A SUMMARY OF THE MANAGEMENT OF ATLANTIC LARGE COASTAL SHARKS

Presented to the 2005 Data Workshop of the 2005/2006 Large Coastal Shark Stock Assessment

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Atlantic sharks in Federal waters have been managed by the Secretary of Commerce since 1993. Below is a brief summary of management actions and issues as they relate specifically to large coastal sharks (LCS). Table 1 provides a list of most Atlantic shark-related management actions published in the Federal Register. Table 2 provides a list of season opening and closing dates for LCS. Table 3 provides a brief summary of current Atlantic shark management measures. Table 4 provides the list of species that are LCS and the list of prohibited species that used to be managed as LCS.

1.0 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 NMFS, 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, small coastal sharks, 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 small coastal shark 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 NMFS under the Trip Interview Program; and,
- \$ Requiring NMFS observers on selected shark fishing vessels to document mortality of marine mammals and endangered species.

At that time, NMFS identified LCS as overfished and established the quota at 2,436 metric tons (mt) dressed weight (dw). Under the rebuilding plan established in the 1993 FMP, the LCS quota was expected to increase in 1994 and 1995 up to the maximum sustainable yield (MSY) estimated in the 1992 stock assessment (3,800 mt dw).

2.0 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 reopened 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." A final rule that capped quotas for LCS at the 1994 levels was published on May 2, 1995 (60 FR 21468).

3.0 The 1996 LCS Stock Assessment and its Results

In June 1996, NMFS 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, NMFS reduced the LCS commercial quota by 50 percent to 1,285 mt dw and the recreational retention limit to two LCS, small coastal sharks, 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, NMFS also prohibited possession of five LCS species: sand tiger, bigeye sand tiger, whale, basking, and white. 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 NMFS "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 NMFS to maintain the 1997 quotas pending further order of the court.

In May 1998, NMFS completed its consideration of the economic effects of the 1997 LCS quotas on fishermen and submitted the analysis to the court. NMFS 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.

4.0 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, NMFS began the process of creating a rebuilding plan for overfished highly migratory species (HMS), including LCS, consistent with the new provisions.

In June 1998, NMFS 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, NMFS published the final Fishery Management Plan for Atlantic Tunas, Swordfish and Sharks (1999 FMP), which included numerous measures to rebuild or prevent overfishing of Atlantic sharks in commercial and recreational fisheries. The 1999 FMP replaced the 1993 FMP. Management measures related to sharks that changed in the 1999 FMP included:

- \$ Reducing commercial LCS and small coastal shark 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 NMFS again, this time challenging the Atlantic shark commercial measures implemented in the 1999 FMP. NMFS was also sued by Bluewater Fisherman's Association regarding the pelagic shark management measures adopted in the 1999 FMP and by the Recreational Fishing Alliance regarding the recreational shark regulations adopted in the 1999 FMP.

On June 30, 1999, NMFS received a court order from Judge Merryday relative to the May 1997 lawsuit. Specifically, the order enjoined NMFS 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 NMFS 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 rule against the Bluewater Fisherman's Association and stated that the regulations were consistent with the Magnuson-Stevens Act and the Regulatory Flexibility Act. On September 20, 2001, Judge Roberts ruled against the Recreational Fishing Alliance and stated that the recreational retention limits were consistent with the Magnuson-Stevens Act.

On November 21, 2000, SOFA *et al.* and NMFS 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-NMFS) review of the 1998 LCS stock assessment. 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 1999 FMP were implemented (66 FR 55). Additionally, on March 6, 2001, NMFS published an emergency rule implementing the settlement agreement (66 FR 13441). This emergency rule expired on September 4, 2001, and established the LCS and small coastal shark commercial quotas at 1997 levels.

5.0 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 NMFS.

In July 2001, NMFS 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. NMFS 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, NMFS would 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), NMFS implemented another emergency rule for the 2002 fishing year that suspended certain measures under the 1999 regulations pending completion of new LCS and small coastal shark 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, NMFS maintained the 1997 LCS commercial quota (1,285 mt dw), maintained the 1997 small coastal shark 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.

6.0 The 2002 LCS Stock Assessment

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

Based on the results of both the 2002 small coastal shark and LCS stock assessments, NMFS 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 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, NMFS announced its intent to conduct an environmental impact statement and amend the 1999 FMP (67 FR 69180, November 15, 2002).

The emergency rule was an interim measure to maintain the status of LCS pending the reevaluation 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 and only time the classification system (ridgeback/non-ridgeback LCS) finalized in the 1999 FMP. Table 4 indicates which LCS were considered ridgeback and which non-ridgeback. NMFS 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, NMFS took the average landings for individual species from 1999 through 2001 and either increased them or decreased them by certain percentages, as suggested by scenarios presented in the stock assessment. Because the stock assessment scenarios suggested that an increase in catch for blacktip sharks would not cause overfishing and that maintaining the sandbar sharks would not increase overfishing (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, NMFS 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. NMFS responded to these comments when extending the emergency rule and further considered these comments when examining the alternatives presented in the Amendment to the 1999 FMP.

NMFS received the results of the peer review of the 2002 LCS stock assessment in December 2002. These reviews were generally positive.

7.0 Amendment 1 to the 1999 FMP and 2004 Rules

Based on the 2002 LCS stock assessment, NMFS re-examined many of the shark management measures in the 1999 FMP for Atlantic Tunas, Swordfish, and Sharks. The changes in Amendment 1 affected all aspects of shark management. The final management measures (December 24, 2003, 68 FR 74746) selected in Amendment 1 included, 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.

Shortly after the final rule for Amendment 1 was published, NMFS conducted a rulemaking that adjusted the percent quota for each region, changed the seasonal split for the North Atlantic based on historical landing patterns, finalized a method of changing the split between regions and/or seasons as necessary to account for changes in the fishery over time, and established a method to adjust from semi-annual to trimester seasons (November 30, 2004, 69 FR 6954).

8.0 Proposed Consolidated HMS FMP

In April through July 2004, NMFS released an Issues and Options Paper and held many scoping meetings regarding additional changes that may be needed in all aspects of HMS fisheries. Based on the comments received at these scoping meetings and on a Predraft of the Consolidated HMS FMP, NMFS released a proposed rule and Draft HMS FMP on August 19, 2005 (70 FR 48804). The Draft HMS FMP would combine and augment the 1999 FMP and Amendment 1 with the 1988 Billfish FMP and its Amendment. The Draft HMS FMP would not replace any existing management measures unless they were specifically analyzed in the Draft Environmental Impact Statement (DEIS). Most of the proposed management measures analyzed in the DEIS do not affect the LCS fishery. Those that could affect the LCS fishery include a requirement for mandatory workshops for bottom longline and gillnet vessels owners and crew regarding the handling and release of protected species, mandatory workshops for shark dealers regarding shark identification, criteria to consider when implementing new or modifying existing time/area closures, changes to the definition of pelagic and bottom longline gear, a requirement to maintain the second dorsal and anal fin on the shark through landing, and a permit condition for all recreational vessels that Federal regulations must be followed regardless of location of fishing unless a state has more restrictive measures. Additionally, some of the objectives of the 1999 FMP may change to include billfish. These changes are contained in the Draft HMS FMP and in Table 5 below.

9.0 Exempted Fishing Permits

Under 50 CFR 635.32, and consistent with 50 CFR 600.745, NMFS 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 NMFS 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 1999 FMP, NMFS established a 60 mt www 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. NMFS also issues EFPs for the collection of other HMS for public display.

10.0 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, NMFS identified EFH for all actively managed species of sharks as well as two habitat areas of particular concern (HAPC). Based on the 2002 LCS and small coastal shark stock assessments and other new information, NMFS considered possible updates to EFH, particularly for species whose status had changed. In Amendment 1, NMFS updated EFH for five species: dusky, sandbar, nurse, finetooth, and blacktip sharks. In the Draft HMS FMP, NMFS is examining additional data to update EFH for all species of sharks. Any changes to EFH would occur in a separate document.

Table 1 Chronological list of most of the Federal Register publications relating to Atlantic sharks.

Federal Register Cite	Date	Rule or Notice	
Pre 1993			
48 FR 3371 Preliminary management plan with optimum yield and total allowable of foreign fishing for sharks		Preliminary management plan with optimum yield and total allowable level of foreign fishing for sharks	
56 FR 20410	5/3/1991	NOA of draft FMP; 8 hearings	
57 FR 1250	1/13/1992	NOA of Secretarial FMP	
57 FR 24222	6/8/1992	Proposed rule to implement FMP	
57 FR 29859	7/7/1992	Correction to 57 FR 24222	
1993			
58 FR 21931	4/26/1993	Final rule and interim final rule implementing FMP	
58 FR 27336	5/7/1993	Correction to 58 FR 21931	
58 FR 27482	5/10/1993	LCS commercial fishery closure announcement	

Federal Register Cite	Date	Rule or Notice		
58 FR 40075	7/27/1993	Adjusts 1993 second semi-annual quotas		
58 FR 40076	7/27/1993	LCS commercial fishery closure announcement		
58 FR 46153	9/1/1993	Notice of 13 public scoping meetings		
58 FR 59008	11/5/1993	Extension of comment period for 58 FR 46153		
58 FR 68556	12/28/1993	Interim final rule implementing trip limits		
1994	12/20/1993	merm marrow impromenting air minus		
59 FR 3321	1/21/1994	Extension of comment period for 58 FR 68556		
59 FR 8457	2/22/1994	Notice of control date for entry		
59 FR 25350	5/16/1994	LCS commercial fishery closure announcement		
59 FR 33450	6/29/1994	Adjusts second semi-annual 1994 quota		
59 FR 38943	8/1/1994	LCS commercial fishery closure announcement		
59 FR 44644	8/30/1994	Reopens LCS fishery with new closure date		
59 FR 48847	9/23/1994	Notice of public scoping meetings		
59 FR 51388	10/11/1994	Rescission of LCS closure		
59 FR 52277	10/17/1994	Notice of additional scoping meetings		
59 FR 52453	10/18/1994	Final rule implementing interim final rule in 1993 FMP		
59 FR 55066	11/3/1994	LCS commercial fishery closure announcement		
1995	1	•		
60 FR 2071	1/6/1995	Proposed rule to adjust quotas		
60 FR 21468	5/2/1995	Final rule indefinitely establishes LCS quota at 1994 level		
60 FR 27042	5/22/1995	LCS commercial fishery closure announcement		
60 FR 30068	6/7/1995	Announcement of Shark Operations Team meeting		
60 FR 37023	7/19/1995	Adjusts second semi-annual 1995 quota		
60 FR 38785	7/28/1995	ANPR - Options for Permit Moratoria		
60 FR 44824	8/29/1995	Extension of ANPR comment period		
60 FR 49235	9/22/1995	LCS commercial fishery closure announcement		
60 FR 61243	11/29/1995	Announces Limited Access Workshop		
1996	1	•		
61 FR 21978	5/13/1996	LCS commercial fishery closure announcement		
61 FR 37721	7/19/1996	Announcement of Shark Operations Team meeting.		
61 FR 39099	7/26/1996	Adjusts second semi-annual 1996 quota		
61 FR 43185	8/21/1996			
61 FR 67295	12/20/1996	Proposed rule to reduce Quotas/Bag Limits		
61 FR 68202	12/27/1996	Proposed rule to establish limited entry (Draft Amendment 1 to 1993 FMP)		
1997	1			
62 FR 724	1/6/1997	NOA of Draft Amendment 1 to 1993 FMP		
62 FR 1705	1/13/1997	Notice of 11 public hearings for Amendment 1		
62 FR 1872	1/14/1997	Extension of comment period and notice of public hearings for proposed rule on quotas		
62 FR 4239	1/29/1997	Extension of comment period for proposed rule on quotas		
62 FR 8679	2/26/1997	Extension of comment period for Amendment 1 to 1993 FMP		
62 FR 16647	4/7/1997	Final rule reducing quotas/bag limits		
62 FR 16656	4/7/1997	LCS commercial fishery closure announcement		
62 FR 26475	5/14/1997	Announcement of Shark Operations Team meeting		
62 FR 26428	5/14/1997	Adjusts second semi-annual 1997 LCS quota		

Federal Register Cite	Date	Rule or Notice	
62 FR 27586	5/20/1997	Notice of Intent to prepare an supplemental environmental impact statement	
62 FR 27703	5/21/1997	Technical Amendment regarding bag limits	
62 FR 38942	7/21/1997	LCS commercial fishery closure announcement	
1998	•		
63 FR 14837	3/27/1998	LCS commercial fishery closure announcement	
63 FR 19239	4/17/1998	NOA of draft consideration of economic effects of 1997 quotas	
63 FR 27708	5/20/1998	NOA of final consideration of economic effects of 1997 quotas	
63 FR 29355	5/29/1998	Adjusts second semi-annual 1998 LCS quota	
63 FR 41736	8/5/1998	LCS commercial fishery closure announcement	
63 FR 57093	10/26/1998	NOA of draft 1999 FMP	
1999			
64 FR 3154	1/20/1999	Proposed rule for draft 1999 FMP	
64 FR 14154	3/24/1999	LCS commercial fishery closure announcement	
64 FR 29090	5/28/1999	Final rule for 1999 FMP	
64 FR 30248	6/7/1999	Fishing season notification	
64 FR 37700	7/13/1999	Technical amendment to 1999 FMP final rule	
64 FR 37883	7/14/1999	Fishing season change notification	
64 FR 47713	9/1/1999	LCS fishery reopening	
64 FR 52772	9/30/1999	Notice of Availability of outline for National Plan of Action for sharks	
64 FR 53949	10/5/1999	LCS closure postponement	
64 FR 66114	11/24/1999	Fishing season notification	
2000	•		
65 FR 16186	3/27/2000	Revised timeline for National Plan of Action for sharks	
65 FR 35855	6/6/2000	Fishing season notification and 2nd semi-annual LCS quota adjustment	
65 FR 47986	8/4/2000	Notice of Availability of National Plan of Action for sharks	
65 FR 38440	6/21/2000	Implementation of prohibited species provisions and closure change	
65 FR 75867	12/5/2000	Fishing season notification	
2001	_ L		
66 FR 55	1/2/2001	Implementation of 1999 FMP pelagic shark quotas	
66 FR 10484	2/15/2001	NOA of Final National Plan of Action for the Conservation and Management of Sharks	
66 FR 13441	3/6/2001	Emergency rule to implement settlement agreement	
66 FR 33918	6/26/2001	Fishing season notification and 2nd semi-annual LCS quota adjustment	
66 FR 34401	6/28/2001	Proposed rule to implement national finning ban	
66 FR 46401	9/5/2001	LCS fishing season extension	
66 FR 67118	12/28/2001	Emergency rule to implement measures based on results of neer review and	
2002			
67 FR 6194	2/11/2002	Final rule implementing national shark finning ban	
67 FR 8211	2/22/2002	Correction to fishing season notification 66 FR 67118	
67 FR 30879	5/8/2002	Notice of availability of SCS stock assessment	
67 FR 36858	5/28/2002	Notice of availability of LCS sensitivity document and announcement of stock evaluation workshop in June	

Federal Register Cite	Date	Rule or Notice		
67 FR 37354	5/29/2002	Extension of emergency rule and fishing season announcement		
67 FR 64098	10/17/2002	Notice of availability of LCS stock assessment and final meeting report		
67 FR 69180	11/15/2002	Notice of intent to conduct and environmental impact assessment and amend the 1999 FMP		
67 FR 72629	12/6/2002	Proposed rule regarding EFPs		
67 FR 78990	12/27/2002	Emergency rule to implement measures based on stock assessments and fishing season notification		
2003				
68 FR 1024	1/8/2003	Announcement of 4 public hearings on emergency rule		
68 FR 1430	1/10/2003	Extension of comment period for proposed rule on EFPs		
68 FR 3853	1/27/2003	Announcement of 7 scoping meetings and notice of availability of Issues and Options paper		
68 FR 31983	5/29/2003	Emergency rule extension and fishing season notification		
68 FR 45196	8/1/2003	Proposed rule and NOA for draft Amendment 1 to 1999 FMP		
68 FR 47904	8/12/2003	Public hearing announcement for draft Amendment 1 to 1999 FMP		
68 FR 51560	8/27/2003	Announcement of HMS AP meeting on draft Amendment 1 to 1999 FMP		
68 FR 54885	9/19/2003	Rescheduling of public hearings and extending comment period for draft Amendment 1 to 1999 FMP		
68 FR 64621	11/14/2003	NOA of availability of Amendment 1		
68 FR 74746	12/24/2003	Final Rule for Amendment 1		
2004				
69 FR 10936	3/9/2004	SCS fishery closure		
69 FR 19979	4/15/2004	VMS type approval notice		
69 FR 26540	5/13/2004	N. Atlantic Quota Split Proposed Rule		
69 FR 28106	5/18/2004	VMS effective date proposed rule		
69 FR 30837	6/1/2004	Fishing season notice		
69 FR 33321	6/15/2004	N. Atlantic Quota Split Final Rule		
69 FR 47797	8/6/2004	Technical amendment correcting changes to BLL gear requirements		
69 FR 51010	8/17/2004	VMS effective date final rule		
69 FR 56024	9/17/2004	Regional quota split proposed rule		
69 FR 6954	11/30/2004	Regional quota split final rule and season announcement		
69 FR 71735	12/10/2004	Correction notice for 69 FR 6954		
2005				
70 FR 11922	3/10/2005	2nd and 3rd season proposed rule		
70 FR 21673	4/27/2005	2nd and 3rd season final rule		
70 FR 24494	5/10/2005	North Carolina Petition for Rulemaking		
70 FR 29285	5/20/2005	Notice of handling and release workshops for BLL fishermen		
70 FR 48804	8/19/2005	Proposed rule Draft HMS FMP		
70 FR 48704	8/19/2005	NOA of Draft EIS for Draft HMS FMP		
70 FR 52380	9/2/2005	Correction to 70 FR 48704		
70 FR 53146	9/7/2005	Cancellation of hearings due to Hurricane Katrina		
70 FR 54537	9/15/2005	Notice of LCS data workshop		
70 FR 55814	9/23/2005	Cancellation of Key West due to Hurricane Rita		
70 FR 58190	10/5/2005	Correction to 70 FR 54537		
70 FR 58177	10/5/2005	Extension of comment period for Draft HMS FMP		

Federal Register Cite	Date	Rule or Notice
70 FR 58366	10/6/2005	1st season proposed rule

Table 2 List of large coastal shark seasons, 1993-2005. GOM = Gulf of Mexico region or Texas through the Florida Keys; S. Atl. = South Atlantic region or North Carolina south to Florida, including the Caribbean; N. Atl = North Atlantic region or Virginia through Maine.

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)
2004	GOM: Jan. 1 - Feb. 29	190.3
The GOM SCS fishery	S. Atl: Jan 1 - Feb. 15	244.7
closed on March 18, 2004.	N. Atl: Jan 1 - April 15	18.1
	GOM: July 1 - Aug. 15	287.4
	S. Atl: July 1 - Sept. 30	369.5
	N. Atl: July 1 - July 15	39.6

Year	Open dates	Quota (mt dw)	
2005	GOM: Jan 1 - Feb 28	156.3	
	S. Atl: Jan. 1 - Feb 15	133.3	
	N. Atl: Jan. 1 - April 30	6.3	
	GOM: July 6 - July 23	147.8	
	S. Atl: July 6 - Aug 31	182	
	N. Atl: July 21 - Aug 31	65.2	
	GOM: Sept. 1 - Oct. 31	167.7	
	S. Atl: Sept 1 - Nov. 15	187.5	
	N. Atl: Sept 1 - Sept. 15	4.9	
2006 - Proposed GOM: Jan 1 - April 15		222.8	
	S. Atl: Jan 1 - Mar. 15	141.3	
	N. Atl: Jan 1 - April 30	5.3	

Table 3 Summary of current shark regulations.

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 = 7% SA = 41% GM = 52%	Pelagic or Bottom Longline; Gillnet; Rod and Reel;
Pelagic Sharks	Shortfin mako, thresher, oceanic whitetip	488	None Handline; Band Gear	Handline; Bandit Gear
 no directed retention limit incidental retention limit 	Porbeagle	92		
	Blue	273		
Small Coastal Sharks - no directed retention limit - incidental retention limit	Atlantic sharpnose, blacknose, finetooth, bonnethead	454	NA = 3% SA = 87% GM = 10%	

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: 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 Gea						
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			

Table 4 List of species that are large coastal sharks, including those that are prohibited.

Common name	Species name		
Ridgeback Species			
Sandbar	Carcharhinus plumbeus		
Silky	Carcharhinus falciformis		
Tiger	Galeocerdo cuvier		
Non-Ridge	back Species		
Blacktip	Cancharhinus limbatus		
Spinner	Carcharhinus brevipinna		
Bull	Carcharhinus leucas		
Lemon	Negaprion brevirostris		
Nurse	Ginglymostoma cirratum		
Scalloped hammerhead	Sphyrna lewini		
Great hammerhead	Sphyrna mokarran		
Smooth hammerhead	Sphyrna zygaena		
Prohibite	ed Species		
Sand tiger	Odontaspis taurus		
Bigeye sand tiger	Odontaspis noronhai		
Whale	Rhincodon typus		
Basking	Cetorhinus maximus		
White	Carcharodon carcharias		
Dusky	Carcharhinus obscurus		
Bignose	Carcharhinus altimus		
Galapagos	Carcharhinus galapagensis		
Night	Carcharhinus signatus		
Caribbean reef	Carcharhinus perezi		
Narrowtooth	Carcharhinus brachyurus		

Table 5 Existing and Proposed Objectives of the Atlantic Tunas, Swordfish, and Shark, Billfish, and Consolidated HMS FMPs. Highlighted text indicates the differences in objectives between the two existing FMPs.

FMPs.	FMPs.					
Obj.#	Tunas, Swordfish, and Shark FMP	Billfish FMP and Billfish Amendment	Proposed Consolidated FMP			
1	To prevent or end overfishing of Atlantic tuna, swordfish, and sharks and adopt the precautionary approach to fishery management	Prevent and/or end overfishing of Atlantic billfish and adopt the precautionary approach to fishery management	Prevent or end overfishing of Atlantic tuna, swordfish, billfish, and sharks and adopt the precautionary approach to fishery management			
2	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	Rebuild overfished Atlantic billfish stocks, and monitor and control all components of fishing mortality, both directed and incidental, so as to ensure the long-term sustainability of the stocks and promote Atlantic-wide stock recovery to the level where MSY can be supported on a continuing basis	Rebuild overfished Atlantic HMS stocks, and monitor and control all components of fishing mortality, both directed and incidental, so as to ensure the long-term sustainability of the stocks and promote Atlantic-wide stock recovery to the level where MSY can be supported on a continuing basis			
3	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	Minimize, to the extent practicable, release mortality in the directed billfish fishery, and minimize, to the extent practicable, bycatch and discard mortality of billfish on gears used in other fisheries	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 HMS or other species, as well as release mortality in the directed billfish fishery			
4	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	Establish a foundation for the adoption of comparable international conservation and management measures, through international entities such as ICCAT, to rebuild overfished fisheries and to promote achievement of optimum yield for these species throughout their range, both within and beyond the EEZ	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.			

Obj.#	Tunas, Swordfish, and Shark FMP	Billfish FMP and Billfish Amendment	Proposed Consolidated FMP
5	To minimize, to the extent practicable, economic displacement and other adverse impacts on fishing communities during the transition from overfished fisheries to healthy ones	Minimize adverse social and economic effects on recreational and commercial activities to the extent practicable, consistent with ensuring achievement of the other objectives of this plan, and with all applicable laws	Minimize, to the extent practicable, adverse social and economic impacts on fishing communities and recreational and commercial activities during the transition from overfished fisheries to healthy ones, consistent with ensuring achievement of the other objectives of this plan and with all applicable laws
6	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	Provide the data necessary for assessing the fish stocks and managing the fisheries, including addressing inadequacies in collection and ongoing collection of social, economic, and bycatch data on Atlantic billfish fisheries	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 on Atlantic HMS fisheries
7	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	Consistent with other objectives of this amendment, manage Atlantic billfish fisheries for the continuing optimum yield so as to provide the greatest overall benefit to the Nation, particularly with respect to recreational opportunities and taking into account the protection of marine ecosystems. Optimum yield is the maximum sustainable yield from the fishery, as reduced by any relevant social, economic, or ecological factors.	Consistent with other objectives of this FMP, 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 to the extent practicable, and taking into account the protection of marine ecosystems
8	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	Better coordinate domestic conservation and management of the fisheries for Atlantic tunas, swordfish, sharks, and billfish, considering the multispecies nature of many highly migratory species (HMS) fisheries, overlapping regional and individual participation, international management concerns, and other relevant factors	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

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Obj.#	Tunas, Swordfish, and Shark FMP	Billfish FMP and Billfish Amendment	Proposed Consolidated FMP
9	To provide a framework, consistent with other applicable law, to take necessary action under ICCAT compliance recommendation	Coordinate domestic regulations and ICCAT conservation measures for controlling Atlantic-wide fishing mortality	Provide a framework, consistent with other applicable law, to take necessary action under ICCAT compliance and/or conservation recommendations, including controlling Atlantic-wide fishing mortality
10	To promote protection of areas identified as essential fish habitat for tuna, swordfish, and sharks	Maximize protection of areas identified as essential fish habitat for Atlantic billfish, particularly for critical life stages	Promote conservation and enhancement of areas identified as essential fish habitat for Atlantic HMS, particularly for critical life stages
11	To simplify and streamline HMS management while actively seeking input from affected constituencies, the general public, and the HMS AP		Simplify and streamline HMS management while actively seeking input from affected constituencies, the general public, and the HMS AP
12		Promote the live release of Atlantic billfish through active outreach and educational programs	Promote the live release and tagging of Atlantic HMS through active outreach and educational programs
13		Maintain the highest availability of billfishes to the U.S. recreational fishery by implementing conservation measures that will reduce fishing mortality	Maintain the highest availability of billfishes to the U.S. recreational fishery by implementing conservation measures that will reduce fishing mortality
14		Optimize the social and economic benefits to the nation by reserving the billfish resource for its traditional use, which in the continental United States is almost entirely a recreational fishery	Optimize the social and economic benefits to the nation by reserving the billfish resource for its traditional use, which in the continental United States is almost entirely a recreational fishery
15		Increase understanding of the condition of billfish stocks and the billfish fishery	Increase understanding of the condition of HMS stocks and HMS fisheries

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Obj.#	Tunas, Swordfish, and Shark FMP	Billfish FMP and Billfish Amendment	Proposed Consolidated FMP
16	To reduce latent effort and overcapitalization in HMS commercial fisheries		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, for both commercial and recreational fisheries, while reducing latent effort and overcapitalization, as needed, and providing access for traditional gears and fishermen to participate fully as the stock recovers
17	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		Combine with objective 16.
18	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		Combine with objective 16.