

Alternative 2: Modify the Gulf of Mexico definition to the South Atlantic definition of Maximum Sustainable Yield defined as 20% static SPR as a proxy.

Alternative 3: Maximum Sustainable Yield equals the yield produced by fishing mortality at maximum sustainable yield (F_{MSY}) or proxy for F_{MSY} . Maximum sustainable yield will be defined by the most recent SEDAR and joint Scientific and Statistical Committee process.

3.3.2 Optimum Yield for Caribbean Spiny Lobster

Alternative 1: No Action- Use the current definitions of optimum yield. The Gulf of Mexico definition: optimum yield is defined as a harvest strategy that results in at least achieving a 30% transitional SPR (SSBR). The South Atlantic definition: optimum yield for the spiny lobster fishery is the amount of harvest that can be taken by U.S. fishermen while maintaining the spawning potential ratio (SPR) at or above 30% static SPR.

Alternative 2: Modify the Gulf of Mexico definition to the South Atlantic definition of optimum yield: the amount of harvest that can be taken by U.S. fishermen while maintaining the spawning potential ratio (SPR) at or above 30% static SPR.

Alternative 3: Optimum Yield equals the yield produced by F_{OY} . If a stock is overfished, F_{OY} equals the fishing mortality rate specified by the rebuilding plan designed to rebuild the stock to SSB_{MSY} within the approved schedule. After the stock is rebuilt, F_{OY} equals the yield produced by a fraction of F_{MSY} (e.g., 65%, 75% or 85% of F_{MSY} ; Joint Councils to specify).

3.3.3 Overfishing Threshold for Caribbean Spiny Lobster

Alternative 1: No Action - Use the current definitions of overfishing threshold. The Gulf of Mexico definition: overfishing exists when the fishing rate mortality rate (F) results in the transitional SPR being reduced below 20%. The South Atlantic definition: overfishing level as a fishing mortality rate (F) in excess of the fishing mortality rate at 20% static SPR (F20% static SPR).

Alternative 2: Modify the Gulf of Mexico definition to the South Atlantic definition of Overfishing Threshold: a fishing mortality rate (F) in excess of the fishing mortality rate at 20% static SPR (F20% static SPR).

Alternative 3: Specify the Maximum Fishing Mortality Threshold (MFMT) as F_{MSY} or F_{MSY} proxy. The most recent SEDAR and joint Scientific and Statistical Committees will define F_{MSY} or F_{MSY} proxy. This should equal the Overfishing Limit (OFL) provided by the Scientific and Statistical Committees. The Councils will compare the most recent value for the current fishing mortality rate (F) from the SEDAR/SSC process to the level of fishing mortality that would result in overfishing (maximum fishing mortality threshold or MFMT) and if the current F is greater than the MFMT, overfishing is occurring. Comparing these two numbers:

- $F_{CURRENT}/MFMT = X.XXX$

This comparison is referred to as the **overfishing ratio**. If the ratio is greater than 1, then overfishing is occurring.

3.3.4 Overfished Threshold for Caribbean Spiny Lobster

Alternative 1: No Action - Use the current definition of overfished threshold. The Gulf of Mexico is the only Council with a current definition: the proxy for minimum stock size threshold is a SSBR level of 15%. The South Atlantic Council said they would use the framework procedure to add a biomass based component to the overfished definition, due to no biomass levels and/or proxies being available.

Alternative 2: Adopt the Gulf Council overfished threshold definition for the South Atlantic. The Gulf of Mexico definition: proxy for minimum stock size threshold is a spawning stock biomass per recruit (SSBR) level of 15%.

Alternative 3: Specify the Minimum Stock Size Threshold (MSST) as XXX million pounds. The MSST is defined by the most recent SEDAR and joint Scientific and Statistical Committees process. The Councils will compare the current spawning stock biomass (SSB) from the SEDAR and Scientific and Statistical Committees process to the level of spawning stock biomass that could be rebuilt to the level to produce the MSY in 10 years. This is referred to as the minimum spawning stock biomass or MSST. Comparing these two numbers:

- $SSB_{CURRENT}/MSST = Y.YYY$

This comparison is referred to as the **overfished ratio**. If the ratio is less than 1, then the stock is overfished.

Discussion and Rationale: This action explores various alternatives for establishing biological reference points, maximum sustainable yield, optimum yield, overfishing threshold, and overfished threshold. Currently the Gulf of Mexico and the South Atlantic Council's have different definitions for these biological reference points and the South Atlantic Council does not currently have an overfished threshold definition (GMFMC 1999; SAFMC 1998). **Alternative 1** no action would use the current definitions of maximum sustainable yield, optimum yield, overfishing threshold, and overfished threshold, separately for each Council. Due to the spiny lobster fishery being a jointly managed species with a new update assessment taking place in 2010, it might be the best time for the Council's to adopt the same biological reference points in this full amendment.

The Gulf of Mexico definition: maximum sustainable yield is defined as a harvest strategy that results in at least a 20% transitional SPR (SSBR). The South Atlantic definition: maximum sustainable yield is defined as a harvest strategy that results in at least a 20% static SPR. Static SPR versus transitional SPR is also used for the definitions of optimum yield, overfishing and overfished threshold by the Gulf of Mexico. Static spawning potential ratio is calculated on a per-recruit basis assuming equilibrium conditions of recruitment and mortality. Static SPR is more frequently used than transition SPR and requires modest data inputs, whereas transitional SPR requires data from a full age-based stock assessment (Parkes 2001). Transitional SPR is computed on a yearly basis and takes into consideration annual variation in population structure and mortality rates, therefore it is considered a dynamic measure (Slipke and Maceina 2001). The SEDAR 8, 2005 benchmark assessment terms of reference, suggest that static SPR was used is the assessment based on the South Atlantic Fishery Management Council's Spiny Lobster Amendment 6 (SAFMC 1998). Further rationale for using static SPR is based on projected yield streams at equilibrium, versus the current dynamic measure (transitional SPR), which may change in future years from the current estimate. This could make the projections less reliable than using equilibrium recruitment and mortality conditions since stock assessments are not usually completed on an annual basis, static SPR may be a better index to use for yield projections.

Alternative 2 would modify the two definitions of maximum sustainable yield, optimum yield, and overfishing threshold to the South Atlantic Council's definitions which use static SPR instead of transitional SPR. **Alternative 2** under the overfished threshold would adopt the Gulf Council's current definition, which still uses transitional SPR, but could be modified if necessary

to static SPR. **Alternative 3** will modify all biological determination criteria from the current definitions to the most recent SEDAR and joint Scientific and Statistical Committee's process. This alternative would provide the best available science in the update assessment and modify the separate Council definitions into one biological reference point for maximum sustainable yield, optimum yield, overfishing and overfished threshold.

3.4 Action 4: Establish the Following Sector Allocations for Caribbean Spiny Lobster in State and Federal Waters from North Carolina Through Texas

Alternative 1: No action. Do not set sector allocations for Caribbean spiny lobster.

Alternative 2: Allocate the Caribbean spiny lobster ACL as the following: 75% to the commercial trap fishery, 4% to the commercial dive fishery, 1% to the commercial bully net fishery, and 20% to the recreational fishery.

Alternative 3: Allocate the spiny lobster ACL as the following: 70% to the commercial trap fishery, 6% to the commercial dive fishery, 1% to the commercial bully net fishery, and 23% to the recreational fishery.

Alternative 4: Allocate the spiny lobster ACL as the following: 70% to the commercial trap fishery, 3% to the commercial dive fishery, 1% to the commercial bully net fishery, and 26% to the recreational fishery.

Alternative 5: Allocate the spiny lobster ACL as the following: 72% to the commercial trap fishery, 5% to the commercial dive fishery, 1% to the commercial bully net fishery, and 22% to the recreational fishery.

Alternative 6: Allocate the spiny lobster ACL as the following: 72% to the commercial trap fishery, 4% to the commercial dive fishery, 1% to the commercial bully net fishery, and 23% to the recreational fishery.

Discussion and Rationale: **Alternative 1** would prevent establishment of sector ACLs and make it more difficult to track total landings to ensure the ACL is not exceeded. In the South Atlantic Council's area, north of Florida, all fishermen are limited to 2 spiny lobsters per person per day year round which effectively allocates 100% to the recreational sector in this area.

Alternative 2 is based on the "better year" which was the 1998/99 fishing season when the trap fishery had the highest proportion of total landings. This alternative was supported by 10 of the 14 members of the Florida Spiny Lobster Ad Hoc Advisory Board present at the May 23-24, 2006 meeting in Duck Key, Florida. **Alternative 3** is based on a 10-year average (1993/94 – 2002/03) and was supported by 10 of the 14 members of the Florida Spiny Lobster Ad Hoc Advisory Board present at the May 23-24, 2006 meeting in Duck Key, Florida. **Alternative 4** is based on using 1993-94 as the first year for baseline allocations and was supported by 3 of the 14 members of the Florida Spiny Lobster Ad Hoc Advisory Board present at the May 23-24, 2006

meeting in Duck Key, Florida. **Alternative 5** is the average of Alternatives 2 and 3 and was supported by 11 of the 14 members of the Florida Spiny Lobster Ad Hoc Advisory Board present at the May 23-24, 2006 meeting in Duck Key, Florida. This is the consensus recommendation of the Advisory Board for spiny lobster allocations. **Alternative 6** is the average of Alternatives 2, 3, and 4 and was supported by 5 of the 14 members of the Florida Spiny Lobster Ad Hoc Advisory Board present at the May 23-24, 2006 meeting in Duck Key, Florida.

The Councils are using the alternatives and the administrative record developed by the Florida Fish and Wildlife Conservation Commission as the basis for developing allocation alternatives given that the majority of the harvest occurs off the State of Florida and given that the Councils have delegated much of the management to the State of Florida through a protocol established in Spiny Lobster Amendment 2 in 1989. The consensus recommendations of the Spiny Lobster Ad Hoc Advisory Board, including all options evaluated, are presented in a document dated May 2007 (**Appendix A**). The alternatives and rationale is taken from the Facilitator's Summary Report of the May 23-24, 2006 Meeting (**Appendix B**). These documents and other materials related to the Spiny Lobster Advisory Committee are available at: http://www.myfwc.com/RULESANDREGS/MarineFisheries_Workshops.htm

The Florida Fish and Wildlife Conservation Commission (FWC) invited representatives of interests participating in Florida's Lobster Fishery to serve as members of an ad hoc lobster advisory board, "The Spiny Lobster Ad Hoc Advisory Board". The advisory board was designed to bring together a group of stakeholder representatives from around the state who represent the diversity of the lobster fishery community and included commercial lobster trappers, commercial lobster divers, recreational lobster fishers, a special recreational license holder, wholesale lobster dealers, an member of a Non-Governmental Organization, and a representative from the Florida FWC. The goal was to convene a group of representative stakeholders who could provide constructive comments and guidance to the Florida FWC in the form of proposed refinements to the management of Florida's spiny lobster fishery. Over a period of sixteen months the advisory board met approximately eight times for approximately two days each to focus on reviewing and discussing lobster fishery issues and proposals for refinements to Florida's spiny lobster fishery. There were 5 commercial trappers, 3 commercial divers, 3 recreational fishers, 2 wholesale dealers, 2 Non-Governmental Organizations, and 1 Florida FWC representative on the board.

The Advisory Board examined landings records for all sectors of the spiny lobster fishery from fishing seasons 1993/94 through 2003/2004. These data have been updated and are included in detail in **Appendix C** and summarized to show percentages in Table 4. The Advisory Board rounded the percentage harvest by bully nets up to a whole percentage and ignored landings from unknown and other gear categories. The alternatives were developed by splitting the landings into four sectors (commercial trap, commercial diving, commercial bully nets, and recreational). During that time, the allocation of the lobster harvest among the different sectors changed. During the initial years of trap reductions, annual landings were generally higher than they had been in a decade. Landings by commercial divers increased, but because landings were so high, the progressive shift in the landings allocation toward that group appeared subtle. However, a period of lower landings beginning with the 2000/01 season underscored this shift toward the commercial dive fishery and the recreational fishery as well. Regulations limiting harvest of commercial divers were enacted beginning with the 2003/04 season. The effects of these rules

can be seen by comparing allocations in the 2002/03 and 2003/04 seasons. Landings were essentially the same in both seasons, but the harvest share of commercial divers was reduced because of trip limits and banning harvest from artificial habitat. It appears that in high landing years, trappers have a larger harvest share because lobsters are available to be captured later in the season when there is little diving activity. Harvest from casitas is most effective early in the season. [Note: Harvest by casitas was prohibited during 2003.] In low landings years, these early landings make up a larger harvest share than in high landings years. There is a need to understand current allocations in the spiny lobster fishery, how those allocations have shifted over time, and how rule changes have likely impacted allocation.

Current regulations: Commercial Trapping - The spiny lobster trap certificate program, implemented in 1993, reduced the number of trap certificates in the spiny lobster fishery from approximately 939,000 in 1991/92 to 474,000 during the 2004/2005 season, and traps have not been reduced since that time. Commercial Diving - During 2003, the harvest of spiny lobsters from illegal artificial habitat was banned, and the commercial dive trip limit was reduced to 250 lobsters per day in Monroe County (extended to Dade, Broward, Collier and Lee Counties the following year). Recreational Diving: Beginning with the 2003/04 fishing season, the recreational bag limit during the regular season was reduced from 24 per boat or 6 per person, whichever is greater, to 6 per person per day. The bag limit in Biscayne National Park during the Special Two-Day Sport Season was also reduced from 12 to 6 lobsters per person per day. Additionally, the Special Recreational License (SRL) daily bag limit was reduced by 5 lobsters each year beginning in the 2004/2005 season.

So, why does increasing harvest from one sector have the effect of reducing the harvest of another sector? It is because the total lobster harvest each year is largely dependent upon the number of lobster available to be harvested that year and not by the amount of fishing effort expended to catch those lobsters, except in those unusual circumstances where effort is curtailed by extraordinary events such as hurricanes. Across the range of effort in the fishery since approximately 1975, landings and effort have not been related. Good fishing years have occurred with high and low effort, as have poor fishing years. For example, the best year on record for the commercial fishery was 1979 when nearly 7.9 million pounds were landed using ~600,000 traps. In contrast, 1983 was a poor fishing season with a harvest of 4.5 million pounds, again from ~600,000 traps. Similar observations can be made in recent years when landings estimates for all fishing groups were available. During 1999, the fishery (recreational and commercial) harvested 10.1 million pounds from 534,000 traps, 4,377 commercial fishing dive days, and 555,000 recreational fishing days. In contrast, the 2001 harvest of 4.3 million pounds was caught from the same number of traps, 4,538 commercial dive days, and 366,000 recreational fishing days. Furthermore, the size-structure of the lobsters landed by the fishery has remained constant since 1987 as has the average size. The average size has consistently been 3 ¼ inch carapace length (CL), just barely above the minimum legal size. This indicates that the fishery is heavily reliant on a single year class of lobsters each season – those that have just grown to legal size. Fluctuations in harvest are related to fluctuations in the numbers of new recruits to the fishery and not the number of traps, diver-days or recreational fishing days. Put another way, the size of the ‘lobster pie’ each year is determined by the number of lobsters attaining legal size. A change in fishing effort by any one sector simply alters that sector’s piece of the pie.

Table 4. Florida statewide spiny lobster landings by fishing year.

Fishing Season	Com. Trap	% Com. Trap	Com. Dive	% Com. Dive	Com. Bully	% Com. Bully	Com. Other	Com. Unknown	Com. Total	Rec. Total	% Rec.	Com. & Rec. Total
1991/92	3,370,669	39.0%	92,587	1.1%	2,715	0.0%	5,537	3,364,507	6,836,015	1,815,971	21.0%	8,651,806
1992/93	3,934,923	58.5%	148,752	2.2%	1,855	0.0%	6,044	1,276,614	5,368,188	1,352,443	20.1%	6,720,631
1993/94	4,982,625	69.3%	169,545	2.4%	5,967	0.1%	8,423	143,230	5,309,790	1,883,114	26.2%	7,192,104
1994/95	6,808,250	74.9%	253,961	2.8%	18,892	0.2%	4,924	95,614	7,181,641	1,905,995	21.0%	9,087,636
1995/96	6,637,721	74.2%	307,717	3.4%	18,333	0.2%	2,784	50,579	7,017,134	1,930,718	21.6%	8,947,852
1996/97	7,318,618	75.7%	337,971	3.5%	28,206	0.3%	3,292	56,017	7,744,104	1,922,596	19.9%	9,666,700
1997/98	7,147,561	71.9%	397,068	4.0%	25,494	0.3%	13,473	56,581	7,640,177	2,304,186	23.2%	9,944,363
1998/99	5,037,323	74.6%	352,283	5.2%	11,582	0.2%	3,627	42,718	5,447,533	1,302,677	19.3%	6,750,210
1999/00	6,995,609	69.1%	588,461	5.8%	16,765	0.2%	8,192	60,180	7,669,207	2,461,981	24.3%	10,131,188
2000/01	4,856,259	64.5%	635,394	8.4%	12,193	0.2%	5,308	59,553	5,568,707	1,957,643	26.0%	7,526,350
2001/02	2,610,086	60.6%	447,484	10.4%	8,527	0.2%	12,854	312	3,079,263	1,222,982	28.4%	4,305,425
2002/03	3,992,322	67.2%	559,839	9.4%	19,575	0.3%	4,948	708	4,577,392	1,366,743	23.0%	5,944,135
2003/04	3,730,675	68.3%	406,694	7.4%	21,581	0.4%	1,560	1,079	4,161,589	1,300,304	23.8%	5,461,893
2004/05	5,126,178	88.1%	311,438	5.4%	34,167	0.6%	565	1,372	5,473,720	341,655	5.9%	5,815,375
2005/06	2,679,606	68.5%	266,565	6.8%	14,593	0.4%	1,161	1,235	2,963,160	947,353	24.2%	3,910,513
2006/07	4,516,784	76.3%	251,522	4.3%	27,875	0.5%	2,573	739	4,799,493	1,118,344	18.9%	5,917,836
2007/08	3,465,602	71.6%	289,525	6.0%	18,919	0.4%	539	1,250	3,775,835	1,060,095	21.9%	4,838,132
2008/09	2,987,334	69.7%	243,292	5.7%	17,034	0.4%	450	2,144	3,250,259	1,036,466	24.2%	4,285,147

Source: Florida Fish & Wildlife Commission. Updated 9/29/09.

3.5 Action 5: Set Annual Catch Limits and Annual Catch Targets for Caribbean Spiny Lobster

3.5.1 Set Annual Catch Limits (ACL) and for Caribbean Spiny Lobster

Alternative 1: No Action – Do not set annual catch limits

Alternative 2: Set an annual catch limit for the entire stock

Option a: $ACL=ABC$

Option b: $ACL<ABC$

Alternative 3: Set separate state and federal annual catch limits

Option a: $ACL=ABC$

Option b: $ACL<ABC$

Alternative 4: Set annual catch limits for each sector and gear type (i.e., recreational, commercial diving, bully netting, and commercial trapping) based on allocation from Action 4

Option a: $ACL=ABC$

Option b: $ACL<ABC$

Discussion and Rationale: The ACL is set by managers and should take into account management uncertainty. Management uncertainty occurs because sufficient catch information is lacking, and may include late catch reporting, misreporting, and underreporting of catches. Management uncertainty is affected by the ability to control actual catch in the fishery. For example, a fishery with in-season catch data and in-season closure authority has better management control than a fishery without these features. Annual catch limits in coordination with accountability measures must prevent overfishing.

The Caribbean spiny lobster stock was last assessed in 2005. A new assessment is scheduled for 2010; the results of this new assessment are expected to be available to the Councils by December 2010 for incorporation in this amendment. The 2005 assessment determined the stock was not undergoing overfishing based on a static SPR value of 20% (F20%) as set in Amendment 6. However, because the spawning stock includes the entire Caribbean region, spawning biomass at MSY (B_{msy}) or the Minimum Stock Size Threshold (MSST) could not be determined, and therefore the assessment could not determine if the stock is overfished.

The Council Scientific and Statistical Committee's are responsible for recommending an acceptable biological catch control rule and acceptable biological catch for each stock to the Councils. The acceptable biological catch is the level of a stock's annual catch that accounts for the scientific uncertainty in the estimate of the overfishing level and any other scientific uncertainty; in most cases acceptable biological catch will be reduced from overfishing limit to reduce the probability overfishing might occur in a year. For the Caribbean spiny lobster, the joint Scientific and Statistical Committees will recommend an acceptable biological catch after reviewing the 2010 stock assessment.

An annual catch limit for a given stock can be established as either a single annual catch limit for the entire fishery, separate annual catch limits for various sectors or gears, or divided into state

and federal annual catch limits. If more than one annual catch limit is set, the sum of the annual catch limits cannot exceed the acceptable biological catch. One annual catch limit for the entire stock (**Alternative 2**) may be appropriate if sector allocations are not set.

The Caribbean spiny lobster fishery occurs mainly off the state of Florida. Commercial landings data are available from 1984; starting in this year commercial fishermen were required to sell to licensed dealers who were required to submit trip tickets. Separate state and federal annual catch limits (**Alternative 3**) may be appropriate because of the large amount of harvest in state waters. However, federal management would be limited to the portion of the fishery under federal authority.

Sector and gear annual catch limits (**Alternative 4**) may be appropriate if allocations are set, or based on landings data. State commercial landings data are available by gear (trap, diving, and bully net) from the 1991/1992 season through the 2007/2008 season. Recreational landings data in Florida are slightly less complete for the same time period.

The annual catch limit cannot exceed the acceptable biological catch. If a Council recommends an annual catch limit which equals acceptable biological catch (**Option a**), and the acceptable biological catch is equal to overfishing limit, the Council must provide sufficient analysis and justification for the approach or the Secretary of Commerce may presume overfishing will not be prevented.

3.5.2 Set Annual Catch Targets (ACT) for Caribbean Spiny Lobster (*Panulirus argus*)

Alternative 1: No Action – Do not set ACTs

Alternative 2: Set an ACT for the entire stock

Option a: Set $ACT=ACL$

Option b: Set $ACT<ACL$

Alternative 3: Set separate state and federal ACTs (If Action 5, Alternative 2 or 3 chosen)

Option a: Set $ACT=ACL$

Option b: Set $ACT<ACL$

Alternative 4: Set ACTs for each sector and gear type (i.e., recreational, commercial diving, bully netting, and commercial trapping) based on allocations from Action 4

Option a: Set $ACT=ACL$

Option b: Set $ACT<ACL$

Discussion and Rationale: The annual catch target is the amount of annual catch of a stock that is the management target of the fishery, and accounts for management uncertainty in controlling the actual catch at or below the annual catch limit. An annual catch target set less than the annual catch limit to provide a buffer so the risk of exceeding the annual catch limit is reduced and, therefore, the likelihood of triggering accountability measures is reduced. An annual catch target lowers the allowed catch below the annual catch limit, but provides stability for fisheries that are apt to fluctuate around a target catch rate.

Alternative 1 would not set an annual catch target for Caribbean spiny lobster. The NS1 Guidelines do not require annual catch targets be established, but provide that annual catch targets may be used as part of a system of accountability measures. Accountability measures are required regardless of whether annual catch targets are established. If no annual catch target is set, the accountability measures would be based on the annual catch limit.

One annual catch target could be set for the entire Caribbean spiny lobster stock (**Alternative 2**) if Alternative 2 is chosen for Action 5. A single annual catch target would constrain harvest for all sectors and any accountability measures would be triggered simultaneously. Currently, no quotas constrain harvest of Caribbean spiny lobster.

Separate federal/state annual catch targets (**Alternative 3**) would be appropriate if separate annual catch limits are chosen in Action 5, Alternative 3. However, the federal government does not have authority to manage harvest of Caribbean spiny lobster in state waters.

Sector/gear annual catch targets (**Alternative 4**) could be set if separate sector annual catch limits are set (Action 5, Alternative 4) or if a single annual catch limit is set for the stock (Action 5, Alternative 2). In the second case, the accountability measures could be based on the stock annual catch limit allowing one or more of the separate annual catch targets to be exceeded without severe consequences. This might be useful if one group consistently has landings below their allocation and can “absorb” any overage from another group.

If management measures (such as IFQ programs) have a high probability of controlling catch below the target, the annual catch target can be set at or near the annual catch limit (**Option a**). An annual catch target set below the annual catch limit (**Option b**) creates a buffer that can be used to prevent triggering more severe accountability measures that could disrupt the fishery.

3.6 Action 6: Accountability Measures by Sector

Note: More than one alternative, option, or sub-option may be chosen as a preferred.

Alternative 1: No Action – Do not set accountability measures.

Alternative 2: Establish in-season AMs

Option a: Commercial

Sub-option i: quota closure

Sub-option ii: implement a commercial trip limit when 75% of the commercial ACL or ACT is projected to be met.

Option b: Recreational

Sub-option i: quota closure

Sub-option ii: reduce the bag limit when 75% of the recreational ACL or ACT is projected to be met.

Option c: Recreational and commercial combined AM

Sub-option i: prohibit both recreational and commercial harvest when the commercial ACL or ACT, or combined ACL or ACT is projected to be met.

Sub-option ii: reduce the recreational bag limit when 75% of the commercial ACL or ACT is projected to be met.

Alternative 3: Establish post-season AMs

Option a: Commercial

Sub-option i: ACL payback in the fishing season following a previous years ACL overage

Sub-option ii: Adjust the length of the fishing season following an ACL overage

Sub-option iii: Implement a trip limit

Option b: Recreational

Sub-option i: ACL payback in the fishing season following a previous years ACL overage

Sub-option ii: Adjust the length of the fishing season following an ACL overage

Sub-option iii: Adjust bag limit for the fishing season following a previous seasons ACL overage

Option c: Recreational and commercial combined AM

Sub-option i: Adjust season length for all harvest of spiny lobster in the fishing season following an ACL overage

Sub-option ii: Recreational and commercial ACL payback in the fishing season following a previous years ACL overage (if a combined ACL is chosen).

Discussion and Rationale: Accountability Measures are designed to provoke an action once either the annual catch limit or annual catch target is reached during the course of a fishing season to reduce the risk overfishing will occur. However, depending on how timely the data are, it might not be realized that either the annual catch limit and/or annual catch target has been reached until after a season has ended. Such accountability measures include prohibited retention of species once the sector annual catch target is met, shortening the length of the subsequent fishing season to account for overages of the annual catch limit, and reducing the annual catch limit in the subsequent fishing season to account for overages.

The final National Standard 1 guidelines recognize that existing fishery management plans may use terms and values that are similar to, associated with, or may be equivalent to accountability measures in many fisheries for which annual specifications are set for different stocks or stock complexes. In these situations the guidelines suggest that, as Councils revise their Fishery Management Plans they use the same terms as set forth in the National Standard 1 guidelines. Current Caribbean spiny lobster regulations include size limits, a seasonal closure, bag limits, and certain prohibited gear types (Table 1). There is no previously specified measure that would be considered an accountability measure. Therefore, accountability measures for the Caribbean spiny lobster fishery in the Gulf and South Atlantic must be specified pursuant to Magnuson-Stevens Act Requirements.

There are several types of accountability measures that may be applied in the Caribbean spiny lobster fishery. In-season accountability measures are those that are triggered during the fishing season and typically before an annual catch limit is exceeded. Some examples of in-season accountability measures include quota closures, trip or bag limit changes, gear restrictions, individual fishing quotas, or catch shares. Post-season accountability measures would be

triggered if the annual catch limit is exceeded and would typically be implemented the following fishing season. Post-season accountability measures could include seasonal closures, reduced trip or bag limits, or shortening of the fishing season implemented in the subsequent year. National Standard 1 guidelines recommend the use of annual catch targets in systems of accountability measures so that an annual catch limit is not exceeded. For fisheries without in-season management control to prevent the annual catch limit from being exceeded, accountability measures may utilize annual catch targets that are set below annual catch limits so that catches do not exceed the annual catch limit. If an annual catch target is specified as part of the accountability measures for spiny lobster, an annual catch target control rule may be utilized for setting the annual catch target. The annual catch target control rule should clearly articulate how management uncertainty in the amount of catch in the fishery is accounted for in setting the annual catch target. The objective for establishing an annual catch target and related accountability measures is that the annual catch limit not be exceeded. Annual catch targets for spiny lobster are being considered by the Councils under Action 5a. of this document. Several accountability measure options that could be applied to the spiny lobster fishery are presented in the alternatives above.

No action **Alternative 1** would not establish accountability measures for the spiny lobster fishery. The Magnuson-Stevens Act requires that annual catch limits and accountability measures be established in 2011; therefore, if **Alternative 1** were chosen as a preferred alternative the Fishery Management Plan for the Spiny Lobster Fishery of the Gulf of Mexico and South Atlantic would not be in compliance with those requirements. Under **Alternative 2** in-season accountability measures would be triggered in order to prevent the annual catch limit from being exceeded. The efficacy of in-season accountability measures is largely reliant upon in-season monitoring of landings, which may be especially difficult for the recreational sector. The newly implemented Marine Recreational Information Program does not collect landings information on crustaceans. Therefore, in-season tracking of Caribbean spiny lobster landings in the recreational sector would be based on the Marine Recreational Fishing Statistics Survey program and state landings reports. An additional obstacle to tracking recreational harvest in-season is that there is a lag time between when the Caribbean spiny lobsters are landed and when those landings are reported in the landings database. This lag time means that projections of when the annual catch limit is expected to be met would need to be employed. Landings projections are not always 100% accurate, thus using such estimates could lead to an in-season accountability measure being triggered prematurely, or not soon enough causing an annual catch limit overage. The Council may also choose one or more post-season accountability measures under **Alternative 3** to supplement any of the in-season accountability measures under **Alternative 2**. This would be the most administratively burdensome scenario; however, if an annual catch limit overage were to occur after an in-season accountability measure has been implemented, a post-season accountability measure would be available to the Regional Administrator as a means to correct an overage.

Under **Alternative 3**, a post-season accountability measures would be implemented the fishing season following the season when an annual catch limit is exceeded. Post-season accountability measures would allow all landings for a particular season to be reported before any harvest restricting measures would take effect. This method of accountability alone may correct for one

year's overage; however, it does little to prevent an overage from occurring again unless it is chosen in conjunction with an in-season accountability measure.

3.7 Action 7: Develop or Update a Framework Procedure and Protocol for Enhanced Cooperative Management for Spiny Lobster

Alternative 1: No Action – Do not update the Regulatory Amendment Procedure or Protocol for Enhanced Cooperative Management

Alternative 2: Update current Regulatory Amendment Procedures to develop a Framework Procedure to modify ACLs and AMs

Alternative 3: Update the current Protocol for Enhanced Cooperative Management

Alternative 4: Update the current Protocol and Procedures as separate documents: a Protocol for Enhanced Cooperative Management and a Framework Procedure to modify ACLs and AMs

Discussion and Rationale: The current Protocol for Enhanced Cooperative Management outlines the roles of the federal and State of Florida agencies in managing spiny lobster. The current Regulatory Amendment Procedure outlines the actions that can be implemented through regulatory amendments, such as gear and harvest restrictions. The current Protocol and Procedure, developed through Amendment 2 (1989), can be seen in its entirety in **Appendix A** of this document. It should be noted that if **Alternative 2** of **Action 1** in this amendment is chosen as a preferred alternative, there may no longer be a need to modify the Protocol portion of this action since all management of spiny lobster, with the exception of annual catch limits would be delegated to the State of Florida. Amendment 10 proposes to modify and update the *protocol* to include relevant agency names and authorities. The framework *procedure* would also be updated to include relevant terms and adjustments to annual catch limits, annual catch targets, and accountability measures. Table 5 lists the items that may be retained, removed, and added to the protocol and framework procedure.

Table 5. Proposed framework modifications.

Items retained from current framework	Items modified from current framework	Items added to current framework
Adjustments to or implementation of trip limits, bag limits (including zero bag limits), minimum sizes, gear restrictions, and seasonal/area closures	Change the term “Regional Director” to “Regional Administrator”	Use of SEDAR reports or other documentation the Councils or FWC deem appropriate to provide biological analyses
	Change the term “FMFC” to “Florida Fish and Wildlife Conservation Commission (FWC)”	The SSC prepares a written report to the Councils and FWC specifying OFL and a range of ABCs for species in need of catch reductions to achieve OY.
		The SEDAR report or SSC will recommend rebuilding periods
Adjustment to or implementation of timeframes for recovery of an overfished species		Adjustment to ACLs and/or sector ACLs
Initial specification and subsequent adjustments of biomass levels and age structured analysis		Adjustment to or implementation of ACTs and AMs
Inclusion of public input in the framework adjustment process		Adjustments to or establishment of MSY
		Adjustments to ABC
		Adjustments to or implementation of quotas including closing any commercial fishery when the quota is filled

Alternative 1 (No Action) would not modify the current protocols or procedures to include modern terminology and adjustments to annual catch limits, annual catch targets, and accountability measures. This would maintain the Regional Administrator’s current ability to adjust trip limits, bag limits, size limits, seasonal closures, and gear restrictions, but there would exist no means of making needed adjustments to the NS1 harvest parameters in a timely manner.

Under **Alternatives 2, 3, and 4**, adjustments to annual catch limits, annual catch targets, and accountability measures could be made with relative ease as new fishery and stock abundance information becomes available. Alternatives that would update the current procedure would

likely be biologically beneficial for spiny lobster since it would allow for periodic adjustments to National Standard 1 guideline harvest parameters, and management measures could be altered in a timely manner to implement harvest level changes or accountability measures in response to stock assessment or survey results. **Alternatives 2, 3, and 4** would increase the types of management measures that could be modified under the framework procedure. This would be expected to increase the efficiency and effectiveness of management change, potentially allowing less severe corrective action when necessary, or the quicker receipt of social and economic benefits associated with less restrictive management. In the long term, positive social and economic effects, relative to the status quo, would be expected from more timely management adjustments. **Alternatives 2 and 5** would allow the framework procedure to be more consistent with frameworks in other fishery management plans under the Councils' jurisdictions. **Alternatives 3 and 4** would retain the current agreement with the State of Florida, but update the language to be consistent with changes in agency names and terminology since 1989.

Proposed Language for the Updated Protocol

I. Protocol for Roles of Federal and State of Florida Agencies for the Management of Gulf and South Atlantic Spiny Lobster

- 1.** The Councils and NOAA Fisheries Service acknowledge that the fishery is largely a State of Florida (State) fishery, which extends into the EEZ, in terms of current participants in the directed fishery, major nursery, fishing, and landing areas, historical regulation of the fishery. As such, this is a fishery requiring cooperative state/federal efforts for effective management through the joint Fishery Management Plan for the Spiny Lobster Fishery of the Gulf of Mexico and South Atlantic.
- 2.** The Councils and NOAA Fisheries Service acknowledge that the State is managing and will continue to manage the resource to protect and increase the long-term yields and prevent depletion of the lobster stocks and that the State Administrative Procedure Act and rule implementation procedures, including final approval of the rules by Governor and Cabinet, provide ample and fair opportunity for all persons to participate in the rulemaking procedure.
- 3.** The Florida Fish and Wildlife Conservation Commission (FWC) acknowledges that rules proposed for implementation under any fishery management plan amendment, regulatory or otherwise, must be consistent with the management objectives of the Fishery Management Plan for the Spiny Lobster Fishery of the Gulf of Mexico and South Atlantic, the National Standards, the Magnuson-Stevens Fishery Conservation and Management Act, and other applicable law. Federal rules will be implemented in accordance with the Administrative Procedures Act.
- 4.** The Councils and NOAA Fisheries Service agree that for any rules defined within an amendment to the Fishery Management Plan for the Spiny Lobster Fishery of the Gulf of Mexico and South Atlantic, the State may propose the rule directly to NOAA Fisheries Service, concurrently informing the Councils of the nature of the rule, and that NOAA

Fisheries Service will implement the rule within the exclusive economic zone provided it is consistent under paragraph three. If either of the Councils informs NOAA Fisheries Service of their concern over the rule's inconsistency with paragraph three, NOAA Fisheries Service will not implement the rule until the Councils, FWC, and NOAA Fisheries Service resolve the issue.

5. The State will have the responsibility for collecting and developing the information upon which to base the fishing rules, with assistance as needed by NOAA Fisheries Service, and cooperatively share the responsibility for enforcement with federal agencies.

6. Florida FWC will provide NOAA Fisheries Service and the Councils written explanations of its decisions related to each of the rules; summaries of public comments; biological, economic and social analysis of the impacts of the proposed rule and alternatives; and such other information that is relevant.

7. The rules will apply to the exclusive economic zone for the management area of North Carolina to Texas, unless NOAA Fisheries Service Regional Administrator determines they may adversely impact other state and federal fisheries. In that event, the Regional Administrator may limit the application of the rule, as necessary, to address the problem.

8. NOAA Fisheries Service and the Councils agree that their staffs will prepare the proposed and final rules and the associated National Environmental Policy Act documentation and other documents required to support the rule.

Proposed Language for Updated Framework Procedure

II. Joint Fishery Management Plan for the Spiny Lobster Fishery of the Gulf of Mexico and South Atlantic Framework Procedure for Specification of Annual Catch Limits, Annual Catch Targets, Overfishing Limits, Acceptable Biological Catch, Accountability Measures, and annual adjustments:

1. At times determined by NOAA Fisheries Service Southeast Regional Office and Florida Fish and Wildlife Conservation Commission (FWC), the Councils, and the Southeast Data, Assessment, and Review (SEDAR) steering committee, stock assessments or assessment updates will be conducted under the SEDAR process for spiny lobster in the Gulf and South Atlantic. Each SEDAR stock assessment or assessment update will: a) assess to the extent possible the current biomass, biomass proxy, or SPR levels for each stock; b) estimate fishing mortality (F) in relation to F_{MSY} (MFMT) and F_{OY} ; c) determine the overfishing limit (OFL); d) estimate other population parameters deemed appropriate; e) summarize statistics on the fishery; f) specify the geographical variations in stock abundance, mortality recruitment, and age of entry into the fishery for each stock or stock complex; and g) develop estimates of B_{MSY} .

2. The Councils and the FWC will consider SEDAR stock assessments, or other documentation deemed appropriate, to provide the biological analysis and data listed above in paragraph 1. Either the Southeast Fisheries Science Center or the stock

assessment branch of a State agency may serve as the lead in conducting the analysis, as determined by the SEDAR Steering Committee. The joint Gulf and South Atlantic Scientific and Statistical Committees or some subgroup thereof, will prepare a written report to the Councils and FWC specifying an OFL and may recommend a range of ABCs for attaining or maintaining OY. The OFL is the annual harvest level corresponding to fishing at MFMT (F_{MSY}). The ABC range is intended to provide guidance to the joint Gulf and South Atlantic Scientific and Statistical Committee subgroup, and is the OFL as reduced due to scientific uncertainty in order to reduce the probability that overfishing will occur in a year. To the extent practicable, the probability that overfishing will occur at various levels of ABC and the annual transitional yields (i.e., catch streams) calculated for each level of fishing mortality within the ABC range should be included with the recommended range.

If the spiny lobster stock is determined to be undergoing overfishing or is overfished, the recommended range of ABCs shall be calculated so as to end overfishing and achieve spiny lobster levels at or above B_{MSY} within the rebuilding periods specified by the Councils and FWC and approved by NOAA Fisheries Service. The SEDAR report or joint Gulf and South Atlantic Scientific and Statistical Committee subgroup will recommend rebuilding periods based on the provisions of the National Standard 1 guidelines, including generation times for the affected stocks. Generation times are to be specified by the stock assessment panel based on the biological characteristics of the individual stocks. The report will recommend to the Councils and FWC a B_{MSY} level and a MSST from B_{MSY} . The report may also recommend more appropriate estimates of F_{MSY} for any stock. The report may also recommend more appropriate levels for the MSY proxy, OY, the overfishing threshold (MFMT), and overfished threshold (MSST). Where data are inadequate to compute an OFL and recommended ABC range, the report will use other available information as a guide in providing their best estimate of an OFL corresponding to MFMT and ABC range that should result in not exceeding the MFMT.

3. The joint Gulf and South Atlantic Scientific and Statistical Committee subgroup will examine SEDAR reports or other new information, the OFL determination, and the recommended range of ABC. In addition, the joint Gulf and South Atlantic Scientific and Statistical Committee subgroup will examine information provided by the social scientists and economists from the Councils' staffs and from the Southeast Regional Office Fisheries Social Science Branch analyzing social and economic impacts of any specification demanding adjustments of allocations, ACLs, ACTs, AMs, quotas, bag limits, or other fishing restrictions. The joint Gulf and South Atlantic Scientific and Statistical Committee subgroup will use the ABC control rule to set their ABC recommendation at or below the OFL, taking in account scientific uncertainty. If the joint Gulf and South Atlantic Scientific and Statistical Committee subgroup set their ABC recommendations equal to OFL, they will provide rational why it believes that level of fishing will not exceed MFMT.

4. The Councils and FWC may conduct a public hearing on the reports and the joint SSCs' ABC recommendation at, or prior to, the time it is considered by the Council for action. Other public hearings may be held also. The Councils and FWC may request a

review of the report by their Spiny Lobster Advisory Panels and optionally by their socioeconomic experts, and convene these groups before taking action.

5. The Councils and Florida FWC in selecting an ACL, ACT, AM, and a stock restoration time period, if necessary, will, in addition to taking into consideration the recommendations and information provided for in paragraphs 1, 2, 3, and 4, utilize the following criteria:

a. Set ACL at or below the ABC specified by the joint Gulf and South Atlantic Scientific and Statistical Committee sub-group or set a series of annual ACLs at or below the projected ABCs in order to account for management uncertainty. If the Councils and FWC set the ACL equal to ABC, and ABC has been set equal to OFL, the Councils and FWC will provide its rationale as to why it believes that level of fishing will not exceed MFMT.

b. May subdivide the ACLs into commercial, for-hire, and private recreational sector ACLs or gear specific ACLs that maximize the net benefits of the fishery to the nation. The Sector ACLs will be based on allocations determined by criteria established by the Councils and FWC, and specified by the Councils through a plan amendment. If spiny lobster is overfished, and harvest in any year exceeds the ACL or sector ACL, management measure and catch levels for that sector will be adjusted in accordance with the AMs established for that stock.

c. Set ACTs or sector ACTs at or below ACLs and in accordance with the provision of the AM for spiny lobster. The ACT is the management target that accounts for management uncertainty in controlling the actual catch at or below the ACL. If an ACL is exceeded repeatedly, the Councils and FWC have the option to establish an ACT if one does not already exist for a particular stock, and adjust or establish AMs for that stock as well.

6. The Councils will provide the joint Gulf and South Atlantic Scientific and Statistical Committee sub-group specification of OFL and recommendation of ABC and its recommendations for ACLs, sector ACLs, ACTs, sector ACTs, AMs, sector AMs; stock restoration target dates for each stock or stock complex; estimates of B_{MSY} and MSST; estimates of MFMT; and the quotas, bag limits, trip limits, size limits, closed seasons, and gear restrictions necessary to avoid exceeding the ACL or sector ACLs to the NOAA Fisheries Service Regional Administrator. The Councils will also provide the joint Gulf and South Atlantic Scientific and Statistical Committee sub-group reports, a regulatory impact review, proper National Environmental Policy Act documentation, and the proposed regulations within a predetermined time as agreed upon by the Councils, FWC and Regional Administrator. The Councils and FWC may also recommend new levels or statements for MSY (or proxy) and OY.

7. The Regional Administrator will review the Councils' recommendations and supporting information; and, if he concurs that the recommendations are consistent with the objectives of the Fishery Management Plan for the Spiny Lobster fishery of the Gulf

of Mexico and South Atlantic, the National Standards, and other applicable law, he shall prepare a regulatory amendment and forward notice of proposed rules to the Assistant Administrator for publication (providing appropriate time for additional public comment). The Regional Administrator will take into consideration all public comment and information received and will forward a final rule for publication in the *Federal Register* within 30 days of the close of the public comment, or such other time as agreed upon by the Councils and Regional Administrator.

8. Appropriate regulatory changes that may be implemented by final rule in the *Federal Register* include:

- a.** ACLs or sector ACLs, or a series of annual ACLs or sector ACLs.
- b.** ACTs or sector ACTs, or a series of annual ACTs or sector ACTs, and establish ACTs to stocks which do not have an ACT.
- c.** AMs, or sector AMs.
- d.** Bag limits, size limits, vessel trip limits, closed seasons or area, gear restrictions, and quotas designed to achieve OY and keep harvest levels from exceeding the ACL or sector ACL.
- e.** New levels or statements of MSY (or proxy) and OY for any stock.
- f.** Adjust fishing seasons/years.

9. The Regional Administrator is authorized, through notice action, to conduct the following activities.

- a.** Close the commercial fishery for spiny lobster at such time as projected to be necessary to prevent the commercial sector from exceeding its sector ACL or ACT for the remainder of the fishing year or sub-quota season.
- b.** Close the recreational fishery for spiny lobster at such time as projected to be necessary to prevent recreational sector ACLs or ACTs from being exceeded.
- c.** Reopen a commercial or recreational season that had been prematurely closed if needed to assure that a sector ACL or ACT can be reached.

10. If NOAA Fisheries Service decides not to publish the proposed rule of the recommended management measures, or to otherwise hold the measures in abeyance, then the Regional Administrator must notify the Councils and Florida FWC of its intended action and the reasons for concern along with suggested changes to the proposed management measures that would alleviate the concerns. Such notice shall specify: 1) The applicable law with which the amendment is inconsistent; 2) the nature of such

inconsistencies; and 3) recommendation concerning the action that could be taken by the Councils to conform the amendment to the requirements of applicable law.

3.8 Action 8: Modify Regulations Regarding Possession and Handling of Short Lobsters as “Undersized Attractants”

Alternative 1: No Action – Allow the possession of no more than 50 undersized spiny lobsters, or one per trap aboard the vessel, whichever is greater, for use as attractants

Alternative 2: Prohibit the possession and use of undersized lobsters as attractants

Alternative 3: Allow undersized lobsters, but modify the number of allowable undersized lobsters, regardless of the number of traps fished

Option a: allow 50 undersized lobsters

Option b: allow 35 undersized lobsters

Discussion and Rationale: This action is being considered in order to address law enforcement concerns related to allowing vessels to maintain undersized spiny lobster onboard fishing vessels. The number and storage requirements for undersize spiny lobster allowed to be retained have been modified several times since the original Fishery Management Plan for the Spiny Lobster Fishery of the Gulf of Mexico and South Atlantic was implemented. In 1982 the Fishery Management Plan for the Spiny Lobster Fishery of the Gulf of Mexico and South Atlantic included the first provisions for keeping undersized spiny lobster for use as attractants. At that time no more than three live undersize lobsters could be placed in each trap or no more than 200 undersize lobsters could be maintained on board a vessel, whichever was greater. The July 1987 final rule implementing Amendment 1 changed the number of undersize lobster that could be kept on board to 100. In May 1988, a second final rule implementing Amendment 1 was published and included a requirement that all undersize lobster are to be maintained in a live well. A regulatory amendment was developed in 1992, which further revised the provisions regarding keeping undersize spiny lobster for use as attractants. The final rule for this regulatory amendment was published in November 1992, and reduced the number of undersize lobster allowed to be kept from 100 to 50, and maintained the live well requirement. The 1992 regulations are still in place today.

Currently, regulations at 50 CFR 640.21(c) state:

A live spiny lobster under the minimum size limit specified in paragraph (b)(1) of this section that is harvested in the EEZ by a trap may be retained aboard the harvesting vessel for future use as an attractant in a trap provided it is held in alive well aboard the vessel. No more than fifty undersized spiny lobsters, or one per trap aboard the vessel, whichever is greater, may be retained aboard for use as attractants. The live well must provide a minimum of $\frac{3}{4}$ gallons (1.7 liters) of seawater per spiny lobster. An undersized spiny lobster so retained must be released alive and unharmed immediately upon leaving the trap lines and prior to one hour after official sunset each day.

Therefore, each vessel is not necessarily limited to only 50 undersize lobsters, but one lobster per trap. In the commercial spiny lobster fishery, it is common for a vessel to carry more than 100 traps on any one trip. This allowance may contribute to the magnitude of negative biological impacts and positive socioeconomic impacts. Traditionally, fishermen have realized great success using live lobster as bait in lobster traps. Experiments have shown that traps baited with short lobsters catch approximately three times more lobster than traps baited with any other method (Moe 1991; Heatwole et al. 1988).

Allowing possession of undersized lobster on board any permitted spiny lobster vessel within the EEZ makes it difficult for law enforcement officials to discern whether those undersized lobsters are truly being maintained for use as attractants, or for illegal purposes. If a vessel is stopped by a law enforcement official with undersized lobster onboard in transit toward port with the intention to sell or keep those lobsters, prosecution is made more difficult by the fact that regulations allow undersized spiny lobster to be kept under certain conditions.

In addition to law enforcement concerns, there may also be negative biological impacts of allowing 50 or more undersized spiny lobster to be maintained in a live well. If undersized spiny lobster continue to be sold illegally, and transported under the guise of being used as attractants, those lobster are not returned to the water as they should be and they are not able to reproductively contribute to the population. Secondly, trauma incurred during holding in live wells, caused by crowding, duration of confinement during transport, or relocation to a different environment, and may also contribute to undersized spiny lobster mortality, which may negatively impact the population. Lyons (1987) indicated live wells eliminated most exposure mortality and reduced seasonal mortality by 37 to 49 %. However he indicated that 28.5% of the undersize lobster would still die from confinement mortality during the season. Therefore, even though live wells reduce the risk of mortality do to air exposure some lobsters may perish as a result of predation when confined to a trap.

Under the no action **Alternative 1**, the same enforcement and biological concerns would persist. **Alternative 2** would eliminate both the difficulties law enforcement officials currently have in prosecuting undersized spiny lobster cases and any negative biological impacts attributable to undersized lobster as attractants. Prohibiting the use of undersized spiny lobster as attractants may therefore, lead to a reduced risk of exceeding the annual catch limit in any given year and hedge against future overfishing. The enforcement and biological benefits under **Alternative 2** are positive; however, the socioeconomic impacts of prohibiting the use of undersized spiny lobster as attractants could be significant given a significant portion of commercial fishermen fishing for spiny lobster do indeed use undersized lobster as attractants and so very successfully. Amendment 1 to the Spiny Lobster FMP (1987) states as a major issue:

The illegal market in undersize lobsters, on board handling and exposure of undersize lobsters and their confinement in traps as attractants are significant sources of undersize lobster mortality that are preventing the fishery from harvesting optimum yield. Although undersize lobsters are an effective attractant, the mortality associated with their use as attractants, in combination with increasing number of traps being fished, are contribution to the fishery's inability to achieve optimum yield.....

Several of these issues still exist today despite the implementation of the “50 Short” rule. Biological problems related to using undersized lobsters would likely be remedied under **Alternative 2**. **Alternative 3** would not improve law enforcement in the fishery; however, it could potentially reduce the negative biological impacts of using undersized spiny lobster under the status quo without incurring significant socioeconomic impacts. The number of undersized lobster handled, held in live wells, and confined to traps, would decrease under this alternative. Therefore, measureable improvement in stock abundance may be expected.

3.9 Action 9: Modify Tailing Requirements for Spiny Lobster for Vessels that Obtain a Tailing Permit

Alternative 1: No Action – Possession of a separated spiny lobster tail in or from the EEZ is allowed only when the possession is incidental to fishing exclusively in the EEZ on a trip of 48 hours or more, and a federal tailing permit is issued to and on board the vessel.

Alternative 2: Eliminate the tailing permit for all vessels fishing for spiny lobster in Gulf and South Atlantic waters of the EEZ.

Alternative 3: Revise the current regulations to clearly state that all vessels must have either a federal spiny lobster permit or a Florida Restricted Species Endorsements associated with a Florida Saltwater Products License in order to obtain a tailing permit.

Alternative 4: Modify the requirements for obtaining a Tail-Separation Permit.

Alternative 5: All Caribbean spiny lobster landed must either be landed all “whole” or all “tailed”.

Discussion and Rationale: Currently, a Tail-Separation Permit is required for any vessel that wishes to land spiny lobster with tails detached for storage purposes on trips longer than 48 hours in duration. As of January 2010, there are 334 vessels with active Tail-Separation Permits. Regulations at 50 CFR 640.21(d) do not require that a vessel fishing for spiny lobster in the EEZ first have a federal or state permit/license/endorsement before they may obtain a federal tailing permit. Vessels wishing to obtain a Tail-Separation Permit only have to meet the qualifying criteria of certifying that at least 10% of their earned income is derived from commercial fishing, and be on a trip for 48 hours or more. However, any vessel owner wishing to legally sell spiny lobster must have the requisite permit/license/endorsement. The regulations do not explicitly state that a vessel must be associated with either a Florida Restricted Species Endorsement, or a federal Spiny Lobster Permit, leaving open the possibility of a non-commercially permitted vessel to obtain a tailing permit, which may affect enforcement of the minimum size requirements, the spear fishing prohibition, and illegal sales. Action 11 of Amendment 1 to the Spiny Lobster FMP (1987) clearly states the Council’s initial intent for issuance of tailing permits:

The separation of lobster carapace and tail at sea shall be prohibited except by species permit. To be eligible for a tail separation permit,

the fishing craft must have been assigned a commercial lobster permit, and must be operated for lobster fishing in the EEZ for two or more days from port. Furthermore, a signed statement that his fishing activity necessitates a tail separation permit.

However, regulations regarding tailing permit requirements have changed several times since the inception of the permit. In 1990 a final rule implementing Amendment 1 was published in the *Federal Register*. This rule prohibited tailing of spiny lobster harvested from the EEZ except by special permit, and required that a vessel must be associated with a federal commercial spiny lobster permit in order to obtain a Tail-Separation Permit. In 1992 the Council opted to make the Tail-Separation Permit an endorsement to the federal Spiny Lobster Permit through a regulatory amendment. At that time, it was also determined that federal Spiny Lobster Permit issuance would discontinue when Florida's trap certificate and identification program was implemented and when Florida designated spiny lobster as a restricted species, thus limiting the sellers of spiny lobster to individuals who have Restricted Species Endorsements on their Florida Saltwater Products License. The Florida trap certificate and identification program was implemented through a final rule published in 1993. Therefore, as stated in the 1992 regulatory amendment, a federal Spiny Lobster Permit was no longer required for vessels fishing for spiny lobster in state or federal waters off Florida. However, the regulations stated that only vessels with federal Spiny Lobster Permits could obtain a Tail-Separation Endorsement. In order to allow vessels participating in Florida's trap certificate program without a federal Spiny Lobster Permit, to obtain a Tail-Separation Endorsement, the regulations were modified to change the "Tail-Separation Endorsement" to a "Tail-Separation Permit", and removed the requirement for a federal Spiny Lobster Permit, as outlined in the 1992 regulatory amendment. The regulations currently state:

The possession aboard a fishing vessel of a separated spiny lobster tail in or from the EEZ is authorized only when the possession is incidental to fishing exclusively in the EEZ on a trip of 48 hours or more and a federal Tail-Separation Permit specified in 50 CFR 640.4(a)(2).

50 CFR 640.4(a)(2) states:

For a person to possess aboard a fishing vessel a separated spiny lobster tail in or from the EEZ, a Tail-Separation Permit must be issued to the vessel and must be on board.

The intent of allowing fishermen to tail spiny lobster was to promote ease of storage and transport of the harvested lobster on long commercial trips. Tail-Separation Permits were not initially intended for use by non-commercially permitted vessels. However, because the regulations do not explicitly state that a federal Spiny Lobster Permit, or a Florida Saltwater Products License with a Restricted Species Endorsement are required in order to obtain a Tail-Separation Permit some recreational fishermen have obtained Tail-Separation Permits for their own purposes. Tail-Separation Permits, even if restricted to the commercial sector, are not biologically advantageous, since commercial vessels with tailing permits are able to fish more

efficiently for spiny lobster than those vessels without the permit. Because whole lobsters utilize more storage space than tails, vessels that are associated with a Tail-Separation Permit are able to store much more product than vessels that have to store the lobster whole. Greater efficiency means those vessels with Tail-Separation Permits are also able to take more spiny lobster from the population at a faster rate, which could be detrimental in the long term for overall stock abundance. Therefore, eliminating the Tail-Separation Permit requirements could potentially benefit the biological environment in addition to complimenting law enforcement efforts.

Alternately, a revision to the regulations may clarify that non-commercially permitted fishermen may not obtain a Tail-Separation Permit regardless of how long a trip is or how much of their earned income is derived from other types of commercial fishing. Revising the regulations in this way would not require an amendment action. The Council would have the option to approve or disapprove the change in regulations when they deem the proposed rule. Currently there are 334 active Tail-Separation Permits. If the Council were to choose to change the requirements for obtaining a tailing permit, it would have the option of changing the trip duration requirement, or change the earned income requirement. Modifying one or both of those parameters could change the universe of vessels eligible to obtain a Tail-Separation Permit. However, changing the earned income requirement is associated with eligibility for the federal Spiny Lobster Permit not just the Tail-Separation Permit, and would therefore affect the universe of vessels able to apply for the federal Spiny Lobster Permit. Several fishery participants that attended the scoping meetings were in favor of requiring that all spiny lobster be either landed all whole or landed all tailed. The rationale for proposing this alternative is that requiring spiny lobster to be landed all whole or all tailed would prevent the abuse of having a short carapace but a long tail.

3.10 Action 10: Limit Spiny Lobster Fishing in Certain Areas in the EEZ off Florida to Address Endangered Species Act Concerns for Staghorn (*Acropora cervicornis*) and Eelhorn (*Acropora palmata*) Corals (“*Acropora*”).

Alternative 1: No Action – Do not limit spiny lobster fishing in certain areas in the EEZ off Florida to address ESA concerns for *Acropora*.

Alternative 2: Prohibit trapping on known hardbottom in the EEZ off Florida (in areas under the SAFMC’s jurisdiction with water depths less than 30 meters).

Alternative 3: Expand existing and/or create new closed areas to prohibit trapping in the EEZ off Florida in locations with high densities of *Acropora* and/or locations of with high likelihood for coral recruitment. For areas with high *Acropora* densities already occurring within closed areas, a minimum buffer zone of X must exist between the boundary of the closed area and closest *Acropora* colony.

Alternative 4: Expand existing and/or create new closed areas to prohibit all spiny lobster fishing in the EEZ off Florida in locations with high densities of *Acropora* and/or locations of with high likelihood for coral recruitment. For areas with high *Acropora* densities already occurring within closed areas, a minimum buffer zone of X must exist between the boundary of the closed area and closest *Acropora* colony.

Discussion and Rationale: *Acropora* are only known to occur in federal waters of the South Atlantic Region. Areas with high *Acropora* densities can be best identified by using GIS to combine two *Acropora* presence/absence datasets. The first identifies individual sites where *Acropora* colonies are known to exist. The second describes broader areas with concentrations of *Acropora* colonies. By combining these datasets, maps can be created that provides information on where known clusters of *Acropora* are currently, as well as where colonies occur in lower densities. Areas of lower *Acropora* density are indicators of locations where the likelihood of coral recruitment is high. By comparing the information on *Acropora* with the locations of areas currently closed to spiny lobster fishing, areas of *Acropora* not already occurring within protected areas can be identified.

The biological opinion on the continued authorization of the spiny lobster fishery requires that existing closed areas must be expanded or new closed areas must be created, to protect *Acropora*. Existing data indicate that spiny lobster trap movement, primarily during storm events, is the fishery's greatest threat to *Acropora* corals. **Alternative 1** would not meet the requirement established under the biological opinion to expand existing and/or create new closed areas to protect *Acropora*. **Alternatives 2 or 3** would satisfy this requirement. **Alternative 4** would also satisfy the requirements of the biological opinion, while providing additional protections for *Acropora*, and would affect all sectors of the commercial fishery equally.

3.11 Action 11: Require Measures to Identify Ropes Associated with Spiny Lobster Traps in the EEZ off Florida be Implemented no Later than the Beginning of the 2014 Fishing Year

Alternative 1: No Action – Do not require measures to identify spiny lobster trap rope.

Alternative 2: Require all spiny lobster trap rope in the EEZ off Florida to be a specific color, not currently in use in other fisheries, along its entire length.

Alternative 3: Require all spiny lobster trap rope in the EEZ off Florida to have easily identifiable patterns/markings, not currently in use in other fisheries, along its entire length.

Alternative 4: Require all spiny lobster trap rope in the EEZ off Florida to be a specific color and have easily identifiable patterns/markings, not currently in use in other fisheries, along its entire length.

Discussion and Rationale: The biological opinion on the fishery requires the establishment of trap line marking requirements no later than 2014, and that the incidental take of protect species be monitored. If gear-marking requirements were implemented sooner than the 2014 deadline the obligation of the biological opinion would also satisfied. Currently, all spiny lobster traps fished in the EEZ off Florida must follow the gear marking requirements established by the State of Florida at 68B-24 in the Florida Administrative Code (F.A.C). Those regulations require a buoy or a time-release buoy to be attached to each spiny lobster trap or at each end of a weighted

trap trotline. Each buoy must be a minimum of six inches in diameter and constructed of Styrofoam, cork, molded polyvinyl chloride, or molded polystyrene [68B-24.006(3)]. Additionally, each trap and buoy used must have the fishers' current crawfish license or trap number permanently affixed in legible figures. On each buoy, the affixed crawfish license or trap number shall be at least 2 inches high [68B-24.006(4)].

Trap line is consistently found as marine debris and most frequently without buoys or traps still attached. Miller et al (2008) found lost pot/trap gear to be the second most prevalent type of marine debris in the Florida Keys and most damaging to benthic habitat. In all cases, traps lines were without buoys. Current gear marking requirements for the fishery only require buoys and traps be marked. However, buoys are frequently dislodged from trap lines and the type of trap line used in the spiny lobster fishery is also used in other fisheries and for other purposes. These conditions make it extremely difficult to determine if line found in the environment, or entangling protected species, originated from the spiny lobster fishery. A lack of uniquely identifiable markings also makes monitoring incidental take by the fishery difficult. Without uniquely identifiable trap line markings, erroneously attributing the incidental take of a protected species to the spiny lobster fishery is possible.

Gear marking techniques are used in other areas and other regions. Specific gear marking requirements have been implemented in the Northeast to address entanglement concerns with large whales. Figure 8 illustrates three methods that were tested and found to work satisfactorily in the Northeast under normal conditions. At the top, colored twine is seized around the line and woven between the strands. In the center, the line was spray-painted; this method requires that the rope be dry. At the bottom, colored electrical tape was wrapped in one direction and then back over itself to form two layers. The particular color/pattern required for the spiny lobster fishery could be similar to those in Figure 8. Requiring a specific color trap line would also fulfill the intent of the requirements in the biological opinion.



Figure 8. Examples of Satisfactory Gear Marking

Alternative 1 would not satisfy the line marking requirements of the biological opinion. **Alternatives 2, 3, or 4** would require uniquely identifiable markings for all spiny lobster trap lines satisfying the requirements of the biological opinion. Uniquely identifiable markings will improve the accuracy of line identification and will improve the monitoring of incidental take, while reducing the likelihood that entanglements and other environmental impacts caused by non-spiny lobster fishing gear are erroneously attributed to the fishery.

3.12 Action 12: Consider Allowing the Public to Remove Trap Line, Buoys, or Otherwise make Unfishable, any Spiny Lobster Gear Found in the EEZ off Florida from April 1-July 31

Alternative 1: No Action- Do not allow public to remove any spiny lobster trap found in the EEZ off Florida from April 1-July 31

Alternative 2: Allow the public to remove any spiny lobster trap found in the EEZ off Florida from April 1-July 31.

Alternative 3: Allow the public to make any spiny lobster trap unfishable by removing trap line, buoy, and throats if found in the EEZ off Florida from April 1-July 31.

Discussion and Rationale: Current federal regulations state that any trap, buoy, or rope found in the EEZ of Florida and any other Gulf state outside of the fishing season is considered unclaimed or abandoned property and may be disposed of in any manner considered appropriate by the Assistant Administrator or authorized officer [50 CFR 640.20(b)(3)(iii)].

[DISCUSSION OF FLORIDA REGS TO BE ADDED]

[DISCUSSION OF WHY THIS ACTION IS NECESSARY TO BE ADDED]

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FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION



SPINY LOBSTER AD HOC ADVISORY BOARD CONSENSUS RECOMMENDATIONS (Including All Options Evaluated)

MAY 2007

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

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LOBSTER ADVISORY BOARD CONSENSUS RECOMMENDATIONS

(Adopted Unanimously May 15, 2007)

CONSENSUS DRAFT RECOMMENDATIONS BY ISSUE

(Options with a 75% or greater level of support)

ALLOCATION

Allocation Baseline by User Groups:

Trap Fishery: 72%; Recreational Fishery: 22%; Commercial Dive Fishery: 5%; Bully Net 1%.

Allocation Criteria/Parameters/Triggers for Response:

A review is triggered when an allocation share falls outside (above or below) normal parameters of the baseline for two consecutive years. Following are the parameters:

	Trap	Recreational	C. Dive	Bully Net
High	77	26	8	3
Baseline	72	22	5	1
Low	67	18	3	0.1

Response When an Allocations Falls Outside Normal Parameters:

Triggers reconvening of a stakeholder group to meet with FWC staff to review the situation and develop recommendations as/if needed.

The reconvening will happen quickly (soon after baseline parameter are exceeded).

SEASON LENGTH

Set trap in water the day after mini-season ends. Contingent on correlation with federal requirements.

HARVESTABLE SIZE LIMITS

Maintain Status quo. No changes to the current requirements.

FISHERY EFFECTS ON THE ENVIRONMENT (NATURAL HABITAT)

The Board voted unanimously to recommend that a “comprehensive Keys shore clean-up plan” be developed and implemented.

The Board voted unanimously to recommend that an “emergency disaster trap clean-up plan” be developed and implemented.

Allow the sale of plastic traps collected during the State’s trap retrieval program, funds to be used to support the program.

The Board voted unanimously to support draft rule language for Rule 68B-55.004, Retrieval of Derelict Traps Located in Closed Areas, and Rule 68B-55.005, Recovery of Traps in Area of Major Natural Disaster.

OTHER LOBSTER SPECIES

Status quo. In general, the Board believes this issue is not a priority at this time.

Egg-bearing females of any species of lobster shall not be taken.

LOBSTER TRAP CERTIFICATE PROGRAM

Continue the certificate program.

Reduce the time from 3 years to 2 years in which trap certificates that have not had all of their associated fees paid for will revert to the State.

Remove 25% transfer surcharge when “A” certificates are sold.

End trap reductions permanently.

Buy back program, voluntary government with a provision for buybacks to be sold to new entrants into fishery, sponsored (state or Federal).

TRAP SPECIFICATIONS

Continue to allow trawls.

Continue to allow all-plastic lobster traps (status quo).

NEW ENTRANTS

Accommodate deck hands by allowing those with trap certificates to pull their own traps from owners' boats.

Develop an incentive program (to facilitate new entrants).

ISSUES REGARDING THE COMMERCIAL DIVE FISHERY

Annual law enforcement details during first two months of the season in the areas where the use of artificial habitat are concentrated.

Loss of license for convictions (stronger penalties) for use of illegal artificial habitat.

Develop an input control effort management program (e.g. endorsement transferability). The Board recommends that the Commission convene a process to review input control effort management program options for the commercial dive fishery, including transferability, developing a comprehensive strategy using the control date for qualifying landing up until March 31st 2007 as the threshold.

No diving for lobster (harvesting and possession) within 50' of illegal artificial habitat (change current rule from 10 yards to 50 feet).

Annual locate and removal efforts of artificial lobster habitat.

Fixed number of commercial dive endorsements (status quo).

Require owner's commercial dive endorsement number (CD) to be displayed on all catch gear for commercial divers.

Require commercial divers to use surface buoys with CD-number on flag, on the Gulf side of Keys.

ISSUES REGARDING THE RECREATIONAL FISHERY

Require a special endorsement to participate in the Special Two-Day Sport Season in Monroe County as a means to aid enforcement of the daily bag limit. The endorsement will have paper tags attached to it that would be separated and kept with each lobster harvested.

Clarifications on the two-day endorsement recommendation:

- Require lobster tags to enforce bag limits and multiple daily trips for the two-day season.
- The endorsement (tags) should be “possession tags”, a paper based system.
- The tag program should only be for the two-day mini-season.
- The program only applies to Monroe County.
- All participants are required to have the endorsements for the two-day season; however, those participants who qualify for licensure exemptions can apply for a free endorsement.
- Endorsements (tags) should be available by all of the existing methods: location-based printers, by mail, and through the FWC website.

Increase fee on recreational sector and earmark funds for tags (for the two-day season).

ISSUES REGARDING THE COMMERCIAL BULLY NET FISHERY

The Status quo. No changes to current regulations.

LAW ENFORCEMENT

The Board recommends that the Commission convene an initiative (i.e., a task force) to examine and assist the enforcement of fishery regulations (primarily regarding the lobster fishery).

**MAJORITY DRAFT OPTIONS EVALUATED BY THE BOARD BY ISSUE
(Options with a between 50% and 74% level of support)**

ALLOCATION

Overview of Other Baseline Allocation Proposals Evaluated by the Board

Better year: Trap 75%, Rec. 20%, Com Dive 4%, Bully Net 1%.

10 year average: Trap 70%, rec. 23%, com diver 6%, bully net 1%

Average of best year, 10 year average, and first year: trap 72%, rec. 23%, com dive 4%, bully net 1 %.

1st year baseline allocations (1993-94) 70% trap, 26% rec., 3%, com dive, 1% bully net.

Overview of Other Criteria for Triggering an Evaluation Proposals Evaluated by the Board

*Drastic change in 1 year or a progressive change over 3 years would trigger review
Drastic = 10% change in pie in 1 year; progressive = 5% shift from baseline allocation over 3 years.*

Any user group increase/decrease 5% of total pie, for 3 years in a row (adjusted for Bully).

	Trap	Rec.	C. Dive	Bully
Top	77	27	10	3
Baseline	72	22	5	1 (0.5 actual)
Bottom	67	17	1	0

Any user group increase/decrease 25% of their share, 2 years in a row (percentage of percent of their share).

Overview of other Response(s) When an Allocations Falls Outside Normal Parameters Proposals Evaluated by the Board

Board will re-convene in 3 years to re-assess percentages of allocations for user groups (this would be instead of a proactive allocation scenario being implemented at this time).

SEASON LENGTH

None in this category.

HARVESTABLE SIZE LIMITS

None in this category.

FISHERY EFFECTS ON THE ENVIRONMENT (NATURAL HABITAT):

None in this category.

OTHER LOBSTER SPECIES

None in this category.

ISSUES REGARDING THE COMMERCIAL TRAP FISHERY

Buy back program, voluntary government sponsored (state or Federal).

Passive reduction with 10% instead of 25% trap reduction (eliminate active reduction component, for transactions only).

TRAP SPECIFICATIONS

None in this category.

NEW ENTRANTS

None in this category.

ISSUES REGARDING THE COMMERCIAL DIVE FISHERY

Marking commercial divers with surface buoys with C-number on flag for Miami-Dade County waters.

ISSUES REGARDING THE RECREATIONAL FISHERY

None in this category.

ISSUES REGARDING THE COMMERCIAL BULLY NET FISHERY

None in this category.

ADDITIONAL OPTIONS EVALUATED BY THE BOARD BY ISSUE (Options with less than a 50% level of support)

ALLOCATION

Status quo - Continued reactive responses to shifts in landings allocations.

Close areas to prevent poaching by eliminating lobster diving.

Eliminate particular user groups.

Quota system – poundage, licenses, etc.

Close certain areas.

SEASON LENGTH

Start season earlier (July 21st traps in the water, pull Aug 1st), increase penalties for egg-bearing females; contingent on correlation with Federal season; 3 year sunset provision unless reinstated by Commission.

End season sooner.

No closed season.

Different regional seasons based upon specific criteria.

Shorten the season.

Start season later.

Traps set the day after mini season, soak 10 days, then the season opens for everyone. The start date of the season will change.

Soak period begin Aug 1st, season begins Aug 10th for all.

HARVESTABLE SIZE LIMITS

Establish a 'slot limit'.

Establish a regional slot limit.

Increase minimum size.

Decrease minimum size.

FISHERY EFFECTS ON THE ENVIRONMENT (NATURAL HABITAT)

Establish an allowable-only gear list (if the gear is not listed than it is not allowed).

Reduce the number of traps.

Establish areal closures to protect certain habitats at certain times.

Evaluate and consider whether to prohibit certain additional gear types.

Shorten the season.

Split season.

OTHER LOBSTER SPECIES

Develop management for some or all of these species.

Prohibit harvest of some or all of these species.

ISSUES REGARDING THE COMMERCIAL TRAP FISHERY

Passive reduction with 10% instead of 25%.

Buy back program , voluntary government (or other entity) sponsored (state or Federal).

Continue passive reduction only (25%); eliminate active reduction component.

Switch to alternate trap management regime (IFQ, tiered license, etc.).

Status quo (Stop reducing the number of certificates at 400,000).

Continue the trap reduction component of the trap certificate program.

Continue with no minimum number of certificates per individual (reduce to zero).

Buy back program, voluntary government sponsored (state or Federal) with a percent of buy backs being used to compensate for any allocation shifts in the trap fishery, so active trappers don't have to give back traps they are using.

Continue active reduction.

Individual Fish Quota (IFQ).

TRAP SPECIFICATIONS

Require escape gaps.

Require weight on buoy lines.

Allow wire traps in state waters.

No floats on trawls.

NEW ENTRANTS

Require a proficiency course for new entrants (i.e., rules and regulations).

Require an apprenticeship (training) program for new entrants.

Create a voluntary apprenticeship program for new entrants.

ISSUES REGARDING THE COMMERCIAL DIVE FISHERY

Adjust trip limits to manage allocation.

Allow the use of permitted artificial habitat.

Closing specific area to divers and recreational users.

Establish an output control effort management program (i.e. IFQ).

Dive Endorsement Transferability Program: less than 100 lbs. of landings endorsement is nontransferable, 100 lbs. or more of landings endorsement is transferable; control date for qualifying = 2005-06 and 2006-07.

Dive Endorsement Transferability Program: less than 500 lbs. of landings endorsement is nontransferable, 500 lbs or more of landings endorsement is transferable; control date for qualifying = 2005-06 and 2006-07.

ISSUES REGARDING THE RECREATIONAL FISHERY

Abolish the two-day sport divers season.

*Limit the issuance of recreational crawfish endorsements.
(Fixed number of recreational endorsements)*

Establish an effort limitation program on the recreational fishery.

*Implement an annual bag limit with tags. (Still maintains the 6 per day limit)
Status quo.*

Bag limit applies to harvesters only.

Conduct straw the poll on the two-day season after 3 years, and once the lobster tag program is in effect.

FWC recommends in a Memo, that Monroe Co conduct a straw poll regarding whether to abolish the 2 day season in Monroe County, language to be developed by staff and Board, results forward to Commission for their consideration.

Reinstate the 24-vessel limit.

Require a lobster tag for each day of the recreational season.

Change the recreational harvesting season.

Establish a recreational limited entry program.

Change the bag limit.

Establish the same regulations for all recreational fishers.

Different management for two-day season.

ISSUES REGARDING THE COMMERCIAL BULLY NET FISHERY

Commercial divers cannot be commercial bully netters.

Establish a commercial bully net endorsement.

Develop an input control effort management program.

Establish and adjust trip limits to manage allocation.

Establish an output control effort management program (i.e. IFQ).

FREE MARKET REGULATION OF FISHERY

This issue was discussed at the January and March 2007 meetings, and there was no support for the concept by the Board.

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

SPINY LOBSTER AD HOC ADVISORY BOARD

FACILITATOR'S SUMMARY REPORT OF THE
MAY 23 - 24, 2006 MEETING—MEETING IV

Duck Key, Florida

Meeting Design & Facilitation By



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FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
SPINY LOBSTER AD HOC ADVISORY BOARD REPORT MEETING IV



OVERVIEW

The Florida Fish and Wildlife Conservation Commission (FWC) has invited representatives of interests participating in Florida’s Lobster Fishery to serve as members of an ad hoc lobster advisory board, “The Spiny Lobster Ad Hoc Advisory Board” (SLAHAB). The advisory board is designed to bring together a group of stakeholder representatives from around the state who represent the diversity of the lobster fishery community and includes commercial lobster trappers, commercial lobster divers, recreational lobster fishers, a special recreational license holder, wholesale lobster dealers, an NGO, and a representative from the FWC. The goal is to convene a group of representative stakeholders who can provide constructive comments and guidance to the FWC in the form of proposed refinements to the management of Florida’s spiny lobster fishery. Over a period of sixteen months the advisory board will meet approximately eight times for approximately two days each to focus on reviewing and discussing lobster fishery issues and proposals for refinements to Florida’s spiny lobster fishery.

The first meeting of the Spiny Lobster Ad Hoc Advisory Board was held on July 20, 2005 at the Sombrero Resort in Marathon, Florida Keys.

The second meeting of the Board was held on January 9 – 10, 2006 at the Marathon Government Center and the Marathon Garden Club respectively.

The third meeting of the Board was held on April 11 – 12, 2006 at Hawk’s Cay on Duck Key.

The fourth meeting of the Board was held on May 23 - 24, 2006 at Hawk’s Cay on Duck Key.

MEMBERS AND REPRESENTATION

Commercial Trappers

Jeff Cramer
Bruce Irwin
George Niles
Mary (Mimi) Stafford
Manuel Toledo

Recreational Fishers

Cyril (Cy) Dougherty
Harry (Hal) Flowers
Richard Sewell

NGO

Bill Goodwin (non-voting member)
Roberto Torres

Commercial Divers

Robert Cardin
Peter Cone
Manuel Ravelo

Wholesale Dealers

Peter (Pete) Bacle
Manuel Prieguez

FWC

Chuck Collins

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
LOBSTER ADVISORY BOARD
PLAN DEVELOPMENT SCHEDULE AND PROCESS

Dates	Activities
June 2005	Appointment of Florida Lobster Management Advisory Board
July 20, 2005	Advisory Board Meeting #1—Organizational, strategic visioning, identification of issues (Marathon)
January 9 - 10, 2006	Advisory Board Meeting #2 (Marathon)
April 11 - 12, 2006	Advisory Board Meeting #3 (Duck Key)
May 23-24, 2006	Advisory Board Meeting #4 (Duck Key)
July 6 – 7, 2006	Advisory Board Meeting #5 (FL Keys)
September 6-7, 2006	Advisory Board Meeting #6 (FL Keys)
November 8 – 9, 2006	Advisory Board Meeting #7—Draft Approval (FL Keys)
December 2006	Public Workshops—Round One
January 16 – 17, 2007	Advisory Board Meeting #8—Review of Public Comments (FL Keys)
April 11 – 12, 2007	FWC Commission Meeting—Draft Rule Review (Tallahassee)
May 22 – 23, 2007	Advisory Board Meeting #9—Review of Commission comments to draft rule (FL Keys)
Summer 2007	Public Workshops—Round Two
September 12 – 14, 2007	FWC Commission Meeting—Final Public Hearing (Fort Myers)

OVERVIEW OF BOARD'S KEY DISCUSSIONS AND ACTIONS

TUESDAY, MAY 23, 2006

Agenda Review and Work Group Plan Overview

Following are the key agenda items discussed at Meeting IV:

- To Approve Regular Procedural Topics (Agenda, Report, and Workplan Schedule)
- To Hear/Discuss Topical Presentations Related to Key Workgroup Issues
- To Review Lobster Fishery Issues and Options Worksheet
- To Identify Any Additional Issues for Evaluation Related to the Lobster Fishery
- To Identify Additional Options for Addressing Key Issues
- To Evaluate Level of Acceptability for Proposed Options
- To Identify Needed Next Steps: Information, Assignments, and Agenda Items for Next Meeting

Board Member Attendance

The following members attended Meeting IV:

Pete Bacle, Robert Cardin, Peter Cone, Chuck Collins, Jeff Cramer, Cy Dougherty, Bill Goodwin, Bruce Irwin, George Niles, Manuel Prieguez, Richard Sewell, Mimi Stafford, Manny Toledo, and Roberto Torres.

FWC Staff Attendance

John Hunt, Program Administrator, FWRI
Jasmine Macpherson, DMFM
Bill Sharp, Fisheries Management Analyst, DMFM
Lt. Steve Golden, DLE

Additional FWC Staff Present

Rod Bertelsen, Shelli Braynard, Carrollyn Cox, Captain Pat Langley, Cynthia Lewis, Tom Matthews, Kerry Maxwell, and Major Skip Russo.

Facilitation

The meeting was facilitated by Jeff Blair from the Florida Conflict Resolution Consortium at Florida State University. Information at: <http://consensus.fsu.edu/>

Project Webpages:

<http://myfwc.com/marine/workgroups/index.html>

<http://consensus.fsu.edu/FWC/index.html>

Welcome and Opening

Bill Sharp, Fisheries Management Analyst, DMFM, welcomed members, staff, and the public to Meeting IV of the Lobster Advisory Board. Bill reviewed the revised meeting schedule found on page two of this report.

Process Review

Jeff Blair, Board facilitator, reminded members that the purpose of the Board is to review the lobster fishery program and propose consensus recommendations for refinements and enhancement to the Commission. Board members were reminded that the Lobster Advisory Board is being asked to identify and evaluate the full range of options related to the issues under consideration and within the scope of the Board's mission. The facilitator explained that all options should be evaluated, even those with little or no apparent support, and that no final decisions would be made until the final package of recommendations was ready for consideration. The Facilitator requested that members consider each option on its own merits, and not in relation to the other options.

Jeff explained that Board members are charged with representing their broader stakeholder constituent groups. In addition, members were requested to consult with their constituents between meetings, to consider the package of recommendations on balance and in relation to the overall lobster fishery, and to bring additional options for consideration to subsequent meetings.

Agenda Review and Approval

The Board voted unanimously, 12 - 0 in favor, to approve the agenda as presented.

Approval of the April 11 - 12, 2006 Facilitator's Summary Report

The Board voted unanimously, 13 - 0 in favor, to approve April 11 - 12, 2006 Facilitator's Summary Report as presented.

Review of the Lobster Fishery Issues and Options Worksheet

A worksheet was prepared based on the issues previously evaluated by the Board at the January 2006 meetings. For each issues in turn, the Board was asked consider and discuss research presentation prepared by staff (for some of the issues), to review the full range of options, to propose additional options, to seek clarification on the intent of each option, and then to evaluate each option using a four-point acceptability scale, where a 4 is acceptable, a 3 is minor reservations, a 2 is major reservations, and 1 is not acceptable.

Following the initial and additional evaluations, Board members were requested to explain their range of concerns, and to identify any additional information they need in order to further consider the issue and/or option. The Facilitator explained that in general a 4 or 3 represents support for the option, and a 2 or 1 represents a lack of support for the option.

The Facilitator explained that this was still a preliminary evaluation, and that all options with some level of support (close to at least an even split for or against the option) would remain on the worksheet to be further evaluated at subsequent meetings. Additionally, at any time, Board members are encouraged to propose additional options, or propose the re-evaluation of options that have already been considered.

The ranking of the options and members comments are included in the options evaluation section of this report.

General Public Comment

Members of the public were invited to address the Board. In addition, the public was encouraged to provide written comments on the form provided in the agenda packets. The Facilitator noted that all written comments would be included in the Facilitator's Summary Reports.

Public Comment

No members of the public addressed the Board on day 1.

Recess

The Board voted unanimously, 14 – 0 in support, to recess at approximately 4:15 PM.

WEDNESDAY, MAY 24, 2006

Agenda Review and Approval

The Board voted unanimously, 12 - 0 in favor, to approve the agenda as presented.

Initial Evaluation of Options by Issue in Turn Continued

The Board continued the process of listening to and discussing research presentations on key issues, and identifying and evaluating a full range of options for each issue.

The results of the options evaluation exercise rankings and Board member's comments and reservations are included in the options evaluation section of this report.

General Public Comment

Members of the public were invited to address the Board. In addition, the public was encouraged to provide written comments on the form provided in the agenda packets. The Facilitator noted that all written comments would be included in the Facilitator's Summary Reports.

Public Comment:

No members of the public addressed the Board on day 2.

Board Member Comment:

Manny Toledo requested options for how collaboration can be enhanced/effectuated with other countries.

Research Issues Identified by the Board at the May 2006 Meeting

- Artificial habitat research/data
- Data related to the 25% surcharge on transfer of "A" certificates.
- Number of plastic traps in the lobster fishery.
- Data on recreational lobster tags.
- Options for how collaboration can be enhanced/effectuated with other countries.

Research Issues Identified by the Board at the April 2006 Meeting

- Number of C-numbers not associated with an RS.

Adjourn

The Board voted unanimously, 12 – 0 in support, to adjourn at approximately 12:30 PM.

OPTIONS EVALUATION EXERCISE RESULTS

During the meeting, Board members were asked to consider research information provided by FWC staff, discuss the research, review the range of options previously evaluated by the Board, to propose additional options, to rank each of the options for acceptability, and to offer their comments and explain their reservations related to each of the options evaluated.

The following scale was utilized for the ranking exercises:

Acceptability Ranking Scale	<i>4 = acceptable, I agree</i>	<i>3 = acceptable, I agree with minor reservations</i>	<i>2 = not acceptable, I don't agree unless major reservations addressed</i>	<i>1 = not acceptable</i>
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ISSUES OUTSIDE THE SCOPE OF THE FISHERY MANAGEMENT PLAN

The following issues were identified by the Board and/or staff at the July 2005 Board meeting. However, these issues are not within the scope of the fishery management plan and cannot be resolved directly through agency rulemaking. The Board may decide to discuss these issues further once they have concluded consideration of draft management plan changes.

- A) Pav-1 Virus
- B) Origin Of Recruitment Of Florida's Spiny Lobster Stock
- C) Outreach
- D) Land Use Issues
- E) Enforcement
 - Trap Theft
 - Counterfeit Lobster Trap Tags
 - Bag Limit Excess
 - Pre-Season Penning
- F) Research

Following are the options evaluated, the acceptability ranking of the options, and member's discussions, comments, and reservations regarding the options:

2. BROAD SCALE ISSUES ACROSS ALL USER GROUPS

ALLOCATION: A shift in the landings allocation from the commercial trap fishery to the commercial dive and recreational fisheries as the Lobster Trap Certificate Program (LTC) progressed was an important factor initiating the comprehensive reevaluation of the spiny lobster fishery. Deciding on a broad direction for how to address allocations is a critical first step for the Board, as this decision will provide considerable guidance for evaluating many of the other issues that have been identified.

Presentation by John Hunt on Allocation:

John explained that the trap fishery is managed while other sectors are not. The unintended consequences of not managing the entire fishery in a holistic and comprehensive manner is that other sectors of the fishery had shifts in their allocation percentages. John indicated that proactive management based on allocation would provide staff with a structure in which to respond to shifts in allocations.

In general, a baseline allocation for each user group is established, a set of criteria/parameters are determined, when the triggers are reached a specified response goes into effect.

John then reviewed a series of six hypothetical allocation scenarios.

General Discussion on Allocation Scenarios/Options (May 23, 2006):

Summary of Questions, Comments, and Discussion

- Collins: Allocation allows adjustments both ways, up and down, and is a two-way street.
- Prieguez: Are there any other allocation programs in existence? Sharp: yes, in Australia.
- Cone: We need accurate baseline data to create allocations each year. There is inaccurate information on actual allocation(s) due to artificial habitat harvesting.
- Hunt: Statistics over time will verify trends in allocations. The lobster fishery has data over 10 years to verify baseline data.
- Dougherty: Have Australians stabilized the fluctuations in the fishery. Hunt: no.
- Cardin: Need to clarify why commercial dive landings increased after trap certificate program.
- Management has been reactionary, should be proactive.
- Bacle: Any reason the allocation presentation did not have a trap fishery scenario?
- Hunt: A major shift in that fishery is not as likely because of the trap certificate program (TCP).
- Sharp: Scenarios in presentation are just some examples, and not meant to be exhaustive.
- Collins: would this system of automatic triggers take politics out of it?
- Hunt: It might reduce it.
- Bacle: The scenarios would have been better with the actual baseline numbers, instead of the hypothetical numbers.
- Hunt: It is part of the job of the advisory board to decide on the baseline numbers.
- Cone: The illegal activities of commercial divers is a hidden issue and skews the number and baseline allocations.
- Stafford: Need restrictions allocation percentages; recreational numbers are on the rise.
- Sewell: We need accurate information for pro-active management recommendations.
- Sharp: We utilize the same evaluation methods over time, and trends are what is actually evaluated. The 10 year average is a useful baseline for establishing allocations.

- Bacle: As far as a pro-active allocation strategy, it is unlikely there will be dramatic changes in allocation in the future and this is a good argument for moving slowly; a proactive allocation program could effect all segments of the fishery negatively and may lead to fixed quotas, an example of unintended consequences. Fishery appears stable into the future so we should leave allocation to evolve on its own for the present.
- Sharp: If an allocation scenario/plan is in place, and there are no major changes (the triggers are not reached) than nothing needs to happen. However, if there is no plan in place, latent effort can explode unexpectedly with no plan for responding.
- Toledo: Can we get a quicker turn around than 1 year with proactive allocation? We also need to know the actual baseline numbers to propose meaningful scenarios.
- Prieguez: Who decides the proper percentage for each user group?
- Hunt: The ad hoc spiny lobster advisory board will recommend allocation baseline for each of the user groups.
- Prieguez: The Board is presently unbalanced among user groups. We should react when it happens and not proactively.
- Blair: The Board is charged with exploring a range of possible options, considering the pros and cons of each scenario/option, determining whether it is fair to all of the user groups, and determining whether any of the allocation options make sense on balance. It is possible that after exploring the full range of options, none will be found acceptable to the Board.
- Dougherty: I am confused about percentages, the recreational numbers are only estimates. Is it really possible to validate numbers from surveys?
- Hunt: Staff use standard established surveys methods, and have a 50% response rate, which is better than most response rates. The surveys are accurate.
- Bacle: Did significant numbers of survey respondents admit to exceeding limits and making multiple trips.
- Hunt: Yes, some did, and the numbers are consistent from year to year, indicating statistical reliability.
- Cone: with the large population influx into Florida, more people participants are getting into recreational segment. In addition, there is harvesting of artificial habitat by “illegal” groups that are organized and use highly developed technology.
- Irwin: Allocation is protection for the future and it protects everyone’s piece of the pie. With a proactive allocation program everyone gets a fair share and it benefits all user groups.
- Cramer: It would be a mistake not to be pro-active.
- Niles: These are all good points, we don’t want to be changing rules every year responding in a reactionary way to events. Allocation protects everyone’s portion and requires some reaction to any shifts in user group allocations.
- Collins: This is a radical change in thinking and has interesting possibilities that the Board should explore further.
- Torres: We should look to see what other countries have done with allocations; allocations will protect resources and the industry.
- Goodwin: There is no perfect resource management system, but pro-active allocation system seems like worthwhile approach.

Baseline Statistics Presentation by John Hunt

John Hunt presented a 10 year analysis of allocation percentages for each of the four key fishery user groups. John reported that the average allocation for user groups is as follows:

70% for the trap fishery, 23% for the recreational sector, 6% for commercial divers, and 1% for bully netters.

Summary of Questions, Comments, and Discussion:

- How do you determine a sectors percentage, should it be a percentage of the percentage or percentage of the total in establishing shift or change?
- Change would have to be a percentage of each sector's share to be fair
- "Percent of a percent" since the sectors are not independent of each other and are inter-related.
- "10 year average" is an effective tool for determining allocation.
- Concern over whether data is accurate.

Allocation Management Options Evaluated by the Board

Pro-active management of landings allocations.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	4	5	1	1
<i>Revised 4/06</i>	2	4	7	2
<i>Revised 4/06</i>	4	8	1	2
<i>Revised 5/06</i>	3	7	3	1

Member's Comments and Reservations (May 2006):

See discussion above.

Baseline Allocation Percentage(s) Supported by the Board

Allocation: Trap 72%; Recreational 22%; C. Dive 5%; Bully Net 1%

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/23/06</i>	5	6	1	2

Criteria for Triggering an Evaluation Supported by the Board

A review is triggered when a share falls outside (above or below) normal parameters of the baseline for two consecutive years. Following are the parameters:

	Trap	Rec.	C. Dive	Bully Net
High	77	26	8	3
Baseline	72	22	5	1
Low	67	18	3	0.1

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/23/06</i>	7	3	2	2

Response When an Allocations Falls Outside Normal Parameters Supported by Board

Triggers a reconvening of a stakeholder group to meet with FWC staff to review the situation and develop recommendations as/if needed.

The reconvening would happen quickly (soon after baseline parameter are exceeded).

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	10	3	0	1
Revised 5/23/06	11	1	0	2

Member's Comments and Reservations (May 2006):

Re-ranked to amend proposal to include a quick response time for convening group.

Overview of all Baseline Allocation Proposals Evaluated by the Board

1st year baseline allocations (1993-94) 70% trap, 26% rec., 3%, com dive, 1% bully net.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	0	3	6	5

Member's Comments and Reservations (May 2006):

- Cardin: natural fluctuations are causing changes in allocation.
- Toledo: I don't agree with 23% for the recreational sector, and the commercial diving allocation should be higher.
- Stafford: This is not a fair distribution. The commercial dive sector is reduced.

10 year average: Trap 70%, rec. 23%, com diver 6%, bully net 1%

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	2	8	0	4

Member's Comments and Reservations (May 2006):

- The dive sector is being rewarded for years when trappers were restricted.
- Lobster percentage for traps is too low, will force Commission to take action in some restrictive manor.
- Triggers are only for an for evaluation, not necessarily a specific action.

Better year: Trap 75%, rec. 20%, com dive 4%, bully net 1%

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	4	6	3	1

Member's Comments and Reservations (May 2006):

- Percentages is not the way to go, not comfortable deciding percentages for user groups.

Average of 3 options above: trap 72%, rec. 23%, com dive 4%, bully net 1 %.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	0	5	5	4

Member’s Comments and Reservations (May 2006):

Average of 2 best ranked options: trap 72%, rec. 22%, com dive 5%, bully net 1 %.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	5	6	1	2

Member’s Comments and Reservations (May 2006):

- Not comfortable deciding percentages.
- This is a good place to start. We need a baseline from which to explore allocation scenarios.

Overview of all Criteria for Triggering an Evaluation Proposals Evaluated by the Board

Any user group increase/decrease 5% of total pie, for 3 years in a row (adjusted for Bully).

Trap	Rec.	C. Dive	Bully
Top	77	27	10
Baseline	72	22	5
Bottom	67	17	1

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06 3 years	0	7	3	3
Revised 5/06 2 years	2	4	4	4

Member’s Comments and Reservations (May 2006):

3 years in a row:

- Three years is too long to react.
- 1 year may be too soon, try 2 years instead.

2 years in a row:

- The user groups with a small share should have an adjustment to provide fairness. If bully netters increased by 5%, it would not have the same effect as a 5% increase in the trap sector for example.

Any user group increase/decrease 25% of their share, 2 years in a row (percentage of percent of their share).

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	0	1	9	3

Member’s Comments and Reservations (May 2006):

- Percentages are unfairly balanced, especially related to the larger user groups.

Drastic change in 1 year or a progressive change over 3 years would trigger review

Drastic = 10% change in pie in 1 year; progressive = 5% shift from baseline allocation over 3 years.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	1	6	4	3

Member’s Comments and Reservations (May 2006):

- The Board should evaluate all proposals, and may then decide to combine ideas.
- Concerned over 3 years, too long a trigger.
- Not only does total catch fluctuate but so does percentage, this is not an effective tool.

A review is triggered when a share falls outside (above or below) normal parameters of the baseline for two consecutive years. Following are the parameters:

	Trap	Rec.	C. Dive	Bully Net
High	77	26	8	3
Baseline	72	22	5	1
Low	67	18	3	0.1

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	7	3	2	2

Member’s Comments and Reservations (May 2006):

- 2 years will trigger review?
- Don’t see a need for a proactive formula.

Overview of all Response(s) When an Allocations Falls Outside Normal Parameters Proposals Evaluated by the Board

Triggers a reconvening of a stakeholder group to meet with FWC staff to review the situation and develop recommendations as/if needed.

The reconvening would happen quickly (soon after baseline parameter are exceeded).

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	10	3	0	1
Revised 5/23/06	11	1	0	2

Member’s Comments and Reservations (May 2006):

Re-ranked to amend proposal to include a quick response time for convening group.

- Concerned about time frame, would like a “fast rack”, quick turn-around to convene work group.
- Bad things happen when you move too fast.

Board will re-convene in 3 years to re-assess percentages of allocations for user groups (this would be instead of a proactive allocation scenario being implemented at this time).

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	2	0	6	6

Member’s Comments and Reservations (May 2006):

- Too long a delay to wait.
- Prefer a pro-active approach.
- Moratorium is in place and we need to create a proactive plan to deal with existing allocations rules.

SEASON LENGTH: Season length is a complex issue that encompasses biological (reproduction, molting), environmental (trap and diver interactions with habitat), enforcement (egg stripping), social (vacation plans and onset of other fisheries), and economic considerations. This issue may best be discussed later in the evaluation process because the specific mechanisms for responding to allocation issues may address aspects of this issue.

Season Length Management Options Evaluated by the Board:

The status quo.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 1/06	0	3	8	0
Revised 4/06	8	5	1	1
Revised 5/23/06	6	5	3	0

Member’s Comments and Reservations (May 2006):

- Trappers should have a 10 day soak time so they are catching when season opens for divers.
- Still feel strongly about starting the season earlier.

Start season earlier (July 21st traps in the water, pull Aug 1st), increase penalties for egg-bearing females; contingent on correlation with Federal season; 3 year sunset provision unless reinstated by Commission.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	3	2	5	4

Member’s Comments and Reservations (May 2006):

- Eliminates mini season, increases handling of egg bearing females.
- The current season allows the growth of borderline juveniles.
- Molting, egg bearers, requires working with the Feds, traps are in water 10 more days to interact with the natural habitat, we should deal with mini season separately and not back-door the season, no advantage to pulling early, the same amount of lobsters will be caught over the season.
- Supports because of hurricane season, the earlier traps are in, sooner fishers can make money to recoup losses from previous hurricanes.

- I have a problem with increased penalties, no one takes egg-bearers on purpose, the penalties are already pretty severe.

Set traps in the water the day after mini season ends; contingent on correlation with Federal requirements.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/23/06</i>	7	2	4	1

Member's Comments and Reservations (May 2006):

- Floating season seems like a lot of work to get agreement with the Feds.
- This locks trappers into the mini season schedule.
- Starting earlier seems good, but might cause more conflict between user groups, better to avoid unnecessary conflict.

Traps set the day after mini season, soak 10 days, then the season opens for everyone.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/23/06</i>	5	2	4	3

Member's Comments and Reservations (May 2006):

- Different starting date every year.
- Bases lobster trapping on mini season.
- We could be starting later than we are already.

Soak period begin Aug 1st, season begins Aug 10th for all.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/23/06</i>	4	3	1	6

Member's Comments and Reservations (May 2006):

- This would mean that four more days are lost from of season in the most productive month.
- Don't want to lose 4 days when there are usually good pulls, lobsters move need those days.
- Stay with the status quo.
- There is no point to lengthening the soak time once traps are in the water.

HARVESTABLE SIZE LIMITS: This issue is a combination of biological factors related to sustainability of the fishery and economic factors including market processes and potential impacts to total harvest.

Size Limits Management Options Evaluated by the Board:

Maintain Status quo.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	8	3	0	0
<i>Revised 4/06</i>	7	6	2	0
<i>Revised 4/06</i>	7	5	3	0
<i>Revised 5/23/06</i>	11	3	0	0

Member's Comments and Reservations (May 2006):

- Support a slot limit.
- Are they bringing in more big lobsters from the lower keys
- There has been less effort, and the size has been consistent.
- According to the presentation we need a slot so small to make any gains in size.

Establish a 'slot limit'.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	3	3	5	0
<i>Revised 4/06</i>	1	5	4	5
<i>Revised 4/06</i>	0	5	2	8
<i>Revised 5/23/06</i>	1	2	4	7

Member's Comments and Reservations (May 2006):

- Same comments as before, we don't need this.

FISHERY EFFECTS ON THE ENVIRONMENT (NATURAL HABITAT):

All sectors of the fishery interact with and change the environment. The purpose of this section is to evaluate management options that may reduce environmental damage caused by harvesting activities. This issue may best be discussed later in the evaluation process because the specific mechanisms for responding to allocation issues may address aspects of this issue.

Natural Habitat Management Options Evaluated by the Board:

Establish an allowable-only gear list (if the gear is not listed than it is not allowed).

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	3	4	3	1
<i>Revised 4/06</i>	5	3	7	0
<i>Revised 5/06</i>	4	7	3	0

Member’s Comments and Reservations (May 2006):

- Everything is covered by current rules and method.

Reduce the recreational effort.

The Board agreed this is an Allocation issue and to remove this as an option.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	1	6	1	3

OTHER LOBSTER SPECIES: The lobster rule has no or only minimal regulations regarding the other lobster species. However, these species are economically important or ecologically important. The only regulations on these species at the present time is a prohibition on landing egg-bearing slipper lobsters, and the harvest of all species of the genus *Panulirus* and the Family Scyllaridae (slipper/shovelnose lobsters) from John Pennekamp State Park during the two-day sport season. Staff frequently field questions regarding these species prompting concern that fishing effort is higher than perceived. Most of the species live in coral reefs and similar hardbottom habitats; therefore, the potential for coral damage exists due to directed fishing effort toward these species. These species include the spotted lobster (*Panulirus guttatus*), and slipper lobster (Family: Scyllaridae).

Other Lobster Species Management Options Evaluated by the Board:

Status quo.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	5	3	3	0
<i>Revised 5/23/06</i>	12	2	0	0

Member’s Comments and Reservations (May 2006):

- Concerned about the species not being managed but being taken, how are they impacted.
- Spotted might be protected soon, slippers are a small percentage of those caught.

Develop management for some or all of these species.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	3	3	4	1
<i>Revised 5/23/06</i>	1	3	7	3

Member's Comments and Reservations (May 2006):

- Still prefer the status quo.

Egg-bearing females of any species of lobster may not be taken

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/23/06</i>	13	0	0	0

Member's Comments and Reservations (May 2006):

No comments were offered.

3. ISSUES REGARDING THE COMMERCIAL TRAP FISHERY

The three broad issues facing the commercial trap fishery are: 1) the trap certificate program; 2) various trap design and trap use issues; and, (3 ensuring the long-term sustainability of the trap fishery via developing mechanisms to find new entrants into the fishery.

LOBSTER TRAP CERTIFICATE PROGRAM

The trap certificate program contains issues whose direction will be determined in part by the Board recommendation regarding allocation and by additional issues that are unique to the trap fishery.

Trap Program Management Options Evaluated by the Board:

Continue the certificate program.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	8	2	1	0
<i>Revised 4/06</i>	9	4	0	0
<i>Rev. 5/24/06</i>	12	2	0	0

Member's Comments and Reservations (May 2006):

- LTC has accomplished its goals, its time to move on, no more reductions.
- This is sending mixed signals, this is allocation so it should all sectors should be managed.
- Board should consider other options, alternative scenarios.
- Its too late to go back, trap fishers have invested heavily in the fishery.

Stop reductions immediately.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	8	3	0	0
<i>Revised 4/06</i>	9	3	1	0
<i>Rev. 5/24/06</i>	8	5	1	0

Member’s Comments and Reservations (May 2006):

- Mixed signals, passive reduction is a good program, it just hasn’t reached goal yet.
- Trap reduction program is working, just not there yet. Need to let it work longer in order to ascertain the efficacy of the program.
- Against active reduction, keep door open to buy backs; may not have a place to put 400,00 traps in the future, too many certificates are out there; keep it open so certificates can have some value.
- Option is to stop active reductions.
- LTC has met goals of trap numbers being reduces, but hasn’t met other goals of higher trap per catch.

Alternative reduction scenarios (compile all fishery management options).

Board Data Request: Alternative Reduction Scenarios Overview.

This option was not ranked in favor or evaluating alternative reductions scenario options.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	4	6	1	0

Overview of Alternative Reduction Scenario General Discussion:

- Currently there are certificates not being fished, and after 3 years if not paid for, they are removed; ~20,000 certificates of this type.
- Trap reductions have hurt the industry, staff should stop pursuing this concept; costs are prohibitive; passive reduction requires 25% more purchased that needed. It takes \$200,000 to enter fishery; need to maintain latent effort traps, provides ability for new entrants to get into the business; supply and demand, need young people coming into industry, but it has to be affordable, need to learn the business.
- Certificates have value and not a good idea to give them up, protect active stash available now for future, create a cushion for future legislation that may negatively impact the industry.
- Present goal of 400,000 traps – once that’s reached, does surcharge stop?
- There are 2 kinds of certificates, once 400,000 reached, surcharges stops.
- Politics can change, staff research continues to work on issues.
- Can commission unilaterally take action?
- Restructured to provide greater input from stakeholders, and work to reach consensus with stakeholders.
- Trap reduction is a delicate issue, can only support government buying back certificates voluntarily until reach the 400,000 goal; hurts guys who bought in when certificates were high; trap reductions has not increased catch per trap yet.
- If state buys back, this would be acceptable if they would be available to others; reduction is reduction.

- Further reductions needs to be on the government, no benefit to yield from reductions; could be released to new entrants if allocation issue arises.
- Dangerous to allow other groups in on buy back, only buy-back by government should be allowed.
- Put some cap on the amount to be bought-back, especially if other interest groups are allowed to buy certificates; lower limits on buyback reductions.
- Leave door open to others beside government for buy-backs.
- Huge amount of information was provided by staff on the environmental damage caused by traps, why CPUE has not gone up, allocation issues; if allocation is in place then unintended consequences can be addressed and reversed.
- Buy-backs are outside the realm of FWC but you can still make recommendations.
- Trap reduction: 400,000 current goal; 250,000 is the economic model recommendation.

Continue passive reduction only

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/24/06</i>	2	2	6	4

Member's Comments and Reservations (May 2006):

Covered in previous discussion (above).

Continue active reduction

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/24/06</i>	0	0	3	11

Member's Comments and Reservations (May 2006):

Covered in previous discussion (above).

Buy back program , voluntary government (or other entity) sponsored (state or Federal).

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/24/06</i>	4	0	4	6

Member's Comments and Reservations (May 2006):

Buy back program , voluntary government sponsored (state or Federal)

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/24/06</i>	4	5	1	4

Member's Comments and Reservations (May 2006):

Covered in previous discussion (above).

Buy back program , voluntary government with a provision for buybacks to be sold to new entrants into fishery, sponsored (state or Federal).

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/24/06</i>	4	7	3	0

Member’s Comments and Reservations (May 2006):

- In general with all reductions, fear is not having anything in place to revert back to over capitalized numbers; support something in place to maintain fishery at an efficient level.
- This is not a reduction in trap numbers, they are going to be sold right back into the fishery.
- Overcapitalization issue is what started reductions, only the fishermen can say when they are over capitalized.
- Buybacks would be in storage, management tool for the future if needed.

Passive reduction with 10% instead of 25%

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/24/06</i>	1	4	4	5

Member’s Comments and Reservations (May 2006):

- Sending conflicting messages, first no reduction, then we support 2 instead of 3.

TCP fees if not paid within 2 years, reverts back to state, instead of 3 years

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/24/06</i>	6	5	1	2

Member’s Comments and Reservations (May 2006):

- Forces certificates back on the market by lowering from 3 to 2 years.
- Sending conflicting messages, first agree to no reduction, then we support 2 instead of 3 years, ok to take reductions after 2 years.
- Votes appear split between commercial trap fishers and other user groups.
- Consensus is not split by user groups.

Remove 25% transfer surcharge when “A” certificates are sold.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/24/06</i>	8	6	0	0

Member’s Comments and Reservations (May 2006):

- Where do these funds go? Staff will report back on transfer funds: how much money is generated, how it is used, how many A certificates are left.
- Worried if they remove surcharge, the State may find another method to charge economic rent.

TRAP SPECIFICATIONS

There are several issues relating to trap use and specifications that have been raised over the years.

Trap Specification Management Options Evaluated by the Board:

Continue to allow trawls.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	10	1	0	0
<i>Rev. 5/24/06</i>	12	1	1	0

Member's Comments and Reservations (May 2006):

- Concern over loose line in the water creating user conflicts.
- This is an enforcement issue.

Continue to allow all-plastic lobster traps (status quo).

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	2	4	5	0
<i>Rev. 5/24/06</i>	1	6	5	2

Member's Comments and Reservations (May 2006):

- Plastic is not environmentally friendly.
- Ghost traps are a more of a problem with plastic.
- Biodegradable panel so won't ghost fish; also forms artificial reef over time.
- Wood disintegrates and is gone; finds plastic traps with non-biodegradable panels.
- Staff will provide data on plastic traps, with the understanding the data comes from survey results
- Plastic traps are a non issue because they are cost prohibitive, and few are used in lobster fishery.
- There are also already thousands of plastic stone crab traps in use.

Require weight on buoy lines.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	2	3	4	2
<i>Rev. 5/24/06</i>	1	5	6	2
<i>Rev. 5/24/06</i>	1	2	10	1

Member's Comments and Reservations (May 2006):

- Issue covers all trap lines, impractical in some areas, cause injuries.
- Rules only allow 15' of line on the surface anyway.
- Not practical out in the Gulf.
- Explore some way to keep ropes tighter, so they are not floating on the surface.
- Is there a way to weight without causing such injuries.
- With weights, if you loose the buoy you loose the trap.

NEW ENTRANTS

Concern has been expressed about the long-term sustainability of the fishery, especially the trap fishery. Various ideas need to be developed to enhance the opportunity for new individuals to enter the fishery.

New Entrants Management Options Evaluated by the Board:

Accommodate deck hands by allowing them to get certificates and pull from owners' boats.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	8	3	0	0
<i>Revised 4/06</i>	8	5	0	0
<i>Rev. 5/24/06</i>	11	3	0	0

Member's Comments and Reservations (May 2006):

- Unsure of enforcement issues associated with this option.
- More details are needed.

Develop an incentive program (to facilitate new entrants).

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	5	6	0	0
<i>Revised 4/06</i>	1	7	5	0
<i>Rev. 5/24/06</i>	1	12	1	0

Member's Comments and Reservations (May 2006):

- This is a free market issue, would rather be bought out.

4. ISSUES REGARDING THE COMMERCIAL DIVE FISHERY

The commercial dive fishery has been minimally regulated. The need for further regulatory efforts will be determined largely by the approach the Board takes regarding allocation.

Overview of General Discussion on the Commercial Dive Fishery:

- Disadvantage only having 2 commercial dive representatives at the table, missing 1 member for most of the meetings.
- For the portion of the allocation pie commercial divers have, they seem to have sufficient representation.
- To bring a new person on now would be too difficult and they would have missed too much.
- The Board agreed that FWC staff and Board members who know Manny Ravelo will contact him to determine his commitment to participate, and impress the importance of consistent attendance.

Commercial Dive Management Options Evaluated by the Board:

Develop an input control effort management program (e.g. endorsement transferability).

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	10	0	0	0
<i>Revised 4/06</i>	12	1	0	0
<i>Rev. 5/24/06</i>	14	0	0	0

Member’s Comments and Reservations (May 2006):

- Are there other examples besides endorsement transferability?
- Staff has been contacted by other CD regarding this issue.

Adjust trip limits to manage allocation.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	0	6	3	1
<i>Revised 4/06</i>	0	12	1	0
<i>Rev. 5/24/06</i>	0	6	7	1

Member’s Comments and Reservations (May 2006):

- Don’t like trip limits, if you have a good day it only makes up for bad days.
- This needs to be carefully thought out, it can affect the catch.
- Contrary to other proposals earlier, this proposal holds to 1 option, don’t want to be tied to only 1 method, prefer the allocation response plan that reconvenes a stakeholder group to review and make recommendations from a suite of options instead of prescriptive responses to given situations.
- There are already other limits, don’t want more limits set.
- Need to be able to take advantage of good days when they are there.
- Mechanism to control, another management tool.
- Solvable with enforcement of illegal harvesting.

Fixed number of commercial dive endorsements (status quo).

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	4	6	1	0
<i>Revised 4/06</i>	1	5	7	2
<i>Revised 4/06</i>	1	7	7	0
<i>Revised 5/06</i>	1	6	6	0

Member’s Comments and Reservations (May 2006):

- This falls under the effort management program, and should be handled there.
- Makes it difficult for new entrants to come into the fishery.
- Is there a limit after moratorium lifted? Presently fixed on transferability.

5. ISSUES REGARDING THE RECREATIONAL FISHERY

Recreational fishery management will be influenced by how the Board approaches allocation combined with the myriad of social issues that involve this sector.

Overview of General Discussion on the Recreational Dive Sector:

- \$3 million per day during mini season is coming into the Keys, merchants need this revenue, we don't want Monroe Co to be looked at as greedy, some family vacations fit better with mini season, quality of recreational divers is also improving.
- Monroe County residents are opposed to the mini season, Chamber did have a motion; not recreational vs. commercial, why should recreational divers get a jump on everyone else?
- Overwhelming numbers are opposed to the mini season.
- Its unfair for one County to attempt to dictate policy for a statewide resource.

Recreational Fishery Management Options Evaluated by the Board:

Require lobster tags to enforce bag limits and multiple daily trips (for the two-day season).

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 1/06	9	0	1	0
Revised 4/06	12	0	0	2
Revised 5/06	8	4	0	1
Rev. 5/24/06	7	5	1	0

Member's Comments and Reservations (May 2006):

- Will not help enforcement or taking of illegal size and quantities; not a solution to the problems.
- Marine patrol feels this is good enforcement tool and would make it easier to enforce multiple trips.
- This would be cost prohibitive (need to ask for more fees), more difficult to develop tags.
- Perception is everything; people against mini season because of those over the limit, maybe less problems with mini season if they use tags.
- There will be a cost to implement the system and users will have to pay for the tags.

Increase the fee on the recreational sector, and earmark funds for enforcement.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 4/06	2	9	0	1
Rev. 5/24/06	2	9	2	0

Member's Comments and Reservations (May 2006):

- Good in concept but money doesn't end up where it's supposed to go.
- Can we stipulate that this money does not go into the general fund?
- Not the Board's job to say where funds go; board members should go and lobby the Commission for recommendations they believe are the best, and not focus on the degree of difficulty in implementing.

Abolish the two-day sport divers season.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 1/06	6	0	3	1
Revised 4/06	8	0	3	3
Rev. 5/24/06	4	5	2	2

Member's Comments and Reservations (May 2006):

There is no reason to create a conflict with the recreational sector of the fishery.

I support the two-day sport divers season providing an advantage to the recreational sector, in exchange for support from the recreational sector for the commercial sectors to use the resource.

Limit the issuance of recreational crawfish endorsements.

(Fixed number of recreational endorsements)

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 1/06	0	6	2	2
Revised 4/06	0	7	5	2
Rev. 5/24/06	0	5	7	1

Member's Comments and Reservations (May 2006):

- This is not fair, and creates unnecessary conflict between user groups.

Establish an effort limitation program on the recreational fishery

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 4/06	7	1	4	3
Revised 5/06	1	9	3	0

Member's Comments and Reservations (May 2006):

FWC recommends in a Memo, that Monroe Co conduct a straw poll regarding whether to abolish the 2 day season in Monroe County, language to be developed by staff and Board, results forward to Commission for their consideration.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	1	1	9	2

Member's Comments and Reservations (May 2006):

- Afraid of opening a can of worms; the mini season now and traps next. This could snowball
- into something else, again unintended consequences are likely.
- When does it end? Vote out the recreational divers next, this is not fair!
- Monroe County voted against becoming a Marine Sanctuary and it was adopted anyway.
- The vote won't be implemented.
- Monroe County does not have the right to vote on how State uses a resource belonging to all Floridians.
- This would be a Non-binding referendum.

Conduct straw the poll on the two-day season after 3 years, and once the lobster tag program is in effect.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 5/23/06	1	3	2	7

Member’s Comments and Reservations (May 2006):

- This option assumes the tag program will be approved and implemented.
- I don’t believe a recreational tag program will change anybody’s opinion on the issue.

6. ISSUES REGARDING THE COMMERCIAL BULLY NET FISHERY

The commercial bully net fishery has been minimally regulated. The need for further regulatory efforts will be determined largely by the approach the Board takes regarding allocation.

Bully Net Fishery Management Options Evaluated by the Board:

The Status quo.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 1/06	4	5	1	0
Rev. 5/24/06	10	2	1	0

Member’s Comments and Reservations (May 2006):

- Concerned about the trends that were already talked about earlier.

Establish a commercial bully net endorsement

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial 1/06	0	0	8	2
Revised 5/24/06	1	1	8	3

Member’s Comments and Reservations (May 2006):

- Would prohibit other segments of the industry from participating.
- Bully netting is a traditional family activity and should be preserved.
- This is such a very small segment of the industry.
- Commercial dive sector was a very small portion of the industry at the beginning of the
- Trap reduction program, and now look at the increase in allocation.
- By creating bully net endorsement for commercial, this would have no impact on the recreational and traditional family aspects of the fishery.

Commercial divers cannot be commercial bully netters

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 5/24/06</i>	1	2	6	4

Member's Comments and Reservations (May 2006):

- Why fix something that's not a problem? The allocation program the Board is proposing with the convening of a stakeholder group or board would be able to deal with this.
- Allocation will put each person into only one fishery category.

Fixed number of commercial dive endorsements (status quo).

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial 1/06</i>	4	6	1	0
<i>Revised 4/06</i>	1	5	7	2
<i>Revised 4/06</i>	1	7	7	0
<i>Rev. 5/24/06</i>	1	6	6	0

Member's Comments and Reservations (May 2006):

- This falls under the Board's proposed effort management program (allocation).
- Makes it difficult for new entrants into the fishery.
- Is there a limit after the moratorium is lifted? Presently fixed on transferability.

ATTACHMENT I

MEETING EVALUATION RESULTS—SPINY LOBSTER AD HOC ADVISORY BOARD

May 23 - 24, 2006—Duck Key, Florida

0 To 10 Rating Scale Where A 0 Means Totally Disagree And A 10 Means Totally Agree.

1. Please assess the overall meeting.

8.08 The background information was very useful.

9.58 The agenda packet was very useful.

9.09 The objectives for the meeting were stated at the outset.

8.72 Overall, the objectives of the meeting were fully achieved.

8.00 Presentation on Allocation Scenarios.

8.18 Overview of Alternative Effort Reduction Scenarios.

8.63 Presentation(s) on Board Identified Research/Data Topics.

9.18 Identification, Evaluation, Refinement, and Acceptability Ranking of Options.

8.81 Next Steps and Agenda Items For Next Meeting.

2. Please tell us how well the Facilitator helped the participants engage in the meeting.

9.38 The members followed the direction of the Facilitator.

9.30 The Facilitator made sure the concerns of all members were heard.

9.23 The Facilitator helped us arrange our time well.

9.38 Member input was documented accurately.

3. What is your level of satisfaction with the meeting?

8.92 Overall, I am very satisfied with the meeting.

9.38 I was very satisfied with the services provided by the Facilitator.

8.23 I am satisfied with the outcome of the meeting.

4. What progress did you make?

9.00 I know what the next steps following this meeting will be.

8.91 I know who is responsible for the next steps.

5. Member's Evaluation Comments.

- This is a great group. I am very pleased and proud to be a part of it.
- Excellent facilitation and meeting pace.
- I'm ok, but everyone else is nuts!

PUBLIC COMMENT SUBMITTED IN WRITING

- Allocation for the commercial fishery should include lobsters lost to the use of shorts as attractants in traps and lobsters lost to ghost traps.
- If the commercial trap fishery adopts practice that eliminates the use of shorts in traps and reduces or eliminates the loss of lobsters to ghost traps, then their allocations should increase.
- As John Hunt stated, the long-term health of the resource is the most important consideration for the management of the lobster fishery. To this end, I think that the potential of “den” type traps should be the subject of a research project. The rationale for such a project is attached (staff has the document).
- Also attached are some thoughts on management of the recreational fishery (staff has the document).

APPENDIX C

STATEWIDE

Fishing Season	Commercial Landings									Recreational Landings										Overall total	
										Numbers of Lobsters				Numbers				Weight			
	Trap	%Trap	Dive	%Dive	Bully	%Bully	Other	Unknown	Total	Valid Licenses	Special	Regular	SRL	Total	CL	Special	Regular	SRL	Total		%Rec
1991/92	3,370,669	39.0%	92,587	1.1%	2,715	0.0%	5,537	3,364,507	6,836,015	127,179	403,002	1,188,322		1,591,324	85.5	459,848	1,355,943		1,815,971	21.0%	8,651,806
1992/93	3,934,923	58.5%	148,752	2.2%	1,855	0.0%	6,044	1,276,614	5,368,188	107,179	483,822	719,487		1,203,309	85.1	543,785	808,658		1,352,443	20.1%	6,720,631
1993/94	4,982,625	69.3%	169,545	2.4%	5,967	0.1%	8,423	143,230	5,309,790	110,713	331,079	1,415,372		1,746,451	83.8	356,987	1,526,128		1,883,114	26.2%	7,192,104
1994/95	6,808,250	74.9%	253,961	2.8%	18,892	0.2%	4,924	95,614	7,181,641	115,094	362,369	1,320,045	68,809	1,751,223	84.1	394,395	1,436,710	74,980	1,905,995	21.0%	9,087,636
1995/96	6,637,721	74.2%	307,717	3.4%	18,333	0.2%	2,784	50,579	7,017,134	114,236	216,147	1,398,989	58,194	1,673,330	85.9	249,394	1,614,178	67,145	1,930,718	21.6%	8,947,852
1996/97	7,318,618	75.7%	337,971	3.5%	28,206	0.3%	3,292	56,017	7,744,104	126,000	353,944	1,374,426	50,530	1,778,900	83.9	382,535	1,485,450	54,612	1,922,596	19.9%	9,666,700
1997/98	7,147,561	71.9%	397,068	4.0%	25,494	0.3%	13,473	56,581	7,640,177	139,553	471,700	1,666,369	47,517	2,185,586	83.2	497,297	1,756,974	50,096	2,304,186	23.2%	9,944,363
1998/99	5,037,323	74.6%	352,283	5.2%	11,582	0.2%	3,627	42,718	5,447,533	130,635	263,167	876,819	45,022	1,185,008	84.4	289,299	963,885	49,493	1,302,677	19.3%	6,750,210
1999/00	6,995,609	69.1%	588,461	5.8%	16,765	0.2%	8,192	60,180	7,669,207	135,146	528,566	1,706,711	57,219	2,292,496	83.7	567,643	1,832,888	61,449	2,461,981	24.3%	10,131,188
2000/01	4,856,259	64.5%	635,394	8.4%	12,193	0.2%	5,308	59,553	5,568,707	136,019	424,410	1,387,159	35,953	1,847,522	83.3	449,770	1,469,841	38,096	1,957,643	26.0%	7,526,350
2001/02	2,610,086	60.6%	447,484	10.4%	8,527	0.2%	12,854	312	3,079,263	128,255	279,974	778,373	28,702	1,087,049	85.1	314,984	875,707	32,291	1,222,982	28.4%	4,305,425
2002/03	3,992,322	67.2%	559,839	9.4%	19,575	0.3%	4,948	708	4,577,392	122,955	298,007	885,078	39,785	1,222,870	84.9	333,068	989,209	44,466	1,366,743	23.0%	5,944,135
2003/04	3,730,675	68.3%	406,694	7.4%	21,581	0.4%	1,560	1,079	4,161,589	136,157	302,177	803,947	34,185	1,140,309	85.5	344,575	916,748	38,981	1,300,304	23.8%	5,461,893
2004/05	5,126,178	88.1%	311,438	5.4%	34,167	0.6%	565	1,372	5,473,720	130,358	289,245 **		32,108	321,353	83.4	307,518 **		34,136	341,655	5.9%	5,815,375
2005/06	2,679,606	68.5%	266,565	6.8%	14,593	0.4%	1,161	1,235	2,963,160	136,888	275,512	596,541	25,025	897,078	83.2	290,953	629,973	26,427	947,353	24.2%	3,910,513
2006/07	4,516,784	76.3%	251,522	4.3%	27,875	0.5%	2,573	739	4,799,493	143,362	243,372	708,085	23,516	974,973	85.7	279,160	812,209	26,974	1,118,344	18.9%	5,917,836
2007/08	3,465,602	71.6%	289,525	6.0%	18,919	0.4%	539	1,250	3,775,835	146,988	290,254	639,522	18,726	948,502	84.9	324,403	714,763	20,929	1,060,095	21.9%	4,838,132
2008/09	2,987,334	69.7%	243,292	5.7%	17,034	0.4%	450	2,144	3,250,259	141,876	330,538	594,120	15,061	939,719	84.5	364,568	655,287	16,612	1,036,466	24.2%	4,285,147

UPDATED 09/29/09

** Data Unavailable due to inability to survey recreational license holders because of multiple Hurricanes hitting Florida at that time.