FINAL AMENDMENT 1 to the FISHERY MANAGEMENT PLAN for ATLANTIC TUNAS, SWORDFISH, AND SHARKS

Includes:
Final Environmental Impact Statement,
Final Regulatory Impact Review,
Final Regulatory Flexibility Analysis, and
Final Social Impact Analysis

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National Marine Fisheries Service
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Final Amendment 1 to the Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks

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Amendment 1 to the Fishery Management Plan for Atlantic Tunas, Swordfish and Sharks

Actions: Amend commercial and recreational regulations regarding the shark fisheries in the Atlantic, Gulf of Mexico, and Caribbean Sea to prevent overfishing and rebuild overfished species; Update Essential Fish Habitat identifications for some species of sharks; Revise the permit system for collecting highly migratory species for public display

Type of Statement: Final Environmental Impact Statement; Final Regulatory Impact Review; Final Regulatory Flexibility Analysis; and Final Social Impact Statement

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Abstract: In 2002, the National Marine Fisheries Service (NOAA Fisheries) conducted two new stock assessments for large and small coastal sharks. These stock assessments constitute the best available science and, in some cases, have resulted in a change of status of some shark species. Based on these new stock assessments, NOAA Fisheries decided that many of the shark management measures in the Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks should be re-examined and amended, as necessary. Additionally, because of the change of status in some species, some essential fish habitat identifications need to be updated. Management measures selected in this amendment include, among other things: aggregating the large coastal shark complex, using maximum sustainable yield as a basis for setting commercial quotas, eliminating the commercial minimum size, establishing regional commercial quotas and trimester commercial fishing seasons, adjusting the recreational bag and size limits, establishing gear restrictions to reduce bycatch or reduce bycatch mortality, establishing a time/area closure off the coast of North Carolina, removing the deepwater/other sharks from the management unit, establishing a mechanism for changing the species on the prohibited species list, updating essential fish habitat identifications for five species of sharks, and changing the administration for issuing permits for display purposes. Comments on the proposed rule and draft Amendment 1 were accepted from August 1, 2003, until October 3, 2003. The effective dates for the selected measures will likely vary from approximately January 1, 2004, to January 1, 2005.

EXECUTIVE SUMMARY

Since 1997, Atlantic shark regulations have been under litigation by different interest groups including commercial fishermen, recreational fishermen, and environmental groups. As a result of these lawsuits and to comply with a settlement agreement with some commercial litigants, the National Marine Fisheries Service (NOAA Fisheries) has: (1) implemented some but not all the regulations finalized in the 1999 Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks (HMS FMP); (2) had the 1998 large coastal shark (LCS) stock assessment peer reviewed; (3) based on the results of that peer review, decided not to base management decisions on the projections and modeling results of the 1998 LCS stock assessment; (4) managed the LCS fishery via several different emergency rules since 2001; (5) in 2002, conducted both a LCS and a small coastal shark (SCS) stock assessment; and (6) had the 2002 LCS stock assessment peer reviewed. As a result of this chain of events and because the 2002 LCS and SCS stock assessments are the best available science and, in some cases, have resulted in a change of status of some shark species, NOAA Fisheries decided that many of the shark management measures in the HMS FMP should be re-examined and amended, as necessary. Additionally, because of the change of status in some species, some essential fish habitat (EFH) identifications need to be updated.

The 2002 LCS and SCS stock assessments found that: (1) the LCS complex is overfished and overfishing is occurring; (2) sandbar sharks are not overfished but overfishing is still occurring; (3) blacktip sharks are rebuilt and healthy; (4) the SCS complex, Atlantic sharpnose, bonnethead, and blacknose sharks are healthy; and (5) finetooth sharks are not overfished but overfishing is occurring. Per a settlement agreement, the 2002 LCS stock assessment was peer reviewed. The peer reviews found that the 2002 LCS stock assessment was based on the best available science and that appropriate stock assessment models were used. The executive summaries of the peer reviews are presented in Appendix 1 of this document.

In the 1999 HMS FMP, NOAA Fisheries established a rebuilding plan for LCS. This rebuilding plan was not fully implemented. NOAA Fisheries did not establish a rebuilding plan for SCS or pelagic sharks because they were not overfished and overfishing was not occurring. This document presents a rebuilding plan that indicates that within 26 years of implementation, the LCS complex should be rebuilt to levels capable of sustaining maximum sustainable yield (MSY) on a long-term basis. This document also presents a plan of action to prevent overfishing of sandbar and finetooth sharks.

NOAA Fisheries announced its intent to conduct an Environmental Impact Statement and Amendment to the HMS FMP on November 15, 2002 (67 FR 69180) and held seven scoping meetings on an Issues and Options paper in February and March 2003 (68 FR 3853, January 27, 2003). A summary of the major comments received during scoping is presented in Appendix 2 of this document. Based in part on the comments received during scoping, the draft Amendment 1 to the HMS FMP examined numerous alternatives to revise commercial and recreational shark management measures, update, as appropriate, EFH, and update and present a plan to rebuild LCS and prevent overfishing of LCS, sandbar sharks, and finetooth sharks consistent with the

Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), the Coastal Zone Management Act (CZMA), the Regulatory Flexibility Act (Reg Flex Act), and other domestic laws.

This document analyzes the ecological, economic, and social impacts on numerous alternatives to rebuild the LCS complex, prevent overfishing, and minimize bycatch. The draft document was available for public comment from August 1, 2003, to October 3, 2003. During that time, NOAA Fisheries held six public hearings from Louisiana to New York, held one Highly Migratory Species (HMS) Advisory Panel meeting, and received over 30 written public comments. NOAA Fisheries also attended four Fishery Management Council meetings (New England, Mid-Atlantic, and two for the Gulf of Mexico) and one Atlantic States Marine Fisheries Commission meeting. NOAA Fisheries was scheduled to attend the South Atlantic Fishery Management Council meeting in mid-September that was canceled due to Hurricane Isabel and was not able to attend a Caribbean Fishery Management Council meeting due to scheduling differences. As a result of public comments, some of the selected alternatives have changed. Changes to the draft Amendment 1 and when selected alternatives are likely to be effective are summarized below.

PREFERRED ALTERNATIVES IN DRAFT AMENDMENT ONE TO HMS FMP	SELECTED ALTERNATIVES IN FINAL AMENDMENT ONE TO HMS FMP	APPROXIMATE DATE OF IMPLEMENTATION
COMMERCIAL MANAGEMENT MEASURES		
Shark Classification		
Alternative A3 - Aggregate LCS, one closure date	Same.	January 1, 2004
Quota Administration		
Alternative B3 - Regional quotas	Same.	January 1, 2004
Alternative B4 - Trimester season	Same but delay effective date to allow for adjustment period.	January 1, 2005
Quota Basis		
Alternative C2 - Quota based upon percentage of Maximum Sustainable Yield	Same but modify the LCS quota reduction from 40 to 45 percent.	January 1, 2004
Minimum Size		
Alternative D2 -No minimum size	Same.	January 1, 2004
RECREATIONAL MANAGEMENT MEASURES		
Retention limits		
Alternative E2 - Existing catch limits (E1) plus the addition of one bonnethead shark per person per trip	Same.	February 1, 2004

PREFERRED ALTERNATIVES IN DRAFT AMENDMENT ONE TO HMS FMP	SELECTED ALTERNATIVES IN FINAL AMENDMENT ONE TO HMS FMP	APPROXIMATE DATE OF IMPLEMENTATION
Minimum Size		
Alternative F2 - Existing size limits (F1) plus a no size limit for bonnethead sharks	Same.	February 1, 2004
Authorized Gear		
Alternative G2 - Only allow handline and rod and reel in the recreational shark fishery	Same.	February 1, 2004
DEEPWATER AND OTHER SHARKS		
Alternative H2 - Remove species group from management unit; data collection only	Same.	February 1, 2004
PROHIBITED SPECIES		
Alternative I6 - Retain established prohibited species group (I1) and establish criteria for the addition and removal of species to/from the prohibited species group	Same.	February 1, 2004
BYCATCH REDUCTION MEASURES		
Gear Restrictions		
Alternative J3 - Existing bycatch reduction measures (J1) and allow only strikenet method in shark gillnet fishery	Maintain current regulations regarding the gillnet fishery (Alternative J1); move toward gear restrictions and/or modifications in a future rulemaking.	Not Applicable
Alternative J4 - Existing bycatch reduction measures (J1) plus requiring Vessel Monitoring Systems (VMS) on shark gillnet vessels during right whale calving season and requiring VMS on directed bottom longline shark fishing vessels, if there are time/area closures	Same but clarify that VMS will be required on directed bottom longline fishermen operating near the time/area closure off of North Carolina (Alternative K2).	Likely November 15, 2004, for vessels with gillnet gear and January 1, 2005, for vessels with bottom longline gear. NOAA Fisheries must publish a type-approval notice in the Federal Register before VMS can be effective.

PREFERRED ALTERNATIVES IN DRAFT AMENDMENT ONE TO HMS FMP	SELECTED ALTERNATIVES IN FINAL AMENDMENT ONE TO HMS FMP	APPROXIMATE DATE OF IMPLEMENTATION
Alternative J5 - Existing bycatch reduction measures (J1) plus requiring the use of non-stainless steel corrodible hooks, the possession of release equipment on vessels with shark bottom longline gear (line cutters, dipnets, and, when approved, dehooking devices), and that bottom longline vessels move 1 nautical mile after an interaction with a marine mammal or a sea turtle	Same but clarify that vessels need to move 1 nmi after an interaction with any protected species including marine mammals, sea turtles, and sawfish.	February 1, 2004, for hooks, line cutters, dipnets, and moving 1 nautical mile; To be determined for dehooking devices but no earlier than Summer 2004.
Not Preferred - Alternative J8 -Existing bycatch reduction measures (J1) plus requiring commercial and recreational fishermen to attend workshops on present regulations, species identification, and release techniques	Not selected. However, NOAA Fisheries intends to conduct another rulemaking regarding implementation of Alternative J8.	Not Applicable.
Time/Area Closures		
Alternative K2 - Time/area closure for sandbar and dusky shark nursery and pupping areas off of Virginia, North Carolina, and South Carolina during the winter fishery	Modified Alternative K2 with a smaller area off only the coast of North Carolina.	January 1, 2005
ESSENTIAL FISH HABITAT		
Alternative L3 - Existing EFH and, as appropriate, identify EFH for the Fishery Management Unit (FMU) for each species and life stages as those habitats necessary for spawning, breeding, feeding, or growth to maturity	Clarified that Alternative L4 (selected) encompasses Alternative L3 (not preferred).	Not Applicable
Alternative L4 - Existing EFH and, as appropriate, increase or decrease the EFH areas identified for individual species in the FMU based on special needs	Same.	Not Applicable
EXEMPTED FISHING PERMITS		
Alternative M2 -Develop separate display permitting system for sharks, apart from research or exempted fishing permits	Same.	February 1, 2004.

NOAA Fisheries believes that the group of selected alternatives in the final document should, consistent with the Magnuson-Stevens Act and other domestic laws: rebuild the LCS complex; prevent overfishing of the LCS complex, sandbar sharks, and finetooth sharks; and prevent other species of sharks from becoming overfished.

Most of the regulations that affect commercial and recreational shark fishermen, including the selected alternatives in this document, are summarized in the chart below.

What would the Final Amendment 1 to the HMS FMP mean to you? Changes as a result of Amendment 1 are in italics.

PROHIBITED SPECIES

The following sharks cannot be kept commercially or recreationally: Whale, basking, sand tiger, bigeye sand tiger, white, dusky, night, bignose, Galapagos, Caribbean reef, narrowtooth, longfin mako, bigeye thresher, sevengill, sixgill, bigeye sixgill, Caribbean sharpnose, smalltail, and Atlantic angel sharks. *There is a mechanism in place to add or remove species, as needed, via rulemaking.*

COMMERCIAL REGULATIONS

Management Unit	**Species that can be retained**	**Quota (mt dw)**	***Regional Quotas***	**Authorized Gears**
Large Coastal Sharks - directed commercial retention limit of 4,000 lb dw per trip - incidental retention limit	Sandbar, silky, tiger, blacktip, bull, spinner, lemon, nurse, smooth hammerhead, scalloped hammerhead, great hammerhead	*1,017*	*NA = 4%* *SA = 54%* *GM = 42%*	Pelagic or Bottom Longline; Gillnet; Rod and Reel; Handline; Bandit Gear
Pelagic Sharks - no directed retention limit - incidental retention limit	Shortfin mako, thresher, oceanic whitetip	488	*None*	
	Porbeagle	92		
	Blue	273		
Small Coastal Sharks - no directed retention limit - incidental retention limit	Atlantic sharpnose, blacknose, finetooth, bonnethead	*454*	*NA = 13%* *SA = 83%* *GM = 4%*	

Additional remarks:
- All sharks not retained must be released in a manner that ensures the maximum probability of survival
- Finning is prohibited for all sharks no matter what species
- Fishing seasons: From January 1, 2004, to December 31, 2004, the fishing seasons will be January 1 to June 30 and July 1 to December 31; *Starting January 1, 2005, the fishing seasons will be January 1 to April 30; May 1 to August 30; September 1 to December 31*
- *Fishing regions: NA = Maine through Virginia; SA = N. Carolina through East Florida and Caribbean; GM = Gulf of Mexico*
- Quota over- and underharvest adjustments will be made for the same season the following year; no reopening that season
- *Count state landings after Federal closure against Federal quota*
- *Time/area closure for vessels with bottom longline gear on board: January through July between 35° 41'N to 33° 51'N and west of 74° 46'W, roughly following the 60 fathom contour line, diagonally south to 76° 24'W and north to 74° 51'W .*
- *Vessel Monitoring Systems required for all gillnet vessels during right whale calving season and from January through July for all vessels with bottom longline gear on board between 33° 00' N and 36° 30'N*
- Limited access; Exempted Fishing Permit (EFP) requirements; *Display permits for collection for public display*
- Observer and reporting requirements
- For incidental limited access permit holders: 5 large coastal sharks per trip; a total of 16 pelagic or small coastal sharks (all species combined) per vessel per trip
- Vessel with bottom longline gear on board must: *(1) have non-stainless steel corrodible hooks; (2) have a dehooking device (when approved), linecutters, and a dipnet on board; (3) move 1 nmi after an interaction with a protected species;* and (4) post sea turtle handling and release guidelines in the wheelhouse

RECREATIONAL REGULATIONS

Management Unit	**Species that can be kept**	**Retention Limit**	*Authorized Gear*
Large Coastal, Pelagic, and Small Coastal Sharks	LCS: Sandbar, silky, tiger, blacktip, bull, spinner, lemon, nurse, smooth hammerhead, scalloped hammerhead, great hammerhead Pelagic: shortfin mako, thresher, oceanic whitetip, porbeagle, blue SCS: Atlantic sharpnose, blacknose, finetooth, bonnethead	1 shark per vessel per trip (all species) with a 4.5 feet fork length minimum size; allowance for 1 Atlantic sharpnose and *1 bonnethead* per person per trip (no minimum size)	*Rod and Reel; Handline*

Additional remarks:
Harvested sharks must have fins, head, and tail attached (can be bled and gutted if tail is still attached).

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1.0. INTRODUCTION

1.1 MANAGEMENT HISTORY

Sharks have been managed by the Secretary of Commerce since 1993. Below is a brief summary of management actions and issues. Table 1.1 provides a list of most of the abbreviations, acronyms, and initialisms that are used in this document or that are commonly used in fishery management. Table 1.2 provides a list of most Atlantic shark-related management actions published in the Federal Register. Table 1.3 provides a list of season opening and closing dates for large coastal sharks (LCS). The National Marine Fisheries Service (NOAA Fisheries) has never issued a closure date for the small coastal shark (SCS) and pelagic shark fisheries.

1.1.1 The 1993 Fishery Management Plan

In 1989, the five Atlantic Fishery Management Councils asked the Secretary of Commerce to develop a Shark Fishery Management Plan (FMP). The Councils were concerned about the late maturity and low fecundity of sharks, the increase in fishing mortality, and the possibility of the resource being overfished. The Councils requested that the FMP cap commercial fishing effort, establish a recreational bag limit, prohibit "finning," and begin a data collection system.

In 1993, the Secretary of Commerce, through NOAA Fisheries, implemented the FMP for Sharks of the Atlantic Ocean. The management measures in the 1993 FMP included:

- Establishing a fishery management unit (FMU) consisting of 39 frequently caught species of Atlantic sharks, separated into three groups for assessment and regulatory purposes (LCS, SCS, and pelagic sharks);
- Establishing calendar year commercial quotas for the LCS and pelagic sharks and dividing the annual quota into two equal half-year quotas that apply to the following two fishing periods--January 1 through June 30 and July 1 through December 31;
- Establishing a recreational trip limit of four sharks per vessel for LCS or pelagic shark species groups and a daily bag limit of five sharks per person for sharks in the SCS species group;
- Requiring that all sharks not taken as part of a commercial or recreational fishery be released uninjured;
- Establishing a framework procedure for adjusting commercial quotas, recreational bag limits, species size limits, management unit, fishing year, species groups, estimates of maximum sustainable yield, and permitting and reporting requirements;
- Prohibiting finning by requiring that the ratio between wet fins/dressed carcass weight not exceed 5 percent;
- Prohibiting the sale by recreational fishermen of sharks or shark products caught in the Economic Exclusive Zone (EEZ);
- Requiring annual commercial permits for fishermen who harvest and sell shark (meat products and fins);
- Establishing a permit eligibility requirement that the owner or operator (including charter vessel and headboat owners/operators who intend to sell their catch) must show proof that at

least 50 percent of earned income has been derived from the sale of the fish or fish products or charter vessel and headboat operations or at least $20,000 from the sale of fish during one of three years preceding the permit request;
- Requiring trip reports by permitted fishermen and persons conducting shark tournaments and requiring fishermen to provide information to NOAA Fisheries under the Trip Interview Program; and,
- Requiring NOAA Fisheries observers on selected shark fishing vessels to document mortality of marine mammals and endangered species.

At that time, NOAA Fisheries identified LCS as overfished and pelagic and SCS as fully fished. The quotas were 2,436 metric tons (mt) dressed weight (dw) for LCS and 580 mt dw for pelagic sharks. No quota was established for SCS. Under the rebuilding plan established in the 1993 FMP, the LCS quota was expected to increase every year up to the maximum sustainable yield (MSY) estimated in the 1992 stock assessment.

1.1.2 After the 1993 FMP

A number of difficulties arose in the initial year of implementation of the Shark FMP. First, the January to June semi-annual LCS quota was exceeded shortly after implementation of the FMP, and that portion of the commercial fishery was closed on May 10, 1993. The LCS fishery re-opened on July 1, 1993, with an adjusted quota of 875 mt dw. Derby-style fishing, coupled with what some participants observed to be an unusual abundance of sharks, led to an intense and short fishing season for LCS, with the fishery closing within one month. Although fin prices remained strong throughout the brief season, the oversupply of shark carcasses led to reports of record low prices. The closure was significantly earlier than expected, and a number of commercial fishermen and dealers indicated that they were adversely affected. The intense season also complicated the task of monitoring the LCS quota and closing the season with the required advance notice.

To address these problems, a commercial trip limit of 4,000 lb. for permitted vessels for LCS was implemented on December 28, 1993 (58 FR 68556), and a control date for the Atlantic shark fishery was established on February 22, 1994 (59 FR 8457). A final rule to implement additional measures authorized by the FMP was published on October 18, 1994 (59 FR 52453). This rule:

- Clarified operation of vessels with a Federal commercial permit;
- Established the fishing year;
- Consolidated the regulations for drift gillnets;
- Required dealers to obtain a permit to purchase sharks;
- Required dealer reports;
- Established recreational bag limits;
- Established quotas for commercial landings; and
- Provided for commercial fishery closures when quotas were reached.

In 1994, under the rebuilding plan implemented in the 1993 FMP, the LCS quota was increased to 2,570 mt dw. Additionally, a new stock assessment was completed in March 1994. This

stock assessment focused on LCS, suggested that recovery to the levels of the 1970s could take as long as 30 years, and concluded that "increases in the [Total Allowable Catch (TAC)] for sharks [are] considered risk-prone with respect to promoting stock recovery." Additionally, declining catch-per-unit-effort (CPUE) and life history characteristics indicated low productivity for pelagic and SCS and suggested a prudent approach for those species as well. A final rule that capped quotas for LCS and pelagic sharks at the 1994 levels was published on May 2, 1995 (60 FR 21468).

1.1.3 The 1996 LCS Stock Assessment and its Results

In June 1996, NOAA Fisheries convened another stock assessment to examine the status of LCS stocks. The 1996 stock assessment found no clear evidence that LCS stocks were rebuilding and concluded that "[a]nalyses indicate that recovery is more likely to occur with reductions in effective fishing mortality rate of 50 [percent] or more." In response to these results, in 1997, NOAA Fisheries reduced the LCS commercial quota by 50 percent to 1,285 mt dw and the recreational retention limit to two LCS, SCS, and pelagic sharks combined per trip with an additional allowance of two Atlantic sharpnose sharks per person per trip (62 FR 16648, April 2, 1997). In this same rule, NOAA Fisheries established an annual commercial quota for SCS of 1,760 mt dw and prohibited possession of five species. On May 2, 1997, the Southern Offshore Fishing Association (SOFA) and other commercial fishermen and dealers sued the Secretary of Commerce (Secretary) on the April 1997 regulations.

On February 26, 1998, Judge Steven D. Merryday of the U.S. District Court for the Middle District of Florida issued an order in the SOFA case finding that the Secretary "failed to conduct a proper analysis to determine the [April 1997 LCS] quota's economic effect on small businesses." As a result of this finding, Judge Merryday directed NOAA Fisheries "to undertake a rational consideration of the economic effects and potential alternatives to the 1997 [LCS] quotas" on small businesses engaged in the Atlantic shark commercial fishery. Judge Merryday allowed NOAA Fisheries to maintain the 1997 quotas pending further order of the court.

In May 1998, NOAA Fisheries completed its consideration of the economic effects of the 1997 LCS quotas on fishermen and submitted the analysis to the court. NOAA Fisheries concluded that 1997 LCS quotas may have had a significant economic impact on a substantial number of small entities and that there were no other available alternatives that would both mitigate those economic impacts and ensure the viability of the LCS stocks.

1.1.4 The 1999 Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks

In 1996, amendments to the Magnuson-Stevens Act modified the definition of overfishing and established new provisions to halt overfishing and rebuild overfished stocks, minimize bycatch and bycatch mortality to the extent practicable, and identify and protect essential fish habitat. Accordingly, in 1997, NOAA Fisheries began the process of creating a rebuilding plan for overfished highly migratory species (HMS), including LCS, consistent with the new provisions.

In June 1998, NOAA Fisheries held another LCS stock assessment. The 1998 stock assessment found that LCS were overfished and would not rebuild under 1997 harvest levels. Based in part on the results of the 1998 stock assessment, in April 1999, NOAA Fisheries published the final Fishery Management Plan for Atlantic Tunas, Swordfish and Sharks ("Highly Migratory Species" or HMS FMP), which included numerous measures to rebuild or prevent overfishing of Atlantic sharks in commercial and recreational fisheries. The HMS FMP replaced the 1993 FMP. Management measures related to sharks that changed in the HMS FMP included:

- Reducing commercial LCS and SCS quotas;
- Establishing ridgeback and non-ridgeback categories of LCS;
- Implementing a commercial minimum size for ridgeback LCS;
- Establishing blue shark, porbeagle shark, and other pelagic shark subgroups of the pelagic sharks and establishing a commercial quota for each subgroup;
- Reducing recreational retention limits for all sharks;
- Establishing a recreational minimum size for all sharks except Atlantic sharpnose;
- Expanding the list of prohibited shark species;
- Implementing limited access in commercial fisheries;
- Establishing a shark public display quota;
- Establishing new procedures for counting dead discards and state landings of sharks after Federal fishing season closures against Federal quotas; and
- Establishing season-specific over- and underharvest adjustment procedures.

The implementing regulations were published on May 28, 1999 (64 FR 29090). On June 25, 1999, SOFA *et al*. sued NOAA Fisheries again, this time challenging the Atlantic shark commercial measures implemented in the HMS FMP. Around this time, NOAA Fisheries was also sued by Bluewater Fisherman's Association regarding the pelagic shark management measures adopted in the HMS FMP and by the Recreational Fishing Alliance regarding the recreational shark regulations adopted in the HMS FMP.

On June 30, 1999, NOAA Fisheries received a court order from Judge Merryday relative to the May 1997 lawsuit. Specifically, the order enjoined NOAA Fisheries from enforcing the 1999 regulations with respect to Atlantic shark commercial catch quotas and fish-counting methods (including the counting of dead discards and state commercial landings after Federal closures), which were different from the quotas and fish counting methods prescribed by the 1997 Atlantic shark regulations. A year later, on June 12, 2000, the court issued an order clarifying that NOAA Fisheries could proceed with implementation and enforcement of the 1999 prohibited species provisions (64 FR 29090, May 28, 1999).

On September 25, 2000, Judge Roberts of the United States District Court for the District of Columbia dismissed the Bluewater Fisherman's Association case and stated that the regulations were consistent with the Magnuson-Stevens Act and the Regulatory Flexibility Act. On September 20, 2001, Judge Roberts dismissed the Recreational Fishing Alliance case and stated that the recreational retention limits were consistent with the Magnuson-Stevens Act.

On November 21, 2000, SOFA *et al*. and NOAA Fisheries reached a settlement agreement for the May 1997 and June 1999 lawsuits. On December 7, 2000, Judge Merryday entered an order approving the settlement agreement and lifting the injunction. The settlement agreement required, among other things, an independent (i.e., non-NOAA Fisheries) review of the 1998 LCS stock assessment (Table 1.4). The settlement agreement did not address any regulations affecting the pelagic shark, prohibited species, or recreational shark fisheries. Once the injunction was lifted, on January 1, 2001, the pelagic shark quotas adopted in the HMS FMP were implemented (66 FR 55). Additionally, on March 6, 2001, NOAA Fisheries published an emergency rule implementing the settlement agreement (66 FR 13441). This emergency rule expired on September 4, 2001, and established the LCS and SCS commercial quotas at 1997 levels.

1.1.5 The Peer Review of the 1998 LCS Stock Assessment

As noted above, the settlement agreement required, among other things, an independent peer review of the 1998 LCS stock assessment. The original settlement agreement determined that the Center for Independent Experts (CIE) would conduct the peer review. In May 2001, the CIE transmitted three peer reviews of the 1998 LCS stock assessment to NOAA Fisheries. Upon examination, NOAA Fisheries determined that the three CIE peer reviews did not conform to the terms of the settlement agreement, and therefore, were not complete.

Due to these irregularities, in July 2001, NOAA Fisheries and the plaintiffs revised certain sections of the settlement agreement and included a provision that stated that Natural Resources Consultants, Inc. (NRC) would conduct a second peer review. NOAA Fisheries received the results of the complete NRC peer reviews in October 2001. Three of the four NRC reviewers found that the scientific conclusions and scientific management recommendations contained in the 1998 Stock assessment report *were not* based on scientifically reasonable uses of appropriate fisheries stock assessment techniques and the best available biological fishery information relating to LCS. The settlement agreement stated that in this case, NOAA Fisheries will take the appropriate action to maintain the 1997 LCS quota and catch accounting/monitoring procedures, pending a new LCS stock assessment.

Taking into consideration the settlement agreement, the results of all the peer reviews, current catch rates, and the best available scientific information (not including the 1998 stock assessment projections), NOAA Fisheries implemented another emergency rule for the 2002 fishing year that suspended certain measures under the 1999 regulations pending completion of new LCS and SCS stock assessments and a peer review of the new LCS stock assessment (66 FR 67118, December 28, 2001; extended 67 FR 37354, May 29, 2002). Specifically, NOAA Fisheries maintained the 1997 LCS commercial quota (1,285 mt dw), maintained the 1997 SCS commercial quota (1,760 mt dw), suspended the commercial ridgeback LCS minimum size, suspended counting dead discards and state landings after a Federal closure against the quota, and replaced season-specific quota accounting methods with subsequent-season quota accounting methods. That emergency rule expired on December 30, 2002.

1.1.6 The 2002 SCS and LCS Stock Assessments

On May 8, 2002, NOAA Fisheries announced the availability of the first SCS stock assessment since 1992 (67 FR 30879). The Mote Marine Laboratory and the University of Florida provided NOAA Fisheries with another SCS assessment in August 2002. Both of these stock assessments indicate that overfishing is occurring on finetooth sharks. The three other species in the SCS complex (Atlantic sharpnose, bonnethead, and blacknose) are not overfished and overfishing is not occurring. Because management of SCS and LCS is interrelated, NOAA Fisheries commenced SCS rulemaking when the 2002 LCS stock assessment was complete.

On May 28, 2002 (67 FR 36858), NOAA Fisheries announced the availability of a modeling document that explored the suggestions of the CIE and NRC peer reviews on LCS. At this time, NOAA Fisheries also announced the dates of a 2002 LCS stock assessment workshop that was held in June 2002. On October 17, 2002, NOAA Fisheries announced the availability of the 2002 LCS stock assessment and the workshop meeting report (67 FR 64098). The results of this stock assessment indicate that the LCS complex is still overfished and overfishing is occurring. Additionally, the 2002 LCS stock assessment found that sandbar sharks are no longer overfished but that overfishing is still occurring and that blacktip sharks are rebuilt and overfishing is not occurring.

Based on the results of both the 2002 SCS and LCS stock assessments, NOAA Fisheries implemented an emergency rule to ensure that the commercial management measures in place for the 2003 fishing year were based on the best available science (67 FR 78990, December 27, 2002; extended 68 FR 31987, May 29, 2003). Specifically, the emergency rule implemented the LCS ridgeback/non-ridgeback split, set the LCS and SCS quotas based on the results of stock assessments, suspended the commercial ridgeback LCS minimum size, and allowed both the season-specific quota adjustments and the counting of all mortality measures to go into place. Additionally, NOAA Fisheries announced its intent to conduct an environmental impact statement and amend the HMS FMP (67 FR 69180, November 15, 2002).

The emergency rule was intended as an interim measure to maintain the status of LCS and SCS pending the re-evaluation of management measures in the context of the rebuilding plan through this FMP amendment. The emergency rule for the 2003 fishing year implemented for the first time the classification system (ridgeback/non-ridgeback LCS) finalized in the HMS FMP. NOAA Fisheries also implemented for the first time a provision to count state landings after a Federal closure and to count dead discards against the quota. To calculate the commercial quotas for these groups, NOAA Fisheries took the average landings for individual species from 1999 through 2001 and either increased them or decreased them, as suggested by the stock assessment. Because the stock assessment suggested an increase in catch for blacktip sharks and no decrease in catch for sandbar sharks (the two primary species in the LCS fishery), this method resulted in an increase in the overall quota for the length of the emergency rule. During the comment period on the emergency rule and scoping for this amendment, NOAA Fisheries received comments regarding, among other things, the quota levels under the rule, concern over secondary species and discards, the ability of fishermen to target certain species, and impacts of the different season length for ridgeback and non-ridgeback LCS. NOAA Fisheries responded to these comments when extending the emergency rule and further considered these comments when examining the alternatives presented in this document.

NOAA Fisheries received the results of the peer review of the 2002 LCS stock assessment in December 2002. Unlike the peer reviews of the 1998 LCS stock assessment, these reviews were generally positive (Appendix 1).

1.1.7 Exempted Fishing Permits

Under 50 CFR 635.32, and consistent with 50 CFR 600.745, NOAA Fisheries may authorize for limited testing, public display, and scientific data collection purposes, the target or incidental harvest of species managed under an FMP or fishery regulations that would otherwise be prohibited. Exempted fishing may not be conducted unless authorized by an Exempted Fishing Permit (EFP) or a Scientific Research Permit (SRP) issued by NOAA Fisheries in accordance with criteria and procedures specified in those sections. As necessary, an EFP or SRP would exempt the named party(ies) from otherwise applicable regulations under 50 CFR part 635. Such exemptions could address fishery closures, possession of prohibited species, commercial permitting requirements, and retention and minimum size limits.

In the HMS FMP, NOAA Fisheries established a 60 mt ww shark public display quota for the purpose of collecting sharks for aquariums and other instances of public display. In order to collect sharks under this quota, fishermen must apply for an EFP. This allows them to collect sharks during closed seasons and also allows them to collect sharks that may be prohibited, such as sand tiger sharks. NOAA Fisheries also issues EFPs for the collection of other HMS for public display. This amendment selects an alternative that establishes a different permit system for fishermen who intend to collect HMS for public display. EFPs in general will be considered in a different amendment to the HMS FMP (July 9, 2003, 68 FR 40907).

1.1.8 Essential Fish Habitat

Under the Magnuson-Stevens Act, each FMP must describe and identify essential fish habitat (EFH) for the fishery, minimize to the extent practicable adverse effects on that EFH caused by fishing, and identify other actions to encourage the conservation and enhancement of EFH. In 1999, NOAA Fisheries identified EFH for all actively managed species of sharks as well as two habitat areas of particular concern (HAPC). NOAA Fisheries now has two new stock assessments for SCS and LCS. These stock assessments contain new information that warrant NOAA Fisheries' consideration of possible updates to EFH, particularly for species whose status has changed. This amendment considers these updates to EFH identifications for these species of sharks. Additionally, under 50 CFR Part 600, NOAA Fisheries must review all identified EFH areas every five years (67 FR 2343, January 17, 2002). NOAA Fisheries is planning to begin to conduct this five year review for all HMS within the next year (68 FR 40907, July 9, 2003).

1.2 NEED FOR ACTION

An amendment to the HMS FMP regarding shark management and the issuance of EFPs/SRPs is needed for a number of reasons:

- After reviewing all peer reviews of the 1998 LCS stock assessment, in the December 2001 emergency rule, NOAA Fisheries determined that the projections of the models used in the 1998 LCS stock assessment no longer constituted the best available science. Thus, a number of management measures in the 1999 HMS FMP are no longer appropriate. In December 2002, NOAA Fisheries implemented a number of commercial regulations for the 2003 fishing year via an emergency rule. With no other action, once this rule expires, management measures that are not based on the best available science would go into place.

- The 2002 SCS and LCS stock assessments indicated that the status of some species has changed. While the HMS FMP did include a framework process that would allow for changes in commercial quotas and recreational bag limits without an FMP amendment, any regulatory adjustment under this process would have to have been contemplated in the original FMP. Some of the actions under consideration now were not considered in the HMS FMP. For example, the quotas for non-ridgeback LCS were based on the assumption that blacktip sharks were overfished and needed a large reduction in fishing mortality. The 2002 LCS stock assessment shows that blacktip sharks are fully rebuilt and can withstand a 20- to 50-percent increase in catch while the LCS complex as a whole needs a 50-percent reduction to rebuild. The HMS FMP did not consider this possibility so any long-term changes to the non-ridgeback LCS quota must be done through an amendment.

- Additionally, management measures of all species groups and commercial and recreational fisheries are interconnected and changing one management measure could affect the expected results from other management measures. Thus, to some extent, NOAA Fisheries is reviewing overall management measures for sharks.

- Since establishing the 60 mt ww shark display quota in the HMS FMP, NOAA Fisheries has received a number of comments that suggest the collection of any HMS for public display could be improved through its own permit system rather than with EFPs. These types of changes were not considered in the HMS FMP.

1.3 OBJECTIVES

The objectives of this amendment fully incorporate all the objectives of the HMS FMP (Table 1.5) and also include:

- To clarify the type of permit needed for obtaining HMS for the purpose of public display.

- To establish criteria for changing via a framework rulemaking process the shark commercial and recreational management measures without an FMP amendment consistent with the best available science, the objectives of the HMS FMP, the Magnuson-Stevens Act, and other domestic laws. Such framework criteria could include, but are not limited to, changes to the commercial quota, the recreational bag limit, time/area closures, and additions or removals to the prohibited species list.

- To update, as necessary, the rebuilding plan for LCS.

- To establish the criteria that are used to change or modify HMS EFH identifications for the FMU.

- To update EFH information and identifications, as necessary, based on the 2002 SCS and LCS stock assessments.

Consistent with these objectives, the objectives in the HMS FMP, and the Magnuson-Stevens Act, NOAA Fisheries is not considering a "No Fishing Alternative" at this time for LCS. While such an alternative would rebuild the LCS complex and prevent overfishing of sharks in the shortest amount of time, this alternative would have severe negative economic impacts on fishermen and the communities (commercial- and recreational-based) that rely on them. Given that alternatives are available that would rebuild the LCS complex and prevent overfishing of sharks without those impacts, NOAA Fisheries does not feel that alternative is reasonable at this time. Additionally, by eliminating both the commercial and recreational fisheries, NOAA Fisheries would lose access to the fishery-dependent data that is needed to have reliable stock assessments. In other words, if this alternative were put in place to rebuild the LCS complex, NOAA Fisheries would no longer have as much data available to use in assessing whether or not the LCS complex remains overfished. Instead, in this amendment and consistent with the Magnuson-Stevens Act, NOAA Fisheries considered the biology of the stocks and attempted to balance the needs of the stocks (as determined by the 2002 stock assessments) with the needs of the fishermen and communities in order to obtain Optimum Yield from the fishery.

NOAA Fisheries held seven scoping meetings regarding an amendment to the HMS FMP in February and March 2003 (68 FR 3853, January 27, 2003). The alternatives and potential impacts considered in this document are based in part on the comments received during scoping (Appendix 2) and on the results of the 2002 SCS and LCS stock assessments. The draft Amendment 1 was available for public comment from August 1, 2003, to October 3, 2003 (Notice of Availability of DEIS 68 FR 45237, August 1, 2003; Proposed rule and Notice of Availability of Amendment 1 68 FR 45196, August 1, 2003; Comment period extension 68 FR 54885, September 19, 2003). During that time, NOAA Fisheries held six public hearings from Louisiana to New York (68 FR 47904, August 12, 2003; Rescheduling of two public hearings 68 FR 54885, September 19, 2003), held one Highly Migratory Species (HMS) Advisory Panel meeting (68 FR 51560, August 27, 2003), and received over 30 written public comments. NOAA Fisheries also attended four Fishery Management Council meetings (New England - 68 FR 38665, June 30, 2003; Mid-Atlantic - 68 FR 43089, July 21, 2003; and two for the Gulf of Mexico - 68 FR 38690, June 30, 2003; 68 FR 47911, August 12, 2003) and one Atlantic States Marine Fisheries Commission meeting. NOAA Fisheries was scheduled to attend the South Atlantic Fishery Management Council meeting in mid-September (68 FR 51997, August 29, 2003) that was canceled due to Hurricane Isabel (68 FR 55034, September 22, 2003) and was not able to attend a Caribbean Fishery Management Council meeting due to scheduling differences. A summary of the major comments received and NOAA Fisheries' response is in Appendix 5.

Due to time constraints (i.e., the need for new regulations by the January 1 opening of the season), this amendment will not address all issues in the shark fisheries or even all the issues

presented in the issues and options paper presented during scoping. However, this amendment should address some of the more pressing matters such as commercial quotas; recreational bag limits; size limits; prohibited species; and bycatch reduction. Other issues such as, but not limited to, the commercial trip limits; quotas for directed, incidental, and recreational permit holders; and season openings and closings will likely be addressed in future rulemakings (e.g., 68 FR 40907, July 9, 2003).

Table 1.1 List of Commonly Used Fishery Management Abbreviations, Acronyms, and Initialisms.

AA	Assistant Administrator for Fisheries
ACCSP	Atlantic Coastal Cooperative Statistics Program
ACS	Angler consumer surplus
ANPR	Advanced Notice of Proposed Rulemaking
AOCTRP	Atlantic Offshore Cetacean Take Reduction Plan
AOCTRT	Atlantic Offshore Cetacean Take Reduction Team
AP	Advisory Panel
APA	Administrators Procedure Act
ASMFC	Atlantic States Marine Fisheries Commission
ATCA	Atlantic Tunas Convention Act
B	Biomass
BAYS	Bigeye, albacore, yellowfin, skipjack tunas
BET	Bigeye tuna
BFT	Bluefin tuna
BiOp	Biological Opinion
B_{MSY}	Biomass expected to yield maximum sustainable yield
B_{OY}	Biomass expected to yield optimum yield
CFMC	Caribbean Fishery Management Council
CFL	Curved fork length
CFR	Code of Federal Regulations
CHB	Charter/Headboat
CIE	Center for Independent Experts
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CPUE	Catch per unit effort
CSFOP	Commercial shark fishery observer program
CZMA	Coastal Zone Management Act
DEIS	Draft Environmental Impact Statement
DPS	Distinct population segment
dw	Dressed weight
EA	Environmental Assessment
EEZ	Exclusive economic zone
EFH	Essential fish habitat
EFP	Exempted fishing permit

EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
F	Instantaneous fishing mortality
FAO	Food and Agriculture Organization
FEIS	Final Environmental Impact Statement
FL	Fork Length
FMP	Fishery Management Plan
F_{MSY}	Instantaneous fishing mortality rate expected to yield maximum sustainable yield
FMU	Fishery management unit
F_{OY}	Fishing mortality rate expected to yield optimum yield
FR	Federal Register
FRFA	Final regulatory flexibility analysis
GSAFDF	Gulf and South Atlantic Fishery Development Foundation
GMFMC	Gulf of Mexico Fishery Management Council
GSMFC	Gulf States Marine Fisheries Commission
HAPC	Habitat area of particular concern
HMS	Highly migratory species: Atlantic sharks, tunas, swordfish, and billfish
HMS FMP	Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks
ICCAT	International Commission for the Conservation of Atlantic Tunas
IPOA	International Plan of Action
IRFA	Initial regulatory flexibility analysis
ITQ	Individual transferable quota
ITS	Incidental take statement
LAP	Limited access permit
LCS	Large coastal sharks
LOA	Letter of acknowledgment
LPS	Large Pelagic Survey
LWTRP	Large Whale Take Reduction Plan
LWTRT	Large Whale Take Reduction Team
MAFMC	Mid-Atlantic Fishery Management Council
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MFMT	Maximum fishing mortality threshold
MMPA	Marine Mammal Protection Act
MPA	Marine protected area

MRFSS	Marine Recreational Fishing Statistics Survey
MSST	Minimum stock size threshold
MSY	Maximum sustainable yield
mt	Metric tons
NEFMC	New England Fishery Management Council
NEFSC	Northeast Fisheries Science Center
NEPA	National Environmental Policy Act
NERO	Northeast Regional Office
NGO	Non-governmental organization
nmi	Nautical mile
NOA	Notice of Availability
NOAA Fisheries	National Marine Fisheries Service
NOAA	National Oceanographic and Atmospheric Administration
NOI	Notice of Intent
NPOA	National Plan of Action
NRC	Natural Resources Consultants, Inc.
NS	National Standards
OSF	Office of Sustainable Fisheries
OY	Optimum yield
POP	Pelagic observer program
PR	Office of Protected Resources
PRA	Paperwork Reduction Act
Reg Flex Act	Regulatory Flexibility Act
RIR	Regulatory Impact Review
RPAs	Reasonable and Prudent Alternatives
RPMs	Reasonable and Prudent Measures
SAFE report	Stock Assessment and Fishery Evaluation report
SAFMC	South Atlantic Fishery Management Council
SCRS	Standing Committee for Research and Statistics
SCS	Small coastal sharks
SEFSC	Southeast Fisheries Science Center
SEIS	Supplemental environmental impact statement
SERO	Southeast Regional Office
SEW	Stock evaluation workshop
SFA	Sustainable Fisheries Act
SFL	Straight fork length

SK Program	Saltonstall-Kennedy Program
SRP	Scientific research permit
SSB	Spawning stock biomass
TAC	Total allowable catch
TAL	Total allowable landings
TCs	Terms and Conditions
TL	Total length
USFWS	United States Fish and Wildlife Service
VMS	Vessel monitoring system
WTP	Willingness to pay
ww	Whole weight

Table 1.2 Chronological List of Most of the Federal Register Publications Relating to Atlantic Sharks

Pre 1993

48 FR 3371	01/25/83	Preliminary management plan with optimum yield and total allowable level of foreign fishing for sharks
56 FR 20410	05/03/91	NOA of draft FMP; 8 hearings
57 FR 1250	01/13/92	NOA of Secretarial FMP
57 FR 24222	06/08/92	Proposed rule to implement FMP
57 FR 29859	07/07/92	Correction to 57 FR 24222

1993

58 FR 21931	04/26/93	Final rule and interim final rule implementing FMP
58 FR 27336	05/07/93	Correction to 58 FR 21931
58 FR 27482	05/10/93	LCS commercial fishery closure announcement
58 FR 40075	07/27/93	Adjusts 1993 second semi-annual quotas
58 FR 40076	07/27/93	LCS commercial fishery closure announcement
58 FR 46153	09/01/93	Notice of 13 public scoping meetings
58 FR 59008	11/05/93	Extension of comment period for 58 FR 46153
58 FR 68556	12/28/93	Interim final rule implementing trip limits

1994

59 FR 3321	01/21/94	Extension of comment period for 58 FR 68556
59 FR 8457	02/22/94	Notice of control date for entry
59 FR 25350	05/16/94	LCS commercial fishery closure announcement
59 FR 33450	06/29/94	Adjusts second semi-annual 1994 quota
59 FR 38943	08/01/94	LCS commercial fishery closure announcement
59 FR 44644	08/30/94	Reopens LCS fishery with new closure date
59 FR 48847	09/23/94	Notice of public scoping meetings
59 FR 51388	10/11/94	Rescission of LCS closure
59 FR 52277	10/17/94	Notice of additional scoping meetings
59 FR 52453	10/18/94	Final rule implementing interim final rule in 1993 FMP
59 FR 55066	11/03/94	LCS commercial fishery closure announcement

1995

60 FR 2071	01/06/95	Proposed rule to adjust quotas
60 FR 21468	05/02/95	Final rule indefinitely establishes LCS quota at 1994 level
60 FR 27042	05/22/95	LCS commercial fishery closure announcement
60 FR 30068	06/07/95	Announcement of Shark Operations Team meeting
60 FR 37023	07/19/95	Adjusts second semi-annual 1995 quota
60 FR 38785	07/28/95	ANPR - Options for Permit Moratoria
60 FR 44824	08/29/95	Extension of ANPR comment period
60 FR 49235	09/22/95	LCS commercial fishery closure announcement
60 FR 61243	11/29/95	Announces Limited Access Workshop

1996

61 FR 21978	05/13/96	LCS commercial fishery closure announcement
61 FR 37721	07/19/96	Announcement of Shark Operations Team meeting.
61 FR 39099	07/26/96	Adjusts second semi-annual 1996 quota

61 FR 43185	08/21/96	LCS commercial fishery closure announcement
61 FR 67295	12/20/96	Proposed rule to reduce Quotas/Bag Limits
61 FR 68202	12/27/96	Proposed rule to establish limited entry (Draft Amendment 1 to 1993 FMP)

1997

62 FR 724	01/06/97	NOA of Draft Amendment 1 to 1993 FMP
62 FR 1705	01/13/97	Notice of 11 public hearings for Amendment 1
62 FR 1872	01/14/97	Extension of comment period and notice of public hearings for proposed rule on quotas
62 FR 4239	01/29/97	Extension of comment period for proposed rule on quotas
62 FR 8679	02/26/97	Extension of comment period for Amendment 1 to 1993 FMP
62 FR 16647	04/07/97	Final rule reducing quotas/bag limits
62 FR 16656	04/07/97	LCS commercial fishery closure announcement
62 FR 26475	05/14/97	Announcement of Shark Operations Team meeting
62 FR 26428	05/14/97	Adjusts second semi-annual 1997 LCS quota
62 FR 27586	05/20/97	Notice of Intent to prepare an supplemental environmental impact statement
62 FR 27703	05/21/97	Technical Amendment regarding bag limits
62 FR 38942	07/21/97	LCS commercial fishery closure announcement

1998

63 FR 14837	03/27/98	LCS commercial fishery closure announcement
63 FR 19239	04/17/98	NOA of draft consideration of economic effects of 1997 quotas
63 FR 27708	05/20/98	NOA of final consideration of economic effects of 1997 quotas
63 FR 29355	05/29/98	Adjusts second semi-annual 1998 LCS quota
63 FR 41736	08/05/98	LCS commercial fishery closure announcement
63 FR 57093	10/26/98	NOA of draft HMS FMP

1999

64 FR 3154	01/20/99	Proposed rule for draft HMS FMP
64 FR 14154	03/24/99	LCS commercial fishery closure announcement
64 FR 29090	05/28/99	Final rule for HMS FMP
64 FR 30248	06/07/99	Fishing season notification
64 FR 37700	07/13/99	Technical amendment to HMS FMP final rule
64 FR 37883	07/14/99	Fishing season change notification
64 FR 47713	09/01/99	LCS fishery reopening
64 FR 52772	09/30/99	Notice of Availability of outline for National Plan of Action for sharks
64 FR 53949	10/05/99	LCS closure postponement
64 FR 66114	11/24/99	Fishing season notification

2000

65 FR 16186	03/27/00	Revised timeline for National Plan of Action for sharks
65 FR 35855	06/06/00	Fishing season notification and 2nd semi-annual LCS quota adjustment
65 FR 47986	08/04/00	Notice of Availability of National Plan of Action for sharks
65 FR 38440	06/21/00	Implementation of prohibited species provisions and closure change
65 FR 75867	12/05/00	Fishing season notification

2001

66 FR 55	01/02/01	Implementation of HMS FMP pelagic shark quotas
66 FR 10484	02/15/01	NOA of Final National Plan of Action for the Conservation and Management of Sharks
66 FR 13441	03/06/01	Emergency rule to implement settlement agreement
66 FR 33918	06/26/01	Fishing season notification and 2nd semi-annual LCS quota adjustment
66 FR 34401	06/28/01	Proposed rule to implement national finning ban
66 FR 46401	09/05/01	LCS fishing season extension
66 FR 67118	12/28/01	Emergency rule to implement measures based on results of peer review and fishing season notification

2002

67 FR 6194	02/11/02	Final rule implementing national shark finning ban
67 FR 8211	02/22/02	Correction to fishing season notification 66 FR 67118
67 FR 30879	05/08/02	Notice of availability of SCS stock assessment
67 FR 36858	05/28/02	Notice of availability of LCS sensitivity document and announcement of stock evaluation workshop in June
67 FR 37354	5/29/02	Extension of emergency rule and fishing season announcement
67 FR 64098	10/17/02	Notice of availability of LCS stock assessment and final meeting report
67 FR 69180	11/15/02	Notice of intent to conduct and environmental impact assessment and amend the HMS FMP
67 FR 72629	12/06/02	Proposed rule regarding EFPs
67 FR 78990	12/27/02	Emergency rule to implement measures based on stock assessments and fishing season notification

2003

68 FR 1024	01/08/03	Announcement of 4 public hearings on emergency rule
68 FR 1430	01/10/03	Extension of comment period for proposed rule on EFPs
68 FR 3853	01/27/03	Announcement of 7 scoping meetings and notice of availability of Issues and Options paper
68 FR 31983	05/29/03	Emergency rule extension and fishing season notification
68 FR 45196	08/01/03	Proposed rule and NOA for draft Amendment 1 to HMS FMP
68 FR 47904	08/12/03	Public hearing announcement for draft Amendment 1 to HMS FMP
68 FR 51560	08/27/03	Announcement of HMS AP meeting on draft Amendment 1 to HMS FMP
68 FR 54885	09/19/03	Rescheduling of public hearings and extending comment period for draft Amendment 1 to HMS FMP

Table 1.3 List of Large Coastal Shark Seasons, 1993-2003.

Year	Open dates	Quota (mt dw)
1993	Jan. 1 - May 15	1,218
	July 1 - July 31	875
1994	Jan. 1 - May 17	1,285
	July 1 - Aug 10 Sept. 1 - Nov. 4	1,318
1995	Jan. 1 - May 31	1,285
	July 1 - Sept. 30	968
1996	Jan. 1 - May 17	1,285
	July 1 - Aug. 31	1,168
1997	Jan. 1 - April 7	642
	July 1 - July 21	326
1998	Jan. 1 - Mar. 31	642
	July 1 - Aug. 4	600
1999	Jan. 1 - Mar. 31	642
	July 1 - July 28 Sept. 1 - Oct. 15	585
2000	Jan. 1 - Mar. 31	642
	July 1 - Aug. 15	542
2001	Jan. 1 - Mar. 24	642
	July 1 - Sept. 4	697
2002	Jan. 1 - April 15	735.5
	July 1 - Sept. 15	655.5
2003	Jan. 1 - April 15 (Ridgeback LCS) Jan. 1 - May 15 (Non-ridgeback LCS)	391.5 (Ridgeback LCS) 465.5 (Non-ridgeback LCS)
	July 1 - Sept. 15 (All LCS)	424 (Ridgeback LCS) 498 (Non-ridgeback LCS)

Table 1.4 NOAA Fisheries' Actions Taken to Comply with the Terms of the Court-Approved Settlement Agreement with SOFA *et al*.

Term of settlement agreement	Result
Independent review of the 1998 LCS stock assessment (Paragraphs 3 (a) through (d), revised settlement agreement)	In October 2001, Natural Resources Consultants Inc. provided NOAA Fisheries with four reviews. Three of the four reviews found that the scientific conclusions and scientific management recommendations contained in the 1998 LCS stock assessment were not based on scientifically reasonable uses of the appropriate fisheries stock assessment techniques and on the best available (at the time of the 1998 LCS stock assessment) biological and fishery information relating to LCS.
Maintain the 1997 LCS quotas, pending the completion of the independent review of the 1998 stock assessment. If the majority of the reviews find flaws in the stock assessment, maintain the 1997 LCS quotas pending rulemaking based on a new stock assessment. (Paragraph 3(e), revised settlement agreement)	In March 2001, NOAA Fisheries issued an emergency rule maintaining the 1997 LCS quota levels pending the completion of the peer review (March 6, 200, 66 FR 13441). Based on results of peer review of 1998 LCS stock assessment, in December 2001, NOAA Fisheries issued a second emergency rule maintaining the 1997 LCS quota levels pending the completion of a new stock assessment (December 28, 2001, 66 FR 67118). Based on results of the 2002 LCS stock assessment and its peer review, NOAA Fisheries issued a proposed rule and draft Amendment 1 on August 1, 2003 (68 FR 45196). A final rule will be issued based on the Final Amendment 1.
Conduct a new LCS stock assessment and obtain a peer review of that stock assessment (Paragraph 3(f), revised settlement agreement)	At the end of September 2002, NOAA Fisheries completed a new LCS stock assessment (67 FR 64098, October 17, 2002). NOAA Fisheries received the results of the completed peer review in December 2002. The results were generally positive (Appendix 1).
Work with SOFA *et al*. to obtain historical fin data (Paragraph 3(g))	Plaintiffs' and Defendant's attorneys subpoenaed historic shark records from fish dealers in New York and San Francisco. No documents were obtained through the subpoenas and NOAA Fisheries is unaware of any other dealers that may have records.
Maintain the 1997 SCS quotas pending the completion of a new stock assessment (Paragraph 4)	In the beginning of 2002, NOAA Fisheries completed a new SCS stock assessment (67 FR 30879, May 8, 2002). Based on results of the 2002 SCS stock assessment, NOAA Fisheries issued a proposed rule and draft Amendment 1 on August 1, 2003 (68 FR 45196). A final rule will be issued based on the Final Amendment 1.
Take appropriate action to adjust the pelagic shark quotas to make them consistent with regulations in the HMS FMP (Paragraph 5)	NOAA Fisheries implemented the pelagic shark quotas in the HMS FMP on January 2, 2001 (66 FR 55).

Table 1.5 List of Management Objectives in the HMS FMP. These objectives are not listed in any particular order.

- To prevent or end overfishing of Atlantic tuna, swordfish, and sharks and adopt the precautionary approach to fishery management;
- To rebuild overfished fisheries in as short a time as possible and control all components of fishing mortality, both directed and incidental, so as to ensure the long-term sustainability of the stocks and promote stock recovery of the management unit to the level at which the maximum sustainable yield can be supported on a continuing basis;
- To minimize, to the extent practicable, economic displacement and other adverse impacts on fishing communities during the transition from overfished fisheries to healthy ones;
- To minimize, to the extent practicable, bycatch of living marine resources and the mortality of such bycatch that cannot be avoided in the fisheries for Atlantic tunas, swordfish, and sharks;
- To establish a foundation for international negotiation on conservation and management measures to rebuild overfished fisheries and to promote achievement of optimum yield for these species throughout their range, both within and beyond the exclusive economic zone (EEZ). Optimum yield is the maximum sustainable yield from the fishery, reduced by any relevant social, economic, or ecological factors;
- To provide a framework, consistent with other applicable law, to take necessary action under ICCAT compliance recommendations;
- To provide the data necessary for assessing the fish stocks and managing the fisheries, including addressing inadequacies in current collection and ongoing collection of social, economic, and bycatch data about HMS fisheries;
- Consistent with other objectives of this FMP, to manage Atlantic HMS fisheries for continuing optimum yield so as to provide the greatest overall benefit to the Nation, particularly with respect to food production, providing recreational opportunities, preserving traditional fisheries, and taking into account the protection of marine ecosystems;
- To better coordinate domestic conservation and management of the fisheries for Atlantic tuna, swordfish, sharks, and billfish, considering the multispecies nature of many HMS fisheries, overlapping regional and individual participation, international management concerns, historical fishing patterns and participation, and other relevant factors;
- To simplify and streamline HMS management while actively seeking input from affected constituencies, the general public, and the HMS AP;
- To promote protection of areas identified as essential fish habitat for tuna, swordfish, and sharks;
- To reduce latent effort and overcapitalization in HMS commercial fisheries;
- To develop eligibility criteria for participation in the commercial shark and swordfish fisheries based on historical participation, including access for traditional swordfish handgear fishermen to participate fully as the stock recovers; and,
- To create a management system to make fleet capacity commensurate with resource status so as to achieve the dual goals of economic efficiency and biological conservation.