

DRAFT
AMENDMENT 1

to the

FISHERY MANAGEMENT PLAN
for
ATLANTIC TUNAS,
SWORDFISH, AND SHARKS

Includes:

Draft Environmental Impact Statement,
Draft Regulatory Impact Review,
Initial Regulatory Flexibility Analysis, and
Draft Social Impact Analysis

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Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Highly Migratory Species Management Division
1315 East-West Highway
Silver Spring, Maryland 20910

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 sharks for public display

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

Lead Agency: National Marine Fisheries Service

For Further Information: Karyl Brewster-Geisz
Highly Migratory Species Management Division F/SF1
1315 East-West Highway
Silver Spring, MD 20910
(301) 713-2347; (301) 713-1917 (fax)

Abstract: In 2002, the National Marine Fisheries Service (NOAA Fisheries) conducted two new stock assessments for large and small coastal sharks. These stock assessments are 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 has 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 considered in this amendment include, among other things: commercial quotas, commercial minimum sizes, recreational bag limits, recreational minimum sizes, gear restrictions to reduce bycatch or reduce bycatch mortality, time/area closures, changing the deewater/other sharks and the prohibited species management units, and updates to essential fish habitat identifications. Additionally, NOAA Fisheries is considering a different permitting system for issuing permits for display purposes. Comments on this document and the proposed rule will be accepted for 60 days from publication of the notice in the Federal Register.

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 has 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 (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. 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 27 years, 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 sharks 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). 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, this document, Amendment 1 to the HMS FMP, examines 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, the Endangered Species Act, the Marine Mammal Protection Act, the Coastal Zone Management Act, the Regulatory Flexibility 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 alternatives considered in this document include (preferred alternatives are in italics):

Commercial Management Measures

Shark Classification	
Alternative A1 (No Action)	Separate LCS groupings (Ridgeback/Non-ridgeback), different closure dates possible
Alternative A2	Separate LCS groupings (Ridgeback/Non-ridgeback), same closure date
<i>Alternative A3 (Preferred)</i>	<i>Aggregate LCS, one closure date</i>
Alternative A4	Species specific groupings, different closure dates possible
<i>Other shark classification alternative considered but not further analyzed at this time</i>	
Alternative A5	Aggregate complex, closure occurs when quota is reached for species of highest vulnerability
Quota Administration	
Alternative B1 (No Action)	Semi-annual season
Alternative B2 (No Action)	No regional quotas
<i>Alternative B3 (Preferred)</i>	<i>Regional quotas</i>
<i>Alternative B4 (Preferred)</i>	<i>Trimester season</i>
Alternative B5	Quarterly season
Quota Basis	
Alternative C1 (No Action)	Quota Basis from 1999 HMS FMP
<i>Alternative C2 (Preferred)</i>	<i>Quota based upon percentage of Maximum Sustainable Yield</i>

Alternative C3	Quota based upon average landings for past three years
<i>Other quota basis alternative considered but not further analyzed at this time</i>	
Alternative C4	Quota based upon maintaining constant fishing mortality over time
Minimum Size	
Alternative D1 (No Action)	4.5 ft for Ridgeback LCS
<i>Alternative D2 (Preferred)</i>	<i>No minimum size</i>
Alternative D3	5 ft for all LCS
Alternative D4	5 ft for Ridgeback LCS; 4.5 ft for Non-ridgeback LCS
Alternative D5	4.5 ft for Atlantic Non-ridgeback LCS; 4 ft for Gulf of Mexico Non-ridgeback LCS
Alternative D6	Minimum size for overfished species (or where overfishing is occurring) only

Recreational Management Measures

Retention limits	
Alternative E1 (No action)	One shark per vessel per trip plus one Atlantic sharpnose shark per person per trip
<i>Alternative E2 (Preferred)</i>	<i>Existing catch limits (E1) plus the addition of one bonnethead shark per person per trip</i>
Alternative E3	Existing catch limits (E1) plus the addition of one pelagic shark per vessel per trip
Alternative E4	Existing catch limits (E1) plus an allowance for vessels with HMS Angling permits participating in registered tournaments or HMS CHB permit holders on for-hire trips to retain one shark per person, up to two sharks per vessel, per trip, as well as one bonnethead shark per person per trip
Alternative E5	Other retention limit that considers existing state recreational retention limits

Alternative E6	No retention, catch-and-release fishing for all recreational shark fisheries, inclusive of all LCS, SCS, and pelagic sharks.
Alternative E7	No retention limit
Minimum Size	
Alternative F1 (No Action)	4.5 ft FL for all sharks, no size limit for Atlantic sharpnose sharks
<i>Alternative F2 (Preferred)</i>	<i>Existing size limits (F1) plus a no size limit for bonnethead sharks</i>
Alternative F3	5.0 ft FL for all sharks, no size limit for Atlantic sharpnose and bonnethead sharks
Alternative F4	5.0 ft FL for all ridgeback LCS, 4.5 ft FL all non-ridgeback LCS, SCS, and pelagic sharks, no size limit for Atlantic sharpnose and bonnethead sharks
Alternative F5	4.5 ft FL all sharks except no size limit for Atlantic sharpnose and bonnethead sharks and regional non-ridgeback LCS minimum sizes (4.5 ft FL for all Atlantic non-ridgeback LCS, 4.0 ft FL for all Gulf of Mexico non-ridgeback LCS)
Alternative F6	No size limit for any sharks
Authorized Gear	
Alternative G1 (No Action)	Any authorized gear
<i>Alternative G2 (Preferred)</i>	<i>Only allow handline and rod and reel in the recreational shark fishery</i>

Deepwater and other sharks

Alternative H1 (No Action)	Retain established species group
<i>Alternative H2 (Preferred)</i>	<i>Remove species group from management unit; data collection only</i>

Prohibited Species

Alternative I1 (No Action)	Retain established species group (19 species)
Alternative I2	Return to the five species in 1997; white, sand tiger, bigeye sand tiger, whale, and basking shark
Alternative I3	Retain established prohibited species group (I1) and add finetooth shark
Alternative I4	Retain established species group (I1) and remove dusky shark
Alternative I5	Retain established species group (I1) and add the deepwater/other species
<i>Alternative I6 (Preferred)</i>	<i>Retain established prohibited species group (I1) and establish criteria for the addition and removal of species to/from the prohibited species group</i>

Bycatch Reduction Measures

Gear Restrictions - Gillnet and Bottom Longline Gear Only	
Alternative J1 (No action)	Gillnet - net checks, large whale take reduction plan (LWTRP), observers; Bottom longline - post guidelines
Alternative J2	Existing bycatch reduction measures (J1) plus closing the shark gillnet fishery permanently/Remove gear from list of authorized gear types
<i>Alternative J3 (Preferred)</i>	<i>Existing bycatch reduction measures (J1) and allow only strikenet method in shark gillnet fishery</i>
<i>Alternative J4 (Preferred)</i>	<i>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</i>
<i>Alternative J5 (Preferred)</i>	<i>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</i>

Alternative J6	Existing bycatch reduction measures (J1) plus limiting shark bottom longline gear to a maximum of 10 miles of mainline, limiting soak time to 10 hours or less, and <i>requiring the use of non-stainless steel corrodible circle hooks</i>
Alternative J7	Existing bycatch reduction measures (J1) plus requiring the retention of all sharks caught in commercial shark fisheries, no discards allowed
Alternative J8	Existing bycatch reduction measures (J1) plus requiring commercial and recreational fishermen to attend workshops in regard to both present regulations, species identification, and release techniques.
Alternative J9	Existing bycatch reduction measures (J1) and close all LCS when the quota for either LCS sub-group is reached
Time/Area Closures	
Alternative K1 (No Action)	No time/area closures
<i>Alternative K2 (Preferred)</i>	<i>Time/area closure for sandbar and dusky shark nursery and pupping areas off of North Carolina during the winter fishery</i>
Alternative K3	Time/area closure for all shark nursery and pupping areas during pupping season based on EFH identifications for neonate and juvenile sharks
<i>Other time/area closure alternatives considered but not further analyzed at this time</i>	
Alternative K4	Time/area closure for finetooth shark pupping and nursery areas in EFH identified off St. Andrews Bay, Florida
Alternative K5	Time/area closure to protect smalltooth sawfish critical habitat

Essential Fish Habitat

Alternative L1 (No Action)	Maintain current EFH identified areas
Alternative L2	Identify EFH for the fishery management unit (FMU) based on the entire geographic range of the species
<i>Alternative L3 (Preferred)</i>	<i>Existing EFH and, as appropriate, identify EFH for the FMU for each species and life stages as those habitats necessary for spawning, breeding, feeding, or growth to maturity</i>

<i>Alternative L4 (Preferred)</i>	<i>Existing EFH and, as appropriate, increase or decrease the EFH areas identified for individual species in the FMU based on special needs</i>
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Exempted Fishing Permits

Alternative M1 (No Action)	Maintain combined permitting system for scientific research, exempted fishing, and public display
<i>Alternative M2 (Preferred)</i>	<i>Develop separate display permitting system for sharks, apart from research or exempted fishing permits</i>
<i>Other exempted fishing permit alternatives considered but not further analyzed at this time</i>	
NOAA Fisheries is accepting comments on several alternatives related to setting quotas for public display. See Chapter 2.7 for details.	

NOAA Fisheries believes that the group of preferred alternatives 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. Comments on this document and the associated proposed rule will be accepted for 60 days from publication of the notice in the Federal Register. NOAA Fisheries intends to finalize the regulations by January 2004.

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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 Atlantic shark related management actions published in the Federal Register. Table 1.2 provides a list of season opening and closing dates for large coastal sharks (LCS).

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 the National Marine Fisheries Service (NOAA Fisheries), implemented the FMP for Sharks of the Atlantic Ocean. The management measures

in 1993 FMP included:

- \$ Establishing a fishery management unit (FMU) containing 39 frequently caught species of Atlantic sharks, separated into three groups for assessment and regulatory purposes (LCS, small coastal sharks (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 large coastal or pelagic species groups and a daily bag limit of five sharks per person for sharks in the small coastal species group;
- \$ Requiring that all sharks not taken as part of a commercial or recreational fishery be release 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 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 until the maximum sustainable yield (MSY) estimated in the 1992 stock assessment was attained.

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-June bi-annual large coastal species group subquota was exceeded shortly after implementation of the FMP, and that portion of the commercial fishery was closed on May 10, 1993. The large coastal 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 4000 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 are 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 small coastal sharks 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 Analyses 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 metric tons (mt) dressed weight (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 and directing 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 analyses 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 (A 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 subgroups 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 under-harvest 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 are 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 1.3). 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 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 (December 27, 2002, 67 FR 78990; extended May 29, 2003, 68 FR 31987). 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 (November 15, 2002, 67 FR 69180).

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 counting 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).

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.

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 proposes a different permit system for fishermen who intend to

collect sharks for public display. EFPs in general will be considered in a different amendment to the HMS FMP.

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 concern. 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 (January 17, 2002, 67 FR 2343). NOAA Fisheries is planning to begin to conduct this five year review for all HMS within the next year.

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 constitute the best available science. Thus, a number of management measures in the 1999 HMS FMP are no longer appropriate. Currently, NOAA Fisheries is implementing 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 indicate 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. Many 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. 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 another management measure. 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 1.4) and also include:

\$ To clarify the type of permit needed for obtaining sharks for the purpose of public display.

\$ To establish criteria via a framework process and criteria for changing 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.

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; quota allocations between directed, incidental, and recreational permit holders; and season openings and closings will likely be addressed in future rulemakings.

Table 1.1 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	Notice of availability of draft FMP; 8 hearings
57 FR 1250	01/13/92	Notice of availability 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 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 46153	11/05/93	Extension of comment period for 58 FR 66153
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	Advanced notice of proposed
rulemaking (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	Notice of availability 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 4 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 29355	05/29/98	Adjusts second semi-annual 1998
LCS quota		
63 FR 41736	08/05/98	LCS commercial fishery closure
announcement		

1999

64 FR 3154	01/20/99	Proposed rule for HMS FMP
64 FR 14154	03/24/99	LCS commercial fishery closure
announcement		
64 FR 29090	05/28/99	Final rule for HMS FMP
65 FR 30248	06/07/99	Fishing season notification
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 2 nd 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	Notice of availability 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 2 nd 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

Table 1.2 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	1,318
	Sept. 1 - Nov. 4	
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	585
	Sept. 1 - Oct. 15	

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)	391.5 (Ridgeback LCS)
	Jan. 1 - May 15 (Non-ridgeback LCS)	465.5 (Non-ridgeback LCS)
	July 1 - Sept. 15 (All LCS)	424 (Ridgeback LCS) 498 (Non-ridgeback LCS)

Table 1.3 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 (66 FR 13441, March 6, 2001). In December 2001, NOAA Fisheries issued a second emergency rule maintaining the 1997 LCS quota levels pending the completion of a new stock assessment (66 FR 67118, December 28, 2001).

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 <i>et al.</i> 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).
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 1.4 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 tuna, 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. 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.<< Table of Contents will generate here >><< Table of Contents will generate here >>