

**DEPARTMENT OF COMMERCE****National Oceanic and Atmospheric Administration****50 CFR Parts 600 and 635****[Docket No. 0612242866–8619–02]****RIN 0648–AU89****Atlantic Highly Migratory Species (HMS); Atlantic Shark Management Measures; Republication**

**Editorial Note:** Federal Register rule document E8–13961, originally published at pages 35778 to 35833 in the issue of Tuesday, June 24, 2008, included several pages of duplicated text and deleted material. This document is being republished in its entirety.

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Final rule; fishing season notification.

**SUMMARY:** This final rule implements the management measures described in Final Amendment 2 to the Atlantic HMS Fishery Management Plan (FMP). These management measures are designed to rebuild overfished species and prevent overfishing of Atlantic sharks. These measures include, but are not limited to, reductions in the commercial quotas, adjustments to commercial retention limits, establishment of a shark research fishery, a requirement for commercial vessels to maintain all fins on the shark carcasses through offloading, the establishment of two regional quotas for non-sandbar large coastal sharks (LCS), the establishment of one annual season for commercial shark fishing instead of trimesters, changes in reporting requirements for dealers (including swordfish and tuna dealers), the establishment of additional time/area closures for bottom longline (BLL) fisheries, and changes to the authorized species for recreational fisheries. This rule also establishes the 2008 commercial quota for all Atlantic shark species groups. These changes affect all commercial and recreational shark fishermen and shark dealers on the Atlantic Coast.

**DATES:** This rule is effective on July 24, 2008.

**ADDRESSES:** For copies of Final Amendment 2 to the Highly Migratory Species Fishery Management Plan, the Small Entity Compliance Guide, or other related documents, please write to the Highly Migratory Species Management Division, 1315 East-West Highway, Silver Spring, MD 20910, or

call at (301) 713–2347 or fax to (301) 713–1917. Copies are also available on the HMS website at <http://www.nmfs.noaa.gov/sfa/hms/>.

Written comments regarding the burden-hour estimates or other aspects of the collection-of-information requirements contained in this final rule may be submitted to the Highly Migratory Species Management Division at (301) 713–2347 or by fax to (301) 713–1917 and by e-mail to [David\\_Rostker@omb.eop.gov](mailto:David_Rostker@omb.eop.gov) or fax to (202) 395–7285.

**FOR FURTHER INFORMATION CONTACT:** Michael Clark, Karyl Brewster-Geisz, or LeAnn Southward Hogan at 301–713–2347 or by fax at 301–713–1917; or Jackie Wilson at 240–338–3936.

**SUPPLEMENTARY INFORMATION:****Background**

The Atlantic shark fisheries are managed under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). The Consolidated HMS FMP is implemented by regulations at 50 CFR part 635.

NMFS announced its intent to prepare an environmental impact statement (EIS) on November 7, 2006 (71 FR 65086), and held seven scoping meetings in January 2007 (72 FR 123, January 3, 2007). As described in the notice of intent, based on the results of the 2005 Canadian porbeagle shark stock assessment, the 2006 dusky shark stock assessment, and the 2005/2006 LCS stock assessment, NMFS declared the current status of the LCS complex as unknown, sandbar sharks as overfished with overfishing occurring, the Gulf of Mexico blacktip shark population as not overfished with overfishing not occurring, the Atlantic blacktip shark population as unknown, the dusky shark as overfished with overfishing occurring, and porbeagle sharks as overfished with overfishing not occurring. Where there are overfished/overfishing determinations, under the Magnuson-Stevens Act, NMFS is required to develop management measures to rebuild overfished shark stocks and prevent overfishing.

In March 2007, NMFS presented a pre-draft of the Amendment 2 to the HMS Advisory Panel (72 FR 7860, February 21, 2007). Based in part on the comments received during scoping and from the HMS Advisory Panel, on July 27, 2007, NMFS developed further and then released the draft Amendment 2 to the Consolidated HMS FMP and the associated proposed rule (72 FR 41325; 72 FR 41392). The public comment period was originally scheduled to end

on October 10, 2007; however, it was subsequently extended (72 FR 56330, October 3, 2007) and reopened until December 17, 2007 (72 FR 64186, November 15, 2007), to provide the Regional Fishery Management Councils, the Interstate Marine Fisheries Commissions, and the public additional opportunity to submit comments. In addition to the written comments submitted, the public verbally commented on the proposed rule at five Regional Fishery Management Council meetings (New England, Mid-Atlantic, South Atlantic, Gulf of Mexico, and Caribbean), an Atlantic States Marine Fisheries Commission meeting, ten public hearings, and one HMS Advisory Panel meeting. The summary of the comments received and NMFS' responses are provided below. Based on these public comments, NMFS re-evaluated the preferred alternatives identified in the draft Amendment 2, made changes as outlined in Final Amendment 2, and now releases its final rule as modified after considering public comment.

Consistent with the Consolidated HMS FMP objectives, the Magnuson-Stevens Act, and other applicable law, the objectives for this final rule are to: (1) implement rebuilding plans for sandbar, dusky, and porbeagle sharks; (2) provide an opportunity for the sustainable harvest of blacktip and other sharks, as appropriate; (3) prevent overfishing of Atlantic sharks; (4) analyze BLL time/area closures and take necessary action to maintain or modify the closures, as appropriate; and (5) improve, to the extent practicable, data collections or data collection programs.

The rebuilding plans in Final Amendment 2 to the Consolidated HMS FMP considers the recommendations in the stock assessments to be the best available scientific information on the status of the species and therefore, reflects those recommendations. This includes NMFS establishing rebuilding time periods that are as short as possible, taking into account the status and biology of the stocks and needs of the fishing communities according to National Standard (NS) 1 guidelines.

The 2005/2006 stock assessment for the sandbar shark assumed that sandbar shark fishing mortality from 2005 to 2007 would be maintained at levels similar to 2004 (the last year of data used in the stock assessment was from 2004) and that there would be a constant total allowable catch (TAC) between 2008 and 2070. Using these assumptions, the projections indicated that sandbar sharks would have a 70–percent probability of rebuilding by 2070 with a TAC of 220 mt whole

weight (ww) (158 mt dressed weight (dw))/year and a 50-percent probability of rebuilding by 2070 with a TAC of 240 mt ww (172 mt dw)/year. As described in Amendment 2, NMFS used the 70-percent probability of rebuilding to ensure that the intended results of a management action are actually realized given the life history traits of sandbar sharks.

Under the rebuilding plan, sandbar sharks are separated from the LCS complex, and the base commercial sandbar shark quota is established at 116.6 mt dw/year, which results in a total sandbar shark TAC of 158.3 mt dw (220 mt ww) once other sources of sandbar sharks mortality are included. For the first five years of this rebuilding plan (through 2012), to account for 2007 overharvests, the base commercial quota is reduced to 87.9 mt dw. The adjusted base quota through 2012 includes the amount of quota that would have been available in the 1<sup>st</sup> season of 2008 had NMFS not closed the fishery during that time. In the final rule for the 1<sup>st</sup> season of 2008, NMFS calculated that 78 mt dw (171,959 lb dw) would have been available (November 29, 2007, 72 FR 67580). However, based on updates to the reported landings, NMFS adjusted the 78 mt dw estimate down to 66.2 mt dw (145,944 lb dw). The actual commercial quota available in any particular year may fluctuate based on overharvests and will be published via appropriate rulemaking in the **Federal Register**.

Projections in the dusky shark stock assessment indicated that with the age-structured production model (i.e., baseline scenario), dusky sharks could be rebuilt with a 70-percent probability by the year 2400. Other projections from the three other modeling approaches indicate that rebuilding of dusky sharks will take between 100–400 years. As such, in this final rule, NMFS assumes that the rebuilding timeframe that would be as short as possible for dusky sharks would be at least 100 years. The harvest of dusky sharks has been prohibited since 2000. Despite this fact, dusky sharks are still overfished with overfishing occurring. NMFS believes this is at least partly due to the fact that they are caught as bycatch, predominantly in longline fisheries. Many of the final actions in this rule, such as establishing a shark research fishery with 100 percent observer coverage and decreasing the retention limits of non-sandbar large coastal sharks on all fishing vessels, should reduce dusky shark bycatch. This reduction in bycatch should aid in rebuilding and in collecting additional information to evaluate dusky shark

status and catches. In the research fishery, if dusky shark catch is high by a particular vessel or in a particular region, NMFS could stop that vessel's trip(s) or stop all research trips in that region and/or time. Additionally, if NMFS decides, after reviewing the data from a particular year, NMFS decides that the catch was too high in the research fishery, NMFS could adjust the research protocols and reduce effort or modify gear requirements, as needed. For the non-research fishery trips, NMFS could either reduce the retention limit in an attempt to reduce effort or work with the appropriate Regional Fishery Management Council to reduce bycatch mortality in certain fisheries, or consider other measures, as appropriate.

A stock assessment was conducted for North Atlantic porbeagle sharks in 2005 by the Canadian Department of Fisheries and Oceans. This assessment was reviewed by NMFS scientists who determined it used appropriate methodologies and all available fishery and biological data including U.S. landings and research. As a result of this review, NMFS determined that the assessment constituted the best available science. NMFS also determined that because the stock assessed is a unit stock that extends into U.S. waters, the assessment and its recommendations were appropriate for use in U.S. domestic management. The assessment recommended that there is a 70-percent probability of rebuilding in 100 years if fishing mortality levels are maintained at or below 0.04 (current fishing mortality level). Considering this science, NMFS believes that the rebuilding timeframe that is as short as possible is 100 years, which will allow a TAC of 11.3 mt dw based on current commercial landings of 1.7 mt dw, current commercial discards of 9.5 mt dw, and current recreational landings of 0.1 mt dw. This results in a commercial porbeagle shark quota of 1.7 mt dw.

This final rule does not contain detailed information regarding the management history of Atlantic sharks or the alternatives considered. Those issues are discussed in the preamble of the proposed rule. Additional information can also be found in the Final Amendment 2 to the Consolidated HMS FMP available from NMFS (see **ADDRESSES**). This final rule contains responses to comments received during the public comment period and a description of changes to the rule between proposed and final. The description of the changes to the proposed rule can be found after the response to comment section.

## Response to Comments

A large number of individuals and groups provided both written and verbal comments on the proposed rule during the 143-day comment period, 10 public hearings, 5 Regional Fishery Management Council meetings, one Interstate Marine Fisheries Commission meeting, and one HMS Advisory Panel meeting. These comments resulted in numerous changes. The comments are summarized below together with NMFS' responses. All of the comments are grouped together by major issue. There are 16 major issues: Quotas/Species Complexes; Porbeagle Sharks as Prohibited; Retention Limits; Fins on Requirement; Time Area Closures; Reporting; Seasons; Regions; Recreational Measures; Stock Assessment and Fishery Evaluation (SAFE) Report and Stock Assessment Frequency; Research Fishery/Preferred Alternative; Comments on Other Alternative Suites and Management Measures; Science; National Standards; Economic Impacts; and Miscellaneous. The comments are numbered consecutively, starting with 1, at the beginning of each issue.

### 1. Quotas/Species Complexes

#### a. Quotas

*Comment 1:* The National Marine Fisheries Service (NMFS) should consider reducing the fishing mortality for overfished sandbar sharks.

*Response:* NMFS is taking steps to reduce fishing mortality for overfished sandbar sharks. In particular, NMFS is reducing the base commercial quota for sandbar sharks to 116.6 mt dw. This amount is further reduced to 87.9 mt dw from 2008 through 2012 to account for 2007 overharvests. This is more than an 80-percent reduction in sandbar shark landings compared to the status quo (594.4 mt dw). This base commercial quota of 116.6 mt dw (which is then adjusted for overharvest) combined with estimated discards both within and outside the commercial shark fishery (e.g., including other commercial fisheries and recreational fisheries) is anticipated to keep sandbar mortality below the recommended total allowable catch (TAC) of 158.3 mt dw, which gives this stock a 70-percent probability of rebuilding by 2070, as described in Chapter one of Amendment 2 to the Consolidated HMS FMP.

*Comment 2:* NMFS should have considered Individual Transferable Quotas (ITQs) for the shark fishery in this rulemaking. The quota is just too small for the number of participants. Individual Fishing Quotas (IFQs) or ITQs would accomplish the same

objectives as the research fishery. ITQs/IFQs are the fairest, simplest, most rational method for this dilemma. NMFS should switch to an ITQ system with no trip limit, because a lot of times fishermen do not weigh the sharks. Rather, fishermen know their legal trip limit based on how they fill their fish boxes. An ITQ system with no trip limit would result in fewer dead discards.

*Response:* ITQs may be beneficial in many fisheries, and NMFS may consider developing an IFQ or Limited Access Privilege Programs (LAPPs) for sharks as well as other HMS in the future. NMFS did not consider ITQs to be a reasonable alternative for this rulemaking given the strict 1-year timeline to which NMFS must adhere in setting up a system for rebuilding a fishery under the Magnuson-Stevens Act. Furthermore, overfishing of sharks would have continued during an extensive ITQ development phase, which would have been inconsistent with NMFS' mandate in section 304(e) of the Magnuson-Stevens Act to rebuild overfished stocks. The Magnuson-Stevens Act states that for stocks identified as overfished or having overfishing occurring, the Secretary of Commerce or the relevant Council, as appropriate, shall prepare a fishery management plan, plan amendment, or proposed regulations for the fishery to end overfishing in the fishery and rebuild affected stocks within one year of that determination. NMFS satisfied that timing provision: sandbar sharks and dusky sharks were determined to be overfished with overfishing occurring on November 7, 2006 (71 FR 65086), and NMFS published Draft Amendment 2 to the Consolidated HMS FMP on July 27, 2007 (72 FR 41325). NMFS notes that the 2006 Magnuson-Stevens Fishery Conservation and Management Reauthorization Act amended section 304(e) to include a two-year timing provision for preparation and implementation of actions, and the new provision will be effective July 12, 2009.

Given section 304 and other timing considerations for this action, NMFS did not consider an ITQ system as a reasonable alternative, as it takes several years to properly design an ITQ system that appropriately considers the views of all stakeholders and then to implement such a system. The general requirements for ITQs or LAPPs were included in the 2007 reauthorized Magnuson-Stevens Act (section 303A). Overall, two basic things must be done when implementing a LAPP system: 1) determine who would receive and who can hold the harvest privileges; and 2) define the nature of the harvest privileges. In addition, NMFS is

currently establishing referenda requirements for LAPPs (for instance, a particular allocation scheme must be approved by a given level of the industry). In addition, unlike the research fishery, which would allow an individual fisherman to target sharks on a yearly basis, allocation under an ITQ, IFQ, or LAPP would be for a much longer time period. Because fishermen would have these allocations for a long time, NMFS traditionally works extensively with all stakeholders to devise the best allocation scheme possible for these type of permit programs through workshops and other meetings.

*Comment 3:* NMFS should reconsider how it calculated the non-sandbar Large Coastal Shark (LCS) quota. The non-sandbar LCS quota is low because fishermen were not targeting non-sandbar LCS in the past. They were targeting sandbar sharks. If fishermen had been targeting non-sandbar LCS, historical landings would be much higher, and there would be a larger non-sandbar LCS quota than is currently proposed.

*Response:* NMFS is implementing a larger non-sandbar LCS base quota of 627.8 mt dw outside the shark research fishery based on dealer reports rather than logbooks, as originally proposed. By using dealer reports, NMFS included in its calculations landings outside of NMFS' jurisdiction (e.g., state landings) and thus maintained consistency in establishing the quota with data used in the stock assessments.

In using historical landings reported by shark dealers to calculate the non-sandbar LCS quota, NMFS follows the recommendations of the stock assessments for Gulf of Mexico and Atlantic blacktip shark populations. These stock assessments recommended keeping catch levels the same in the Atlantic region and not increasing catch levels in the Gulf of Mexico region. Basing quotas on dealer reports would cap fishing effort at historical levels and keep stocks in the Gulf of Mexico healthy and stocks in the Atlantic from declining. Setting quotas higher than these levels could have detrimental effects on shark stocks.

*Comment 4:* NMFS should consider allocating the entire sandbar quota to fishermen participating in the research fishery because giving a few sandbar sharks to those outside of the research fishery would not be worth it. NMFS should also consider only allowing fishermen with directed shark permits to participate in the shark fishery.

*Response:* NMFS considered the option discussed in the comment. Under the final action, NMFS is

allocating the entire 87.9 mt dw adjusted sandbar quota to the shark research fishery. NMFS will publish a **Federal Register** notice each year, inviting applications from permit holders who are willing to participate in the shark research fishery. Within that notice, NMFS will publish the selection criteria that NMFS would use to select participants for the research fishery. For example, depending on the research objectives for a given year, NMFS may consider applications from a variety of permit holders, including directed, incidental, and charter/headboat (CHB) permit holders, for participation in the shark research fishery.

*Comment 5:* NMFS should acknowledge that the proposed reduction in quotas is the end of the directed shark fishery. NMFS should ensure that sharks are not discarded and accommodate incidental landings whenever possible.

*Response:* The final actions will likely end the directed shark fishery for certain species. With the reductions in the sandbar quota, the reduction in retention limits, and the prohibition on retaining sandbar sharks outside the research fishery, fishermen with directed shark permits will likely no longer target LCS outside of the research fishery. As described above, these modifications to quotas and retention limits are necessary to end overfishing and rebuild overfished stocks.

However, as suggested by the commenter, NMFS tried to accommodate incidental landings in other fisheries. Under the final action, fishermen can still retain some non-sandbar LCS while they fish for other species (e.g., reef fish and snapper-grouper). A fisherman with a directed shark permit could harvest 33 non-sandbar LCS per trip and a fisherman with an incidental shark permit could land 3 non-sandbar LCS per trip. The trip limit for directed shark permit holders is based, in part, on BLL observer program data from 2005 to 2007. The observer data showed that fishermen with directed shark permits fishing for snapper-grouper kept, on average, 12 sharks per trip. A 33 non-sandbar trip limit should allow fishermen with directed permits to retain sharks (besides sandbar sharks) they catch while targeting other species and should minimize discards. The incidental trip limit is based on what fishermen with incidental permits currently retain under the status quo.

NMFS also considered whether limiting sandbar harvest to the research fishery would increase dead discards or if NMFS needed to include a trip limit for sandbar sharks. Observer data

indicate that fishermen targeting species other than sharks (i.e., snapper-grouper) catch, on average, one sandbar shark per trip. Given that sets on trips not targeting sharks are typically shorter in length and duration than sets on trips targeting sharks, it is anticipated that sandbar sharks would remain on the gear for less time than on trips targeting shark species, and, thus, would have a greater likelihood of being released alive. Therefore, the current trip limits are not anticipated to result in increased dead discards.

*Comment 6:* NMFS needs to take a more a precautionary approach in regard to hammerheads, common thresher sharks, and blacktip sharks in the Atlantic region, which have an unknown stock status; NMFS should follow international organizations such as the International Union for the Conservation of Nature (IUCN), and pay attention to red listed shark species such as hammerheads, dusky, and sand tiger sharks, which would likely be taken (under the quota or as bycatch) in the fishery and are particularly depleted. Considering these factors, as well as NMFS' poor record for shark recovery to date, NMFS should close the commercial shark fishery; NMFS should put a moratorium on LCS fishing in the Atlantic until the stock status of Atlantic blacktip sharks is known; NMFS should only allow fishing for Atlantic blacktip sharks within scientifically derived limits when the population is capable of supporting such exploitation and bycatch of prohibited species is demonstrated to be insignificant.

*Response:* NMFS is implementing management measures based on the latest NMFS-conducted stock assessments for blacktip, dusky, and sandbar sharks, and the LCS complex, which represent the best available peer reviewed science. NMFS is also implementing management measures based on the latest Canadian-based stock assessment for porbeagle sharks, which NMFS determined represents the best available science. The management measures in this final rule are consistent with the rebuilding targets established in these shark stock assessments, and the rebuilding time periods are as short as possible, taking into account the status and biology of the stocks and needs of the fishing communities according to NS 1 guidelines.

In general, shark stock status determinations are based on NMFS-conducted stock assessments. NMFS uses the Southeast Data, Assessment, and Review (SEDAR) process for shark stock assessments, which is open to the public and uses the Center for

Independent Experts (CIE) to provide independent peer reviews of assessment results.

These assessments consider landings by other countries such as Mexico and Canada but contain mostly U.S. data. For shark species that may have substantial landings outside of the United States (e.g., blue shark), NMFS also relies on the results of the Standing Committee for Research and Statistics (SCRS) of the International Commission for the Conservation of Atlantic Tunas (ICCAT). These stock assessments are conducted with scientists and data from throughout the world, including U.S. scientists and data. In the case of porbeagle sharks, SCRS determined that ICCAT did not need to conduct a stock assessment since Canada had already conducted one. As such, NMFS scientists reviewed the Canadian stock assessment and determined it was appropriate for use in domestic management.

To date, NMFS has not relied on outside organizations, such as the IUCN, when making stock status determinations. This is due to the unknown nature of the data and peer review methodology applied by these outside groups.

The latest blacktip shark assessments recommended not increasing catch levels in the Gulf of Mexico and keeping catch levels at historical levels in the Atlantic. To account for differences in catch between the Gulf of Mexico and Atlantic region and to follow recommendations from the blacktip shark stock assessments, NMFS is implementing a Gulf of Mexico non-sandbar LCS regional quota and an Atlantic non-sandbar LCS regional quota based on historical landings from HMS shark dealer reports from 2003 to 2005. Based on dealer reports, the Atlantic region has a lower non-sandbar LCS base quota (188.34 mt dw) than the Gulf of Mexico region (439.5 mt dw). Since the Atlantic blacktip shark stock assessment recommended not changing landings and did not recommend prohibiting the harvest of blacktip sharks, NMFS is implementing this regional quota based on historical landings in the Atlantic region.

Unlike the sandbar shark assessment, which recommended a specific TAC, or the blacktip stock assessments, which recommended specific catch levels, the dusky shark assessment did not give specific mortality targets. Dusky sharks have been on the prohibited species list in 2000; however, there continue to be dusky shark discards in other fisheries. NMFS estimated reduction in dusky shark mortality as a result of sandbar shark and non-sandbar LCS

management actions. Based on the reduced quotas and trip limits, NMFS estimates that dusky shark mortality will likely be reduced from 33.1 mt dw to 9.1 mt dw per year. This is a 73-percent reduction in mortality compared to the status quo, which should help rebuild the dusky shark population and afford dusky sharks more protection compared to the status quo.

Finally, NMFS is aware of a separate external hammerhead shark stock assessment that is being conducted, but not aware of separate stock assessments for common threshers or sand tiger sharks. Conducting stock assessments at a species specific level is difficult due to the lack of species-specific information collected to conduct stock assessments for each species of sharks involved in commercial shark fisheries. Therefore, species such as hammerhead sharks and common threshers are managed within species complexes. While NMFS is not implementing management measures for hammerhead sharks, it is likely that hammerhead shark landings will be reduced due to the reduced non-sandbar LCS quota and retention limits.

NMFS has not considered specific management actions for common threshers in this rulemaking, but an annual quota is in place for the pelagic shark complex (488 mt dw), and underharvests of this complex are not applied to the next season. NMFS may consider additional management actions for this species, as warranted, in the future.

For sand tiger sharks, based on their high vulnerability to exploitation and to discourage any future directed fisheries, NMFS included these sharks on the prohibited species list in 1997. Additionally, as with the dusky sharks, a reduction in discards based on the sandbar shark and non-sandbar LCS quotas and management actions taken in this rulemaking should afford additional protection for sand tiger sharks.

*Comment 7:* NMFS should include landings by states, such as Louisiana and Alabama, against the Federal shark quota.

*Response:* NMFS counts both Federal and state landings of sharks against the Federal shark quota since sharks in both state and Federal waters contribute to the stocks that are federally managed. This approach is consistent with that used by NMFS to manage other Federal fisheries such as reef fish and snapper grouper.

*Comment 8:* NMFS should consider species-specific quotas. NMFS should begin with blacktip sharks, since an assessment was done for them in both

the Gulf of Mexico and Atlantic. This is because of variation in life history parameters, different intrinsic rates of increase, and different catch and abundance data for all species listed in each complex. Managing sharks as a complex is inappropriate.

*Response:* NMFS is moving towards species-specific management, including species-specific quotas. However, for some species, NMFS has only limited data which requires management to be based on species within a complex. Based on the latest stock assessment, NMFS has removed sandbar sharks from the LCS complex, resulting in a sandbar shark quota, and a non-sandbar LCS quota, comprised of blacktip, bull, smooth hammerhead, scalloped hammerhead, smooth hammerhead, lemon, nurse, silky, tiger, and spinner sharks. The sandbar shark assessment gave a specific TAC for sandbar sharks, which resulted in NMFS accounting for sandbar shark mortality in all fisheries (both commercial and recreational sectors) before establishing a base commercial quota of 116.6 mt dw. In order to monitor this quota, NMFS removed sandbar sharks from the LCS complex and set a separate commercial quota for this species.

However, while separate blacktip shark assessments were conducted, NMFS has decided not to implement separate blacktip shark quotas because the shark fishery is a multi-species fishery. The majority of sharks harvested in the directed shark fishery, other than sandbar sharks, are blacktip sharks. For instance, 82-percent of sharks caught in the directed shark fishery in the Gulf of Mexico region are blacktip sharks (not including sandbar sharks). The next highest landings were for hammerhead sharks at 7-percent and bull sharks at 5-percent. The South Atlantic region had the same pattern with the highest percentage of landings, apart from sandbar sharks, for blacktip sharks at 72-percent followed by hammerhead sharks at 14-percent, and then bull sharks at 4-percent. Because NMFS did not have species-specific assessments on other species besides blacktip and sandbar sharks, and because the majority of the LCS catch, not including sandbar sharks, is blacktip sharks, NMFS created a non-sandbar LCS complex with its own quota. To account for differences in catch between the Gulf of Mexico and Atlantic region, NMFS is implementing a regional Gulf of Mexico non-sandbar LCS quota and an Atlantic non-sandbar LCS quota.

*Comment 9:* NMFS should split the sandbar quota between research and bycatch. This could be a "phased-in" quota system where  $\frac{2}{3}$  of the quota in

the first year would be allocated toward incidental landings and  $\frac{1}{3}$  would be allocated toward research.

*Response:* In establishing the base commercial quota of 116 mt dw, NMFS allocated approximately 42 mt dw to account for recreational harvest and dead discards. A further allocation of  $\frac{1}{3}$  of the base commercial quota for the research fishery in the first year would only result in 38.8 mt dw for research. In addition, due to overharvests in 2007 (see Appendix C in the FEIS for more details), NMFS is reducing the base commercial sandbar shark quota to 87.9 mt dw annually for five years. A  $\frac{1}{3}$  allocation of this reduced base commercial quota would only leave 29.3 mt dw of sandbar quota available for research. One third of either the base annual quota or the adjusted five year quota would not provide enough trips or observations to produce statistically sound data on the several research questions NMFS intends to address, especially given that NMFS has already accounted for dead discards and recreational harvest in setting the base commercial quota. In addition, a  $\frac{2}{3}$  allocation of the sandbar quota would only allow fishermen (directed or incidental) to retain a few sandbar sharks (less than what was proposed under alternative suite 3, where all permit holders would have been allowed to retain sandbar sharks). Thus, splitting the quota into thirds would not provide benefits to the fishery or to the research needed for future stock assessments. However, as funds are available, NMFS would have scientific observers on vessels fishing outside the research fishery that would monitor discards of sandbar sharks. If large number of sandbar dead discards occurred in the fishery, resulting in mortality above the recommended TAC, NMFS would take management action, as necessary. Additionally, NMFS will monitor landings of sandbar shark by state fishermen and deduct those landings from the base commercial quota, as needed.

*Comment 10:* NMFS should not use the maximum rebuilding time period (70 years) allowed under the law but should use a more precautionary approach. NMFS should not strive for maximum sustainable yield (MSY) for blacktip and sandbar sharks. The proposed sandbar shark quota of 116 metric tons (mt) is too high to ensure recovery of this population and NMFS should consider adopting an even lower final number.

*Response:* The 2005/2006 stock assessment for sandbar sharks discussed three rebuilding scenarios, including: a rebuilding timeframe if no fishing were

allowed; a TAC corresponding to a 50-percent probability of rebuilding by 2070; and a TAC corresponding to a 70-percent probability of rebuilding by 2070. Under no fishing, the stock assessment estimated that sandbar sharks would rebuild in 38 years. Under the NS 1 guidelines, if a species requires more than 10 years to rebuild, even in the absence of fishing mortality, then the specified time period for rebuilding may be adjusted upward by one mean generation time. Thus, NMFS added a generation time (28 years) to the target year for rebuilding sandbar sharks. The target year is the number of years it would take to rebuild the species in the absence of fishing, or 38 years for sandbar sharks. NMFS determined that the rebuilding time that would be as short as possible for sandbar sharks would be 66 years, taking into account the status and biology of the species and severe economic consequences on fishing communities. This would allow sandbar sharks to rebuild by 2070 given a rebuilding start year of 2004, the last year of the time series of data used in the 2005/2006 sandbar shark stock assessment. Since sharks are caught in multiple fisheries, to meet the rebuilding timeframe under a no fishing scenario, NMFS would have to implement restrictions in multiple fisheries to eliminate mortality, such as entirely shutting down multiple fisheries to prevent bycatch. If NMFS were to shut down the shark fishery completely, such action would likely have severe economic impacts on the fishing community and it would likely result in difficulties for fisheries in which Councils recommend management measures as well as Commission-managed fisheries, which often catch sharks as bycatch. In addition, prohibiting all fishing for sharks would impact NMFS' ability to do collect data for future management.

The recommended TAC associated with a 50-percent probability of rebuilding by 2070 is 172.7 mt dw (or 240 mt whole weight (ww)). However, given the life history of sharks including slow growth, late age of maturity, and relatively small litter sizes, as described in the 1999 Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks (1999 FMP), a 50-percent probability of success is minimally acceptable for sharks. Thus, NMFS adopted the TAC corresponding to a 70-percent probability of rebuilding by 2070, or 158.3 mt dw (220 mt ww). This timeframe is consistent with the Magnuson-Stevens Act, the NS 1 guidelines at § 600.310, the 2006 Consolidated HMS FMP (which

includes the rebuilding requirements of the 1999 FMP), and the other national standards that require NMFS to consider, among other things, the economic and social impacts of the fishery.

#### b. Discard Issues

*Comment 11:* NMFS should consider sandbar shark discards outside the research fishery. NMFS should also be concerned with derby-style fishing with the reduced quotas and retention limits.

*Response:* NMFS considered sandbar shark discards outside the shark research fishery when it established the base sandbar shark quota (see Table A.1 in Appendix A of the Final EIS). In doing so, NMFS set a commercial sandbar shark quota that, in addition to considering discards in other fisheries outside the shark research fishery, should keep sandbar shark mortality below the recommended TAC of 158.3 mt dw each year. In order to deter derby-style fishing outside the shark research fishery, NMFS reduced the trip limit for directed shark permit holders to 33 non-sandbar LCS per trip. This trip limit should allow the LCS fishery to stay open longer than it has in the past while also minimizing, to the extent practicable, regulatory discards and derby-style fishing.

*Comment 12:* NMFS should acknowledge that dusky shark bycatch will be an issue both inside and outside the research fishery. Seventy percent of dusky sharks are dead at haulback.

*Response:* Dusky sharks caught as bycatch under the new management measures would result in dead discards to the same extent as current levels. Currently, most of the dusky shark discards occur within the directed shark fishery (on average, 24.5 mt dw per year), with a total of 33.2 mt dw of dusky sharks discarded on average per year. Under the final action, there would no longer be a directed LCS fishery. For a limited number of trips, the few vessels that qualify for participation in the shark research fishery will be allowed to direct on LCS. Depending on the number of trips taken within the research fishery, NMFS estimates that yearly dusky shark discards could be between 0.5 mt dw (that would be caught during 64 trips associated with the adjusted sandbar shark quota) and 0.6 mt dw (that would be caught during 92 trips associated with the base sandbar shark quota), with a total of 9.1 mt dw of dusky shark discards across all fisheries. This is a 73-percent reduction in dusky shark discards compared to the status quo.

*Comment 13:* NMFS should evaluate if highgrading will be an issue outside the research fishery.

*Response:* Under the final action, highgrading, or the discarding of smaller, less valuable animals and retaining only the most valuable animals to fill a retention limit, is expressly prohibited. However, because fishermen aim to have the highest profits per trip, highgrading can be an issue whenever trip limits are implemented.

Based on the latest shark stock assessments, NMFS is implementing a reduced shark trip limit from 4,000 lb of LCS per trip to 33 non-sandbar LCS per trip for directed permit holders operating outside the research fishery. NMFS expects that this reduced trip limit (approximately one quarter of what a directed fisherman lands on a shark trip under the status quo) and the prohibition on the retention of sandbar sharks will result in fishermen with directed shark permits no longer targeting LCS. Additionally, this trip limit is higher than the average number of sharks shark fishermen currently retain when targeting other species (i.e., 12 sharks from non-targeted trips). Thus, NMFS assumes that the reduced trip limit will allow fishermen with directed shark permits to keep all incidentally caught non-sandbar LCS as they target non-sharks species. Because fishermen will likely be allowed to keep all sharks caught when fishing for other species, the reduced trip limit should reduce the incentive to engage in highgrading.

#### c. Species Complexes

*Comment 14:* NMFS should reconsider the use of the term “non-sandbar LCS.” This title is awkward and might confuse some fishers. The use of “LCS” or “LCS (other than sandbars)” is recommended following the same logic as when referring to “pelagic sharks” (which otherwise would be referred to as non-blue or porbeagle pelagic sharks.)

*Response:* NMFS considered several names for the group of LCS that does not include sandbar sharks. NMFS felt keeping the title “LCS” for the new complex may be confusing with the “old” LCS complex (i.e., the complex prior to the implementation of the amendment). NMFS chose “non-sandbar LCS” because it was the most explicit description of the new complex: the LCS complex with sandbar sharks removed.

*Comment 15:* NMFS is taking sandbars out of the LCS complex. Where did NMFS get the authority to remove a given species from a complex?

*Response:* NMFS has the authority under the Magnuson-Stevens Act to manage all coastal sharks. As part of this authority, NMFS created the complexes in 1993 to aid in managing the fishery. Thus, NMFS may set species-specific quota as appropriate, given the best available science. Indeed, NMFS has often changed the specific species in each management unit starting with the creation of five prohibited species in 1997. In this case, the sandbar shark assessment gave a specific TAC for sandbar sharks, which resulted in NMFS establishing a base commercial quota of 116.6 mt dw. In order to monitor this quota, NMFS is establishing a quota for sandbar sharks that is separate from the quota for the rest of the LCS complex.

*Comment 16:* The Director of the North Carolina Division of Marine Fisheries stated that NMFS should place blacktip sharks in the small coastal shark (SCS) complex.

*Response:* NMFS is not changing the composition of the SCS complex in this rulemaking. Rather, based on the TAC recommended by the sandbar shark stock assessment, NMFS is establishing separate quotas for sandbar sharks and the non-sandbar LCS. The non-sandbar LCS complex consists of blacktip, bull, smooth hammerhead, scalloped hammerhead, lemon, nurse, silky, tiger, and spinner sharks. Blacktip sharks are the species most commonly caught within this complex. In the 1993 FMP for Atlantic Sharks, blacktip sharks were placed within the LCS complex based on fishery dynamics. Blacktip sharks are more commonly caught with gear targeting LCS (i.e., BLL gear) rather than gear used to target SCS (i.e., gillnet gear). In addition, the blacktip shark stock assessments recommended that blacktip shark landings should not change or increase from historical catch levels. By placing blacktip sharks within the SCS complex, NMFS could either drastically reduce the blacktip shark regional quotas if the 454 mt dw SCS complex quota was not increased (i.e., the 454 mt dw quota would include the quota for blacktip sharks and SCS), or increase the SCS complex quota to include historical catch of blacktip sharks. Placing blacktip sharks within the SCS complex and increasing the overall SCS quota could result in increased catch levels of SCS. These catch levels may or may not be sustainable for the SCS complex. Therefore, at this time, NMFS is not placing blacktip sharks within the SCS complex.

d. Over- and Underharvests

*Comment 17:* NMFS received several comments regarding transferring quota. These include: NMFS should consider transferring unused quota to the next season; NMFS should not consider transferring underharvests to the next season even if species are not overfished or the status is unknown. This is because other bodies such as the IUCN have expressed concern as to some of these species; NMFS should subtract quota overages from the subsequent season's quota and disallow carryover of underharvests to the next season for populations that are of unknown status, overfished, or experiencing overfishing.

*Response:* Under the final action, NMFS will generally subtract overharvests that occurred during one fishing year from the next fishing year for each individual species or species group. Depending on the amount of overharvests, NMFS may decide to split the overharvests over several years to allow continuation of the shark research fishery and to minimize dead discards. In addition, NMFS will add underharvests up to 50-percent of the base quota to the next fishing year for species or species grouping in which the stock status of all species is other than unknown, overfished, or subject to overfishing. For all other species and species groups, underharvests will not be carried. Not applying underharvests should increase the likelihood that these stocks rebuild in a timelier manner. This approach is also used in other fisheries that NMFS manages, including bluefin tuna and swordfish.

e. Shark Display and Research Quota

*Comment 18:* NMFS received several comments in favor of the preferred management measures affecting display quotas under alternative suite 4. These comments included: NMFS should allocate 2 mt dw of sandbar sharks from the overall 60 mt ww display and shark research quota to public display and research under exempted fishing permits (EFPs); the 60 metric tons (mt ww) quota for display permits and research should be reduced if it has never been attained; NMFS should prohibit dusky sharks for public display; and, dusky sharks have no display value.

*Response:* In order to stay within the TAC recommended by the sandbar stock assessment, NMFS is reducing the commercial sandbar shark quota, and restricting the number of sandbar sharks that can be collected under EFPs and Display Permits. The final action restricts the sandbar shark collection to 1 mt dw for research under EFPs and 1

mt dw for public display to ensure that the sandbar shark mortality stays below the 158.3 mt dw TAC and to ensure that the shark research fishery has sufficient quota to produce statistically sound data. The preferred allocations to the EFP and display quotas were based on the 2 mt dw average annual collection of sandbar sharks under EFPs, scientific research permits (SRPs), and display permits from 2000 to 2006. As such, NMFS does not anticipate that these restrictions will affect future sandbar shark collections under these types of permits.

Due to the severity of the overfished and overfishing status of dusky sharks, the collection of dusky sharks for public display will be prohibited. Aquariums that currently have dusky sharks will not be allowed to replace them. In addition, NMFS will review the allocation of dusky sharks for research under EFPs on a case by case basis. This should allow for research under EFPs on dusky sharks to continue, as appropriate.

*Comment 19:* NMFS received numerous comments stating that the existing research/display quotas for sharks should not be reduced because: the quota is already small and not expected to increase in the future; the EFP quota has never been exceeded; the collection of sandbar sharks for public display is not a significant contributing factor to the reported decline of this stock; there is a disproportionate amount of regulation on display permits compared to other permits for other fishermen; any reduction in quotas or restrictions on species, if scientifically warranted and if based on scientifically peer-reviewed stock assessments, should come entirely out of the commercial quotas which have not been historically adhered to, and where the animals are landed dead with zero conservation or educational value; the sandbar shark is one of only a handful of shark species that are exceptionally hardy and have historically adapted well to closed aquarium environments.

*Response:* While the 60 mt ww (or 43.2 mt ww) shark display and research quota is small compared to the current commercial 1,017 mt dw LCS quota, the final action does not change the overall display and research quota. The final action, however, does significantly reduce the commercial quota and prohibits most commercial fishermen from harvesting sandbar sharks. Additionally, the final action prohibits recreational retention of sandbar sharks.

As described in the response to Comment 18 in this section, the quantity of sandbar and dusky sharks authorized for display and research

(outside of the shark research fishery) is limited under the final action. For sandbar sharks, the amount is limited to what has been landed, on average, under various EFPs during the past six years. Therefore, no negative economic impacts are anticipated with the EFP allocation of sandbar sharks. EFPs and display permits will no longer be issued for the collection of dusky sharks. This regulation is consistent with the prohibition on the harvest of dusky sharks by commercial and recreational fishermen and, because of the overfished status and length of time for rebuilding, is appropriate for dusky sharks.

Finally, because EFPs exempt fishermen from certain regulations that other fishermen must follow, NMFS will continue to issue EFPs, SRPs, and display permits only if the applicant has shown compliance with other relevant regulations regarding reporting, notifying enforcement, and tagging animals.

*Comment 20:* NMFS should consider an exemption to allow for the live take of dusky sharks for public display. Aquariums need to work on the husbandry of these sharks.

*Response:* As discussed in the response to Comment 18 in this section, due to the severity of the overfished and overfishing status of dusky sharks, dusky sharks will be prohibited for collection for public display. Moreover, dusky sharks do not do well in captivity. Currently, only 13 dusky sharks per year have been collected under EFPs. Under the final action, NMFS will review the allocation of dusky sharks for research under EFPs on a case by case basis. This should allow for research under EFPs on dusky sharks to continue, as appropriate.

*Comment 21:* NMFS should explain how it will prohibit sandbar and dusky sharks for EFPs and display permits.

*Response:* EFPs allow fishermen to harvest species otherwise prohibited by existing regulations. NMFS is not prohibiting the collection of sandbar sharks under the EFP program. Instead, 1 mt dw for research under EFPs and 1 mt dw for public display will be allocated to fishermen to ensure that the sandbar shark mortality stays below the 158.3 mt dw TAC. However, due to the severity of the overfished and overfishing status of dusky sharks, dusky sharks will be prohibited for collection for public display because they do not do well in captivity. While NMFS cannot prohibit fishermen from incidentally catching dusky sharks, NMFS can prohibit their retention for public display or research under EFPs when necessary. NMFS reviews the

allocation of dusky and sandbar sharks under EFPs and Display Permits on a case-by-case basis. If research on dusky sharks is deemed scientifically necessary, even if it includes mortality, NMFS may issue the necessary EFPs. However, such permits must have scientific merit and the research conducted by scientific staff in order for the permit to be issued. As is currently done for EFPs and Display permits, NMFS will continue to monitor all sources of mortality as a result of EFPs, Display Permits, Scientific Research Permits, and Letters of Acknowledgments, and these data will be incorporated in future stock assessments.

*Comment 22:* NMFS should provide more information on how they track landings under EFPs and what happens to HMS that are collected under EFPs.

*Response:* NMFS requires persons who receive EFPs to report the number of total animals kept, discarded alive, and discarded dead under the EFP program. This information is published in the **Federal Register** every November/December in conjunction with NMFS' request for comments and Notice of Intent to issue EFPs and related permits in the subsequent year. The information is also published in the annual SAFE Report and may be used in stock assessments, if appropriate. Permittees who do not provide this information are not issued a permit in the future until all required reporting from past permits was received. NMFS does not track what is done with the animals (e.g., if they are sold to aquariums) after they have been collected and landed by the original permittees.

## 2. Porbeagle Sharks as Prohibited

*Comment 1:* NMFS received several comments in support of prohibiting the harvest of porbeagle sharks including: NMFS should prohibit the harvest of porbeagle sharks because even seasoned fishermen misidentify porbeagle sharks as mako sharks; the prohibition on the possession of porbeagle sharks is long overdue; NMFS should prohibit the harvest of porbeagle sharks and implement stricter management measures that address porbeagle take, including bycatch; and NMFS should prohibit the possession of porbeagle sharks, however, if bycatch of porbeagle sharks is allowed, the rule will have little effect on the overall status of porbeagle sharks.

*Response:* As a result of the 2005 Canadian stock assessment for the North Atlantic porbeagle shark, NMFS has determined that porbeagle sharks are overfished, but overfishing is not

occurring. Under the final action, the commercial quota is 1.7 mt dw. NMFS estimates that commercial discards will be approximately 9.5 mt dw, and recreational catch, including landings in tournaments, will be approximately 0.1 mt dw per year. This TAC of 11.3 mt dw should increase the likelihood that fishing mortality will remain low, allowing the stock to rebuild within 100 years (see rebuilding plan in Chapter 1 of the FEIS). While bycatch of porbeagle sharks will continue, the majority of porbeagle sharks caught currently are discarded alive. For instance, of an average of 723 porbeagle sharks that were discarded annually in the PLL fishery, only 161.3 were discarded dead whereas 561.6 were discarded alive. The final action is not expected to change this discard mortality rate. Therefore, dead discards should continue to be low and not negatively affect the stock.

*Comment 2:* NMFS received several comments, including comments from the states of Massachusetts and New Hampshire, opposing any prohibition of porbeagle shark retention including: there is a small historical porbeagle shark catch in the United States that is not significantly contributing to the loss of the porbeagle shark. The U.S. porbeagle fishery has remained sustainable under current regulations; other countries, such as Canada, should be more responsible for rebuilding this stock as they contribute more towards Atlantic-wide fishing mortality; NMFS should pressure Canadians to reduce their porbeagle catch; porbeagle sharks are the only big game fish in the Northeast; and placing porbeagle sharks on the prohibited species list takes away 33-percent of the potential catch in New England.

*Response:* The final action to reduce the TAC for porbeagle sharks will cap U.S. fishing mortality at the current level. Given the low level of porbeagle catch in U.S. waters, capping porbeagle catch at the current U.S. fishing level, assuming Canada also continues to take action to conserve porbeagle sharks, should allow the porbeagle shark population to rebuild within 100 years (see rebuilding plan in Chapter 1 of the FEIS). Capping fishing levels should also discourage any future directed fishery on this species.

Other countries that have a directed fishery for porbeagle sharks have reduced their porbeagle quotas. For instance, the Canadian porbeagle quota was cut by 80-percent in 1998. It was cut back even further in 2001 and again in 2006. The current Canadian quota is 250 mt per year, 185 mt of which may be taken by the directed porbeagle shark fishery, with the rest of the quota being

allocated for bycatch. In addition, according to the latest ICCAT Recommendation (07-06), all contracting parties are obligated to reduce mortality of porbeagle sharks in their directed porbeagle shark fisheries. NMFS may take additional management measures in the future, as necessary, if future stock assessments warrant such action.

*Comment 3:* The Atlantic States Marine Fisheries Commission (ASMFC) requested establishing a 2 mt quota for porbeagle sharks to allow a limited harvest. Allowing a small harvest of porbeagle sharks would help the ASMFC set identical species groups while offering protection from overharvest.

*Response:* NMFS is setting a reduced TAC for porbeagle sharks of 11.3 mt dw, of which 1.7 mt dw is allocated to commercial harvest. This cap on fishing mortality at its present level by commercial and recreational fishermen should prevent a directed fishery for this species from developing in the future. In addition, it is an 88-percent reduction in the current commercial quota of 92 mt dw, which will help ensure rebuilding within 100 years (see rebuilding plan in Chapter 1 of the FEIS).

*Comment 4:* Does NMFS have any evidence that Canadian porbeagle sharks go into U.S. waters? Is NMFS aware if U.S. fishermen are catching these Canadian sharks?

*Response:* Tagging data provide strong evidence that there are distinct porbeagle populations in the Northeast and Northwest Atlantic, and that the Northwest Atlantic stock is a separate population that undertakes extensive annual migrations between Canada and northeastern United States. Given these migrations, porbeagle sharks found in U.S. and Canadian waters are considered to be one stock that is shared by U.S. and Canadian fishermen.

*Comment 5:* If porbeagle sharks are overfished but overfishing is not occurring, what would the rebuilding timeframe be if the fishery was to continue at the current level?

*Response:* Since the 2005 Canadian stock assessment on which NMFS based its analysis included U.S. commercial landings of porbeagle sharks, capping fishing mortality at its current level should allow the species to rebuild within 100 years (see rebuilding plan in Chapter 1 of the FEIS).

*Comment 6:* Will NMFS propose similar porbeagle shark prohibition measures at the International Commission for the Conservation of Atlantic Tunas (ICCAT) meeting this year? Since most landings for porbeagle

occur outside the United States, international cooperation is needed to help manage this species.

*Response:* Adopted at the 2007 ICCAT annual meeting in Turkey, ICCAT Recommendation (07-06) obligates all Contracting Parties to take appropriate measures to reduce fishing mortality in fisheries targeting porbeagle sharks. While the United States does not have a directed porbeagle shark fishery, and U.S. commercial and recreational landings are small (1.8 mt dw), this ICCAT measure should help reduce mortality of porbeagle sharks that are targeted by other countries. The United States is also implementing a reduced TAC of 11.3 mt dw, which is below the current commercial quota of 92 mt dw per year for porbeagle sharks, and encouraging the live release of porbeagle sharks. This final action should prevent a directed fishery from developing for porbeagle sharks in U.S. waters in the future.

*Comment 7:* NMFS underestimated the number of porbeagle sharks being caught. This is because the Marine Recreational Fisheries Statistics Survey (MRFSS) data is flawed. Porbeagle sharks are not present in New England waters when MRFSS is collecting their surveys in this area.

*Response:* NMFS currently is working on a marine recreational information program to improve data collection from the recreational sector. Due to the rarity of porbeagle shark landings, it is difficult to estimate porbeagle landings with survey data, which only sample a portion of the recreational fishing fleet and then extrapolate the number of fish caught based on the estimated number of anglers. Therefore, NMFS may consider census data (i.e., a trip ticket or a call-in system where all porbeagle shark landings are counted) in the future to better estimate recreational porbeagle landings.

*Comment 8:* The Large Pelagic Survey (LPS) started out as a tuna survey, and the LPS survey happens during the middle of summer. There is no LPS survey taking place when porbeagle sharks are present, so NMFS' data is skewed.

*Response:* The LPS survey was designed to capture recreational landings in the Northeast during the time period when most fishing takes place north of Virginia. Currently, the survey consists of randomly selected weekly telephone and dockside intercept interviews, with mandatory participation from June 1 through October 31 from Virginia to New York. The survey is conducted July 31 through October 31 for states north of New York. Past phone surveys indicated this is

when most of the fishing effort occurs in this region. As mentioned in the response to Comment 7 in this section, due to the rarity of porbeagle shark landings, it is difficult to estimate porbeagle landings with survey data. Therefore, NMFS may consider census data (i.e., trip ticket or a call-in system where all porbeagle sharks landed are counted) in the future to better estimate recreational porbeagle landings.

*Comment 9:* NMFS should have recreational fishermen report their porbeagle shark landings.

*Response:* NMFS currently does not require recreational fishermen to report shark landings. NMFS collects data on recreational fishing catch and effort through the LPS and the MRFSS, which is considered the best available science for determining recreational landings. These surveys collect data on fishing effort and catch of highly migratory species. In addition, randomly selected fishing tournaments are an important component of HMS recreational fisheries data. However, because of the rarity of porbeagle shark landings, in general, NMFS may not be capturing all of the porbeagle sharks landed recreationally through these types of surveys. Thus, NMFS is currently working on ways to gather more data on recreational landings of porbeagle sharks.

### 3. Retention Limits

*Comment 1:* The proposed 22 non-sandbar LCS retention limit is not economically feasible and is the equivalent of shutting down the fishery; NMFS should consider a trip limit of 0 to 75 non-sandbar LCS to maintain economic viability.

*Response:* NMFS assessed and analyzed the economic impacts of the proposed retention limits, which are summarized in the FRFA and Chapter 8 of the FEIS. The proposed 22 non-sandbar shark LCS retention limit was calculated by dividing the available quota over average annual number of trips that landed non-sandbar LCS by directed and incidental permit holders as reported in the Coastal Fisheries logbook and the HMS logbooks. At the time of the Draft EIS, the available non-sandbar LCS quota was determined by the average annual landings reported in the HMS and Coastal Fisheries logbooks from 2003 to 2005. However, during the comment period, the Southeast Fisheries Science Center (SEFSC) recommended using HMS shark dealer reports (i.e., southeast and northeast general canvass and SEFSC quota monitoring databases) to calculate historical landings of non-sandbar LCS since the stock assessments were, in

part, based on landings reported by HMS shark dealer reports. Therefore, in the FEIS, NMFS used the shark dealer reports to calculate the non-sandbar LCS base quota. Because the HMS shark dealer reports include landings by both state and Federal shark fishermen, whereas logbook data includes landings by only federally-permitted shark fishermen, using dealer reports results in a higher non-sandbar LCS base quota.

In this final action, NMFS is using a higher base quota. After accounting for overharvests that occurred in 2007 (see Appendix C of the Final Environmental Impact Statement), NMFS is revising the retention limits based on the larger non-sandbar LCS quota. The final measures implement a 33 non-sandbar LCS trip limit for directed permit holders and a three non-sandbar LCS trip limit for incidental permit holders. While the trip limit for directed permit holder has increased from what was proposed in the Draft EIS, NMFS assumes that fishermen with directed shark permits will no longer target non-sandbar LCS outside the research fishery. Rather, a 33 non-sandbar LCS trip limit allows fishermen to keep non-sandbar LCS while they target other species, such as reef fish and snapper-grouper. Based on BLL observer program data from 2005 to 2007, fishermen with directed shark permits fishing for snapper/grouper kept, on average, 12 sharks per trip. Thus, this trip limit should help in preventing excess discards. However, this retention limit will be too low to create an incentive for fishermen to target non-sandbar LCS.

NMFS is aware that the revised retention limit of 33 non sandbar sharks per vessel/trip is a significant reduction from the current 4,000 lb dw LCS retention limit for directed permit holders. These measures are necessary, however, to rebuild overfished stocks, reduce bycatch, and end overfishing consistent with NMFS's obligations under the Magnuson-Stevens Act.

*Comment 2:* NMFS should consider a per day limit in lieu of an individual trip limit. NMFS could reduce the limit to something like 2,000 lb non-sandbar LCS per day. This would allow a larger amount to be harvested in a single trip, making it more profitable for the fishermen. A day limit would also keep quota available for longer throughout the year.

*Response:* NMFS has not considered a per day trip limit because of the difficulty in determining how NMFS would monitor what a vessel harvests within a 24 hour period during a multiday trip. Currently the shark fishery is managed on a per trip basis, as are most of the HMS fisheries. While

a higher per day limit may allow for a larger single trip, which may reduce discards, it would be difficult for NMFS to monitor when a vessel left and returned to port and whether or not this was done multiple times within 24 hours, especially if vessels visited several ports and were not required to possess vessel monitoring systems (VMS). A per trip limit is easier to enforce; no matter what port a vessel returns to, it would be held to the same trip limit. While a per day limit may reduce the number of trips and elongate the season based on how gillnet and BLL trips targeting non-shark species typically fish, the trip limits in the final action were devised in such a way to keep the non-sandbar LCS season open longer than they have been in the past. NMFS estimates that under the non-sandbar trip limit in this final action, the fishery should remain open the entire year. Given the reduced trip limits to accommodate the reduced shark quotas, NMFS believes that dividing the available quota across the historical fishing effort should help the shark fisheries stay open longer. In addition, since directed shark permit holders will presumably no longer target non-sandbar LCS based on those reduced trip limits and the prohibition on retention of sandbar sharks outside the research fishery, the non-sandbar LCS fishery will likely be incidental in nature where non-sandbar LCS are landed while fishermen target other species throughout the year.

*Comment 3:* NMFS should propose a 4,000 lb level per year for directed permit holders and grant the least productive vessels an incidental permit.

*Response:* Based on the available quota (see Appendix C in the FEIS for more details), NMFS is setting a non-sandbar LCS trip limit of 33 non-sandbar LCS for directed shark permit holders (approximately 1,000 lb dw per trip of non-sandbar LCS); incidental permit holders would be allowed 3 non-sandbar LCS per trip. If fishing effort were to stay the same as the average level of effort from 2003-2005, then NMFS expects the shark fishing season to stay open for the entire fishing year with these trip limits. NMFS has chosen a trip limit that would utilize the entire non-sandbar LCS quotas outside the research fishery, assuming fishing effort remains at the average level from 2003-2005. A 4,000 lb dw limit per year for non-sandbar LCS would be approximately four trips per year for directed fishermen. At this time, NMFS feels that such a retention limit would be overly restrictive; however, if NMFS finds that the 33 non-sandbar LCS per trip for directed fishermen does not

sufficiently rebuild the overfished stock of sandbar sharks or prevent overfishing, then trip limits can be adjusted, as appropriate. Fishermen selected to participate in the shark research fishery would be afforded higher trip limits consistent with research objectives and would be allowed to land all shark species, except prohibited sharks.

In order for NMFS to change retention limits for individual vessels based on their past landing history, NMFS would likely consider an IFQ or LAPP.

However, as explained in response to Comment 2 under "Quotas" above and in Chapter 1, it would take NMFS several years to implement an ITQ system. Under the current timeline under the Magnuson-Stevens Act for establishing a plan amendment to end overfishing, NMFS has insufficient time to establish an IFQ or LAPP for sharks at this time. However, NMFS could consider developing an IFQ or LAPP for sharks as well as other highly migratory species in the future.

*Comment 4:* NMFS should carve out a retention limit specific to existing gillnetters. Gillnetters are being penalized by the preferred retention limit because they catch very few sandbar and dusky sharks.

*Response:* NMFS believes that revised quotas and retention limits for non-sandbar LCS that apply to all gear types are more appropriate. These revised retention limits include a higher retention limit for directed shark permit holders compared to incidental shark permit holders. While sandbar and dusky sharks may be less likely to be caught in gillnet gear compared to BLL gear, setting separate gillnet retention limits was not considered as a part of this rulemaking mainly because NMFS has serious concerns regarding interaction rates with marine mammals and protected resources with gillnets. Given these interactions set forth in the following paragraph, NMFS believes it is inappropriate to implement measures that might result in increased fishing effort with this gear type. For example, setting different trip limits for gillnet gear could result in displaced BLL fishermen moving to the gillnet fishery.

The five year incidental take statement (ITS) for the drift gillnet fishery in the 2003 Biological Opinion (BiOp) was 10 loggerhead sea turtles (with 1 mortality), 22 leatherback sea turtles (with 3 mortalities) and 1 smalltooth sawfish (with zero mortalities). The ITS was specific to drift gillnet gear as strikenet gear had not interacted with protected species, at that time, and sink nets were not considered to be part of the shark gillnet

fishery. However from 2003 to 2007 (2003 being the start of the ITS period), vessels with shark permits using drift, sink, and strike gillnets interacted with a total of 13 loggerhead sea turtles (3 of which died or were unresponsive when discarded), 1 leatherback sea turtle and 2 bottlenose dolphins (1 of which died). In addition, in January 2006, an Atlantic right whale calf was caught and died in gillnet gear off the northeast coast of Florida. Therefore, NMFS is not establishing a higher specific gillnet retention limit at this time.

*Comment 5:* NMFS should consider capping the number of vessels that can deploy gillnets for sharks.

*Response:* There are currently only 4 to 6 sink and strike gillnetting vessels combined that target sharks (Carlson and Bethea, 2007). Given the reduction in trip limits as a result of this rulemaking, and restrictions and regulations under the Atlantic Right Whale Take Reduction Plan for this gear, NMFS does not believe there would be a significant increase in shark gillnet fishing in the future.

*Comment 6:* NMFS should lower the incidental catch limit for non-sandbar LCS to be more in line with the current average (3 non-sandbar LCS/vessel/trip); NMFS should not decrease the directed permit holder retention limits by 30-percent while increasing the incidental retention limit by more than seven times; NMFS should provide better justification for raising the trip limits for incidental permit holders; the proposed retention limit increase for incidental permit holders could increase fishing effort and bycatch; NMFS should consider restricting incidental take of non-sandbar LCS.

*Response:* In the final action, NMFS establishes retention limits of 33 non-sandbar LCS per trip for directed permit holders and 3 non-sandbar LCS per trip for incidental permit holders. NMFS initially proposed retention limits of 22 non-sandbar LCS per trip for both directed and incidental permit holders because NMFS considers the future non-sandbar shark fishery outside the shark research fishery as mainly incidental in nature (i.e., fishermen would not target non-sandbar LCS based on the low retention limits). Under the proposed scenario, incidental permit holders could have experienced a net positive economic benefit, given the retention limit of 22 non-sandbar LCS trip limit was more than the average of 3 non-sandbar LCS per trip that they currently retain. Such an increase in trip limits for incidental permit holders could have resulted in increased fishing pressure on sharks by incidental permit holders.

Based on public comment and to acknowledge differences among directed and incidental permit holders (e.g., on average, directed permit holders discard more sandbar and dusky sharks (8.1 mt dw and 25.7 mt dw per year, respectively) than incidental permit holders (1.5 mt dw and 3.8 mt dw per year, respectively)), NMFS' final action is to set separate retention limits based on permit type. Directed permit holders will be allowed a higher retention limit than incidental permit holders. This affords directed permit holders, who may have paid more for their directed shark permit and who presumably rely on shark products for a larger part of their income, a higher retention limit than if all permit holders had the same retention limit.

*Comment 7:* NMFS should clarify how a retention limit based on the number of sharks per trip would work. What happens if you get 100 sharks on a line? Under these new regulations, one will have to make multiple trips to be legal.

*Response:* Under current regulations, NMFS has a directed LCS trip limit of 4,000 lb dw. When fishermen exceeded this trip limit on a given set, they would often cut their gear and leave it while they returned to port to offload their legal trip limit. Once they had offloaded, they would return to retrieve the rest of their gear and catch. The same principle applies for this final action. However, due to the reduction in the retention limit and the prohibition on the harvest of sandbar sharks, NMFS assumes that fishermen with directed shark permits would no longer target non-sandbar LCS as they have in the past. Rather, fishermen would keep non-sandbar LCS only while they target other species, such as reef fish and snapper-grouper. The trip limit in this final action of 33 non-sandbar LCS for directed shark permits should minimize dead discards of sharks that fishermen catch while in pursuit of other species.

*Comment 8:* NMFS should have proposed different retention trip limits for different species in different regions because there are more sandbars available in the Atlantic and more blacktip sharks available in the Gulf of Mexico; NMFS should split trip limits by state given the tendency of different areas to catch sandbar or dusky sharks; NMFS should consider the fact that Louisiana fishermen catch mostly blacktip sharks and no sandbar or dusky sharks and, therefore, should have a larger retention trip limit.

*Response:* Based on public comment, NMFS analyzed regional quotas and retention limits for two regions: the Atlantic and Gulf of Mexico regions. As

a result, NMFS is implementing regional quotas based on the results of the blacktip shark assessment, overharvests that occurred in 2007 (for more details, see Appendix C), and the fact that the ASMFC interstate shark management plan will implement measures in state waters of the Atlantic. Regional quotas allow for a higher non-sandbar LCS quota in the Gulf of Mexico region, which is comprised of a healthy stock of blacktip sharks. Regional quotas also allow for a lower non-sandbar LCS quota in the Atlantic region where the stock status of blacktip sharks is unknown and the majority of dusky sharks are caught.

However, while the final action sets regional quotas for non-sandbar LCS, NMFS is not implementing regional non-sandbar LCS retention limits. Instead, the same retention limit for non-sandbar LCS would apply in the Atlantic and the Gulf of Mexico regions. NMFS believes that a single retention limit, regardless of region, will help with enforcement and be less confusing for fishermen. For example, with one retention limit, fishermen fishing near the Florida Keys could move between the two regions on one trip. If there were two different retention limits, then fishermen would need to stay in one area per trip or risk landing a higher trip limit in the wrong region. Finally, while the analyses for setting these retention limits used historical fishing effort as a proxy for determining the retention limit, it is uncertain how future effort would be allocated among regions, or even states. This added uncertainty makes it difficult to determine a region-specific or state-specific retention limit, given the other management measures that are changing as a result of this final action.

*Comment 9:* NMFS should consider having a set-aside quota for the incidental fishermen so that they can still retain sharks when the directed fishery is closed.

*Response:* As a result of the final actions in this rule, NMFS is assuming that fishermen with directed shark permits will no longer target non-sandbar LCS. Rather, fishermen will likely keep sharks only while they target other species such as reef fish and snapper-grouper. As such, the non-sandbar LCS fishery would be incidental in nature and non-sandbar LCS will likely be landed only incidental to the non-shark species that the fishermen would target throughout the year. Given the reduced trip limits for non-sandbar LCS, NMFS believes that the shark fishery will remain open for longer periods than in the past, possibly the entire year. Given the

analyses that indicate the fishery will be open most of the time and the change in status of the fishery, NMFS believes that an incidental set aside is not needed at this time.

*Comment 10:* NMFS should consider a trip limit that is not based on weight since most fishermen do not have scales on their vessels.

*Response:* Under the final action, NMFS is basing the trip limits on the number of sharks per trip for both directed and incidental permit holders.

*Comment 11:* If 7 out of 10 LCS landed are sandbar sharks, as NMFS claims, and NMFS has a 500+ mt dw non-sandbar LCS quota, then NMFS' discard calculations are flawed. A 500+ mt dw non-sandbar LCS quota would result in 3,500 mt of sandbars being discarded.

*Response:* The catch composition described above would only be realized if 1) fishermen were directing effort on sharks, and 2) there was a 4,000 lb dw trip limit. This catch composition, which was based on information from NMFS BLL observer reports, was used to estimate the number of trips that the shark research fishery could take to harvest the available sandbar shark quota, assuming there was a 4,000 lb dw LCS trip limit within the research fishery.

However, for trips outside the research fishery, sandbar sharks would be prohibited and there would be reduced non-sandbar LCS trip limits. Therefore, NMFS assumes that directed shark permit holders would no longer make trips targeting non-sandbar LCS because of the significant reduction in retention limits and the fact that sandbar sharks could not be retained, therefore, the catch composition and subsequent sandbar discards described in the comment above would not apply to trips occurring outside the research fishery. Given this assumption, and based on the best available science from logbook, dealer reports, and observer program data, NMFS estimates that incidental sandbar shark mortality outside the research fishery would be approximately 40 mt dw. This estimate was determined by evaluating logbook data and observer reports to estimate sandbar shark discards from pelagic longline (PLL) gear (4.3 mt dw), discards by recreational fishermen (27 mt dw), discards within the shark research fishery (0.3 mt dw), sandbar sharks discarded by fishermen without HMS permits (6.3 mt dw), and sandbar sharks that used to be landed by incidental fishermen (2.3 mt dw).

#### 4. Fins On Requirement

*Comment 1:* NMFS received several comments in support of a ban on shark finning as well as support for the proposal to land sharks with their fins attached. Commenters believe that shark identification is hampered by fin removal, enforcement is made easier if sharks are landed with fins attached, that the quality of data collected would improve, which is critical to improving the sustainability of shark stocks, and that technical difficulties of landing sharks whole could be alleviated with input from fishery experts and NOAA staff. A commenter also stated that NMFS should implement this measure promptly in the Atlantic while also taking steps to ensure a similar measure is implemented in the U.S. Pacific waters.

*Response:* On December 21, 2000, the Shark Finning Prohibition Act (Public Law 105-557) (SFPA) was signed into law. The SFPA amended the Magnuson-Stevens Act section 307(1)(P), making it unlawful for any person “(i) to remove any of the fins of a shark (including the tail) and discard the carcass of the shark at sea; (ii) to have custody, control or possession of any such fin aboard a fishing vessel without the corresponding carcass; or (iii) to land any such fin without the corresponding carcass.” On February 11, 2002 (67 FR 6194), NMFS published a final rule that established regulations which, among other things, prohibit any person from engaging or attempting to engage in shark finning; possessing shark fins without the corresponding carcasses while on board a U.S. fishing vessel; and landing shark fins without the corresponding carcasses. In this Amendment, NMFS is selecting an alternative that will require fishermen to land sharks with their fins naturally attached. This requirement will improve enforcement, species identification, data quality for future stock assessments, and further prevent the practice of shark finning. In the U.S. Pacific Ocean, three Regional Fishery Management Councils recommend shark management measures to NMFS: the Pacific Fishery Management Council, the North Pacific Fishery Management Council, and the Western Pacific Management Council. The Councils may consider recommending amendments to fishery management plans to include measures to land sharks with fins attached in the U.S. waters of the Pacific Ocean.

*Comment 2:* NMFS received several comments in opposition to landing sharks with fins attached stating that this requirement would result in large amounts of waste at the dock, that the

market has grown accustomed to receiving sharks in log form, that it will be more difficult for law abiding fishermen to comply with the law, and it will do nothing for those intent on breaking the law who may still bring only fins to the docks.

*Response:* While this requirement will change current fishing practices, NMFS does not believe that the requirement to land sharks with fins attached is overly burdensome for the following reasons. The requirement to land sharks with fins attached will allow fishermen to leave the fins attached by at least a small piece of skin so that the fins could be folded against the carcass and the shark packed efficiently on ice while at sea. Shark fins could then be quickly removed at the dock without having to thaw the shark. Sharks may be eviscerated, bled, and the head removed from the carcass at sea. These measures should prevent excessive amounts of waste at the dock, since dressing (except removing the fins) the shark may be performed while at sea. While this will result in some change to the way in which fishermen process sharks at sea, because the fins may be removed quickly after the shark has been landed, NMFS expects that the market will continue to receive sharks in their log form. Alternatively, the dealers may decide to accept shark carcasses with the fins still attached. No person aboard a vessel with a shark permit would be allowed to possess shark fins without the fins being attached to the corresponding carcass until after the shark has been landed. Individuals that do not have a shark permit or who land shark fins detached from the corresponding carcass will be in violation of the regulations and subject to enforcement action.

*Comment 3:* NMFS received several comments regarding the 5-percent fins to carcass ratio stating that 1) the ratio is wrong and NMFS needs to collect data to re-examine the ratio because it is different for all species, 2) NMFS should urge Congress to revise the fin to carcass ratio in the SFPA, 3) making fishermen land sharks with fins attached could still lead to a violation of the 5-percent ratio, and 4) fishermen are unsure of which weight to record in their logbook if the 5-percent ratio remains in effect and sharks are landed with fins attached.

*Response:* NMFS first implemented the 5-percent fin-to-carcass ratio in the 1993 Shark FMP. This ratio was based on research that indicated that the average ratio of fin weight to dressed weight of the carcass was 3.6 percent, and the sandbar fin ratio was 5.1 percent. In December 2000, the SFPA

was signed into law. The SFPA established a rebuttable presumption that any shark fins landed from a fishing vessel or found on board a fishing vessel were taken, held, or landed in violation of the shark finning ban if the total weight of shark fins landed or found on board exceeded 5-percent of the total weight of shark carcasses landed or found on board. This management measure was implemented by NMFS through a final rule released in February 2002. NMFS may conduct additional research on the fin-to-carcass ratio in the shark research fishery, though any changes to the 5-percent ratio will have to be modified by Congressional action. In order to help fishermen document that sharks were landed with their fins attached, NMFS intends to modify the dealer weigh-out slips so that dealers may clearly document that the sharks were landed with fins attached. Consistent with the regulations at § 635.30(c)(3), a person that has been issued a Federal shark LAP and who lands shark in an Atlantic, Gulf of Mexico, or Caribbean coastal port must have all fins and carcasses weighed and recorded on the weigh-out slips specified in § 635.5(a)(2) and in accordance with regulations at part 600, subpart N. Fishermen may either record the weight of the whole shark landed or they may record carcass and fin weights separately. Dealers must report the dressed carcass weight separately from the fin weight.

*Comment 4:* NMFS received several comments, including one from the State of Florida, that NMFS should recalculate the conversion factor between dressed weight and whole weight of a shark since more of the shark is going to be landed.

*Response:* The 1.39 conversion factor from dressed weight to whole weight is used to convert the dressed (gutted) weight of a shark, (the weight of the shark carcass in a log form with fins removed) to a whole weight. NMFS will continue to monitor shark quotas in dressed weight (i.e., carcass in log form with fins removed) and will use shark landings recorded via dealer reports to monitor the quota outside the shark research fishery. Therefore, the conversion factor should not need to be recalculated since the definition of dressed weight would still constitute a shark log with fins removed. Currently, dealers record the fin weights and dressed weight of the shark carcasses separately on their dealer reporting forms; in this rule, NMFS clarifies this reporting requirement. However, NMFS will monitor the situation and may change the conversion factor if appropriate.

*Comment 5:* NMFS received several comments stating that NMFS should allow fishermen to remove just one pectoral fin, remove all fins except the pectoral fins, allow the removal of fins from species in the SCS complex, and allow vessels operating in the shark research fishery to remove the fins since those vessels would have 100-percent observer coverage. NMFS also received several comments from the State of Florida that NMFS should allow fishermen to remove the tail of the shark at sea and that NMFS should provide fishermen with a diagram depicting the proper way to clean and land sharks with fins attached.

*Response:* The provision to land sharks with their fins attached allows fishermen to bleed, eviscerate, and remove the head at sea while cutting the fins almost all the way off so that the fins can be folded and the shark can be packed on ice. Authorizing the removal of certain fins or the fins of a specific species, or within a species complex, or from vessels within the research fishery could create additional enforcement problems and complicate compliance. Therefore, NMFS is requiring that all fins remain attached to the carcass through landing for all vessels. Because there are potentially many ways that the sharks may be dressed while leaving the fins attached, NMFS does not believe it is appropriate to provide specific instructions on how to dress sharks because more than one method may be used. NMFS only requires that sharks be landed with their fins naturally attached. Fishermen are allowed the flexibility to dress the shark and tailor the method to their specific operation or dealer requirements, providing they land all sharks with their fins naturally attached.

*Comment 6:* NMFS received several comments regarding the potential food safety or Hazardous Analysis of Critical Control Point (HACCP) concerns if shark fins cannot be removed until the shark is landed because it may be difficult to keep the core temperature of the shark at 40 degrees in 90 degree heat. The state of Florida commented that NMFS should test shark meat quality to determine if there is a decrease in quality as a result of regulatory actions.

*Response:* The Food and Drug Administration (FDA) published regulations (December 18, 1995; 60 FR 65092) mandating the application of the HACCP principles to ensure the safe and sanitary processing of seafood products. Although these regulations do not apply to fishing vessels or transporters, the processors of domestic seafood must comply with the

regulations as it applies to incoming product. Dealers should consult the FDA Center for Food Safety and Applied Nutrition Fish and Fisheries Products Hazards and Controls Guidance for guidance on FDA regulations. The provision to land sharks with their fins attached allows fishermen to bleed, eviscerate, and remove the head at sea while cutting the fins almost all the way off so that the fins can be folded and the shark can be packed on ice. Because the sharks may be dressed and the fins cut almost all the way off the shark at sea before it is packed on ice, the shark should not have to be thawed to completely remove the fins once the shark is landed. In addition, reduced retention limits for non-sandbar LCS should reduce the number of sharks that are landed per trip, therefore decreasing the amount of processing time at the dock. NMFS might conduct tests through the shark research fishery to see if the new fins on requirement affect fish meat quality. However, the results of these tests would be limited in use as the higher retention limits in the shark research fishery could increase processing times and therefore lower meat quality.

*Comment 7:* NMFS received several comments regarding international cooperation and imports including, 1) NMFS should set a firm shark conservation precedent for the international community, 2) NMFS should not get too far out in front of the international community, and 3) the United States should ban imports of shark fins from countries that do not prohibit shark finning.

*Response:* The United States has taken an active role in promoting improved international shark conservation and management measures in international fora such as Regional Fisheries Management Organizations (including ICCAT), the United Nations General Assembly, the Convention on International Trade of Endangered Species (CITES), and the Convention on Migratory Species. Consistent with the United Nations Food and Agricultural Organizations' International Plan of Action for sharks, the United States completed and implemented the National Plan of Action (NPOA) for sharks in February 2001. The NPOA calls for data collection; assessment of elasmobranch stocks; development of management measures, where appropriate; research and development of mitigation measures to reduce shark bycatch; and outreach and education. The requirement to land sharks from the U.S. Atlantic Ocean with their fins attached should help raise awareness in the international arena of enforcement

issues associated with shark finning bans and the 5-percent fin-to-carcass ratio. NMFS published a proposed rule on April 4, 2008 (73 FR 18473), that would amend the International Trade Permit (ITP) Program to require shark fin importers, exporters, and re-exporters (shark fin traders) to obtain an ITP consistent with ICCAT recommendations. This requirement would provide needed information on shark fin trade participation and would provide NMFS enforcement access to trade records, since the export of shark fins is one of the primary economic incentives for much of the U.S. Atlantic shark fishery.

##### 5. Time Area Closures

*Comment 1:* NMFS should include the Marine Protected Areas (MPAs) recommended by the South Atlantic Fishery Management Council (SAFMC) in alternative suite 5 because if that alternative were selected, the MPAs proposed by the SAFMC would still need to be implemented.

*Response:* NMFS decided to include a prohibition on shark BLL fishing in the MPAs in several of the alternative suites in order to ensure that the SAFMC's Amendment 14 prohibition on bottom tending gear would include HMS BLL gear. NMFS needed to implement complementary regulations in order for the MPAs to be effective. Since alternative suite 5 would have resulted in a closure of the entire shark fishery, no shark BLL fishing would occur in the MPAs or elsewhere. Thus, NMFS did not need to include a prohibition on shark BLL fishing in MPAs in alternative suite 5.

*Comment 2:* NMFS received a number of specific comments regarding the MPAs recommended by the SAFMC, including: 1) coordinates of MPAs — NMFS should provide the correct coordinates for the Charleston Deep Artificial Reef MPA; 2) NMFS should state the specific type of MPAs being implemented (i.e., type II MPAs); and, 3) NMFS should include a transit exemption for vessels traveling through proposed MPAs with BLL.

*Response:* NMFS is aware of problems with the coordinates provided in the Draft Amendment for the Charleston Deep Artificial Reef and has provided the correct coordinates for the Charleston Deep Artificial Reef in Final Amendment 2 to the Consolidated HMS FMP. In the Draft EIS, NMFS described the MPAs as type II MPAs according to the language used in the SAFMC's Amendment 14. Type II MPAs are areas that are closed to bottom fishing but allow trolling for coastal pelagics and HMS. Since NMFS is prohibiting the

use of BLL gear in these MPAs there is no need to specify the type of MPA in the proposed or final rules. Readers should refer to SAFMC's Amendment 14 for more information on the type of MPAs being recommended by the Council and being implemented by NMFS. NMFS did not implement a stowage provision because very few HMS permitted vessels have historically fished in the MPAs, and the MPAs are generally small in size and can easily be circumnavigated by BLL vessels. If the SAFMC recommends a stowage provision, then NMFS may consider a similar backstop provision in the HMS regulations.

*Comment 3:* NMFS should implement VMS requirements for the SAFMC Amendment 14 MPAs.

*Response:* Consistent with SAFMC's Amendment 14, which does not include a VMS requirement, NMFS determined that it was unnecessary to implement a VMS requirement for HMS vessels. NMFS has several other VMS requirements in place for HMS vessels including all vessels with gillnet gear during certain times of the year, BLL vessels in the vicinity of the mid-Atlantic shark closed area, and all vessels with PLL gear on board year-round. To the extent that some of those vessels would fish in the vicinity of the MPAs, NMFS would be able to track their movements. However, most vessels that do not fish with PLL and maintain directed or incidental shark permits in the South Atlantic are not required to have VMS.

*Comment 4:* NMFS should use the terms "closed areas" or "area closures" to describe the locations where the proposed regulations apply to avoid confusion on the intent of the MPAs (since they are for snapper/grouper, and not sharks) and to improve compliance by fishermen. "Marine protected area" is not a term used in the Magnuson-Stevens Act. NMFS should clarify how and why closures for fisheries management are part of the official MPA classification system.

*Response:* NMFS chose to use the term Marine Protected Area or MPA because that is the specific language provided in Amendment 14. Although the intent of the MPAs is to protect snapper grouper species, using nomenclature in this final rule that differs from that used to refer to the closures in Amendment 14 may create confusion. As a result, NMFS is referring to the closures in the same way as the SAFMC.

*Comment 5:* NMFS should prohibit the use of longline gear in existing and new MPAs. The overall amount of bycatch within MPAs may not be

minimal when considered in the context of the relevant MPA and the number of species and individuals found within the MPA.

*Response:* NMFS is prohibiting the use of BLL gear in all of the preferred SAFMC MPAs because those are the areas the SAFMC has determined to be important for certain grouper species that are sometimes caught incidentally on shark BLL gear.

*Comment 6:* The ASMFC Spiny Dogfish and Coastal Sharks Management Board would like NMFS to reconsider the closures off of North Carolina. Specifically, the Board asks that the duration of the closure be reduced to run from January 1 – May 14. This request is based on the Coastal Sharks Technical Committee's recommendation for a state water closure from May 15 through July 15 from Virginia to New Jersey. This state water closure is designed to protect large adult female sandbar sharks when they are on the pupping grounds. The closure off of North Carolina was designed to protect juvenile sharks in the nursery area during the winter; however the majority of the small sharks have migrated out of that area by mid-May.

*Response:* The mid-Atlantic shark closed area was implemented to protect juvenile sandbar sharks and all life stages of prohibited dusky sharks. Survey data collected from the NOAA fisheries research vessel Delaware II from April through May 2007 indicate that the majority of sandbar sharks caught in the mid Atlantic shark closed area were juvenile (56-percent immature vs. 44-percent mature). Therefore, maintaining the mid-Atlantic closed area should continue to reduce the number of interactions of BLL gear with sandbar and dusky sharks as well as reduce the number of interactions with immature sandbar and dusky sharks. This will provide positive ecological benefits for both of these overfished shark stocks. Furthermore, measures implemented by the ASMFC are not yet finalized. Once finalized measures are in place, NMFS may consider taking additional action to complement state measures. Implementing these measures before they are finalized and implemented in the ASMFC Coastal Shark FMP could result in inconsistent management measures.

*Comment 7:* The SAFMC and the South Carolina Department of Natural Resources support the MPAs and maintaining the current time/area closure as proposed in the draft amendment.

*Response:* This final action will implement the MPA provisions in

Amendment 14 and maintain the current time/area closure.

## 6. Reporting

*Comment 1:* NMFS should take action to ensure that fishermen report their landings correctly and honestly as most fishermen do not currently provide accurate reports.

*Response:* The regulations require fishermen to submit accurate and truthful reports on their fishing activities. NMFS can and does verify logbook reports and catch rates with observer reports, as needed. If fishermen and/or dealers choose not to abide by the regulations, then they may face enforcement action.

*Comment 2:* NMFS received many comments on the dealer reporting timeframe, including: NMFS should consider stronger restrictions on dealer reporting; NMFS should allow two-weeks for dealer reports to be submitted; 10 days is acceptable for the report to be postmarked, but not for NMFS to receive it; NMFS should consider more frequent reporting; NMFS should consider 24 hour reporting for shark dealers; NMFS should consider electronic reporting for dealers (once a week); dealers still need to be able to fax reports; more frequent reporting is not needed. NMFS should take action against dealers that are not reporting; NMFS should not renew a dealer permit if they don't report on time; making reports "received by" will not allow fishermen to know if NMFS got their report on time; and NMFS should provide confirmation numbers when dealer reports are received.

*Response:* NMFS prefers to require dealer reports be received within ten days of the end of the reporting period at this time because a "received by" requirement can be tracked by NMFS, the dealers, and enforcement more easily than a "postmarked" requirement. NMFS is concerned about dealers that are not reporting and is working with the Office of Law Enforcement to pursue shark dealers who do not meet their reporting obligations. Additionally, given recent issues with dealers not realizing that substantial landing reports were not received by NMFS, NMFS feels that requiring reports to be "received by" a certain day will aid in ensuring all reports are received by NMFS in a timely manner. The final action does not require twenty-four hour reporting because such reporting would result in an unduly increased reporting burden for shark dealers at this time. NMFS may consider additional modifications and/or adjustments to reporting frequency for future implementation.

NMFS is currently capable of accepting electronic reports from some dealers who have access to that data system in the Southeast Fisheries Science Center and faxes of shark dealer landings. NMFS does not issue confirmation numbers when shark dealer reports are received; however, submitting dealer reports by FAX or electronically includes a date/time stamp in addition to whether the transmission was successful or not. Shark dealers may also consider using certified mail to provide verification that the correspondence was received.

*Comment 3:* NMFS should be more proactive and contact dealers as the quotas fill up.

*Response:* Significant overharvests in the shark fishery in recent years have occurred because shark dealers were not submitting their reports, or verifying that their reports were received by NMFS in the time period required by NMFS regulations. NMFS is working to ensure better compliance with its reporting regulations by encouraging shark dealers to report on time or face possible enforcement action for failing to do so.

*Comment 4:* Does NMFS have a specified time within which it must turn around dealer reports?

*Response:* NMFS provides shark landings reports, by complex or species, on a frequent basis to ensure participants are aware of catches in the shark fishery. NMFS does not have a specified time frame as to when it provides landings reports; however, efforts are being made to provide more frequent shark landings updates in light of the final action to close seasons when a species/complex quota has reached 80-percent of their quota.

*Comment 5:* NMFS should stick to its existing reporting system rather than create a new one.

*Response:* NMFS will not institute a new reporting system for shark dealers or fishermen in this final rule.

*Comment 6:* NMFS should not allow sharks to be listed as unclassifieds and, if dealers continue to report unclassifieds, they should have their permits revoked. Unclassified sharks should not be counted against the sandbar shark quota because the sandbar shark quota for the research fishery is already miniscule.

*Response:* Current regulations require that all sharks landed be identified and reported at the species-level. This final action adds language to clarify this requirement. While reporting sharks as "unclassified" violates the regulations, and NMFS has recently completed shark identification workshops to improve shark dealers' identification skills,

NMFS must account for unclassified shark landings to produce timely and accurate shark landings reports and because this data is used in stock assessments. Under this final action NMFS will use species composition data from the observer reports outside the shark research fishery to determine which proportion of unclassified sharks should be deducted from the appropriate quotas (i.e., sandbar, non-sandbar LCS, SCS, and pelagic sharks). This methodology is consistent with how unclassified sharks are treated in stock assessments. Shark dealers that continually report sharks as unclassified will be reported to NOAA Office of Law Enforcement and may face enforcement action.

NMFS proposed counting all unclassified sharks from shark dealer reports as sandbar sharks to provide dealers with an incentive to identify sharks to the species level because if the quota for sandbar sharks were filled, they would no longer be able to purchase sandbar sharks. However, NMFS believes that allocating landings to the appropriate complex/species based on observer data is a more accurate means of accounting for unclassified landings. Furthermore, NMFS is concerned that counting all unclassified sharks as sandbar sharks may result in the shark research fishery closing prematurely.

*Comment 7:* NMFS received a comment stating that a dealer had inadvertently reported all sharks landed in the past as sandbar sharks and that they knew of no dealers that identify sharks at the species level.

*Response:* All dealers are required to report shark landings at the species level. NMFS instituted a requirement to attend shark identification workshops to assist dealers in properly identifying sharks in order to obtain more accurate landings data.

*Comment 8:* NMFS received a comment wondering how the stock assessments can use the dealer data because of the lack of species-level landings data for sharks.

*Response:* Many dealers do report at a species-specific level. However, not all do. Thus, stock assessment scientists assign unclassified sharks to a species/complex group based on species composition data from the observer program. Regional and temporal species composition data attained from observed trips are summarized and applied to the unclassified sharks to estimate the proportion that should be assigned to respective quotas and complexes.

*Comment 9:* NMFS received a comment in support of the workshops

for shark identification because dealers have observed a drastic reduction in the number of sharks that are not being identified properly.

*Response:* NMFS is encouraged by the results of the shark identification workshops for dealers. Better shark identification should lead to more accurate landings data, which should improve the quality of data used in stock assessments.

*Comment 10:* NMFS received several comments on the "dealer" definition (i.e., who is required to have a dealer permit), including: NMFS should provide the current definition of a shark dealer; the current definition is satisfactory; the proposed dealer definition is appropriate; the first receiver cannot be the shark dealer; an intermediary on land is needed solely for transport; and, the definition should take into account multiple transfers.

*Response:* The current definition of a shark dealer is a person that receives, purchases, trades for, or barbers for Atlantic sharks from a fishing vessel of the United States (50 CFR 635.4(g)(2)). When NMFS implemented the shark identification workshops, many dealers were confused as to whether they needed to attend a workshop because they buy sharks from another dealer, who buys sharks from a fishing vessel. Because the sharks originally came from a fishing vessel, these secondary dealers had obtained a shark dealer permit. To clarify who needs to attend the workshops and to aid enforcement, this final action modifies the definition of shark dealers and is modified from the proposed definition based on public comments. Specifically, the final action clarifies that shark dealer permits are required only for "first receivers." The definition of a "first receiver" at 50 CFR 635.2 is "entity, person, or company that takes, for commercial purposes (other than solely for transport), immediate possession of the fish, or any part of the fish, as the fish are offloaded from a fishing vessel of the United States, as defined under § 600.10 of this chapter, whose owner or operator have been issued or should have been issued a valid permit under this part."

*Comment 11:* Can federally permitted dealers buy state landed sharks? Do federally permitted dealers have to report state landings?

*Response:* The current regulations at 50 CFR 635.31(c)(4) state that federal dealers may purchase a shark only from an owner or operator of a vessel that has a valid commercial federal permit for shark, except that federal dealers may purchase a shark from an owner or operator of a vessel that does not have a commercial federal permit for shark if

that vessel fishes exclusively in state waters (i.e., no federal commercial shark permit). Federal dealer permit holders must report all sharks landed, including those from state waters, and cannot purchase any sharks, caught in state or Federal waters, once the Federal shark fishing season is closed. Additionally, on May 6, 2008, the Spiny Dogfish and Coastal Shark Board of ASMFC voted to require all state dealers to obtain a federal shark dealer permit. As such, when the ASMFC Coastal Shark FMP is fully finalized and implemented, expected in 2009, state shark dealers from Maine to Florida will be required to obtain a federal shark dealer permit and attend shark identification workshops.

*Comment 12:* NMFS received a comment questioning the mechanism that requires dealers to report on time.

*Response:* All federally permitted shark dealers are required to submit a dealer report on a bimonthly basis. Failure to do so could result in enforcement action.

*Comment 13:* NMFS should implement the strongest possible restrictions to ensure prompt and reliable reporting by dealers, within 24 hours if possible. Landings of 300 to 500-percent of allowable quotas, even if subtracted in subsequent seasons, are simply not acceptable and do not reflect the close attention and precautionary action required to achieve sustainable shark fisheries.

*Response:* Accountability measures for quota overharvests are necessary. The TAC has been reduced considerably and overharvests are accounted for over time. Importantly, the final action includes closing the fishery for a particular species when 80-percent of the quota is reached with five days notice upon filing in the **Federal Register** in order to reduce the likelihood of overharvests. NMFS will also send out e-mail notices and conduct outreach regarding closures upon filing in the **Federal Register**, giving fishermen five days to be notified of a closure. Reduced retention limits and other effort control measures are expected to reduce fishing mortality in the shark fishery. In addition, under the final action, NMFS is changing the reporting requirements for shark dealers so that shark dealer reports must be received by NMFS within 10 days after the reporting period ends. This will ensure timelier reporting and potentially avoid overharvests.

*Comment 14:* NMFS received several comments regarding excess shark landings in state waters and NMFS' coordination with various states, including: NMFS should preempt the

State of Louisiana or others as necessary pursuant to authority provided in the Magnuson-Stevens Act (section 306(b)) if shark landings in state waters impact Federal shark fishery management; NMFS should recognize that Federal fishermen are catching adults during designated fishing seasons, while state fishermen are catching juveniles all year long; NMFS should allow Federally permitted fishermen to fish in state waters; NMFS should ensure that state waters are closed at the same times as Federal waters to protect juveniles; NMFS should consult with the states in order to manage fisheries better; NMFS should require states to abide by Federal rules; and NMFS should coordinate with the ASMFC.

*Response:* Pursuant to the Magnuson-Stevens Act, NMFS has jurisdiction to manage fisheries in Federal waters of the Exclusive Economic Zone (EEZ). Landings in state waters are counted against Federal shark quotas because many shark species inhabit both Federal and state waters, and thus make up one population or stock. NMFS includes state landings in stock assessments for coastal sharks. This practice is consistent with quota monitoring and management strategies for many marine species.

NMFS has been working with the State of Louisiana, and other states, to ensure consistent management strategies for sharks in state and Federal waters due to excessive landings that occurred in Louisiana state waters in 2007. In 2007, the State of Louisiana agreed with NMFS to close its state waters when the federal fishery closed during the third trimester of 2007. Additionally, ASMFC recently voted on final management measures for a coast-wide state shark plan for states in the Atlantic Ocean. The final measures included in the ASMFC Coastal Shark FMP are expected to be effective in 2009. Many of the final measures in the ASMFC Coastal Shark FMP are consistent with federal regulations and will require commercial state shark fisheries to open and close with federal openings and closures. The implementation of ASMFC's Coastal Shark FMP could potentially lead to similar measures being implemented in the Gulf of Mexico.

*Comment 15:* NMFS should provide information in the shark landings update on the percentage of total shark landings that are state and Federal.

*Response:* Federal dealers must report all landings; however, they are not required to differentiate which landings are purchased from Federal vessels and which shark products are purchased from state vessels (if a Federal dealer also has a state dealer permit). Current

reporting requirements make it difficult to determine state versus Federal landings, although NMFS generally does not need to distinguish these landings because all landings are used in stock assessments and are counted against the federal shark quota.

*Comment 16:* The stock assessment does not take the area inside state waters into consideration.

*Response:* Stock assessments include both fishery dependent and fishery independent landings and effort data from state and Federal waters.

*Comment 17:* NMFS should not mandate that all shark fishing stop entirely once the sandbar quota is met.

*Response:* NMFS will not close both the sandbar and non-sandbar LCS fisheries if either quota is met. Rather, NMFS will close the sandbar and non-sandbar LCS quota, individually, if either fishery reaches 80-percent of its respective quotas.

*Comment 18:* The State of Florida supports decreasing the length of time it takes to supply NMFS with landings information used to manage the shark fishery. NMFS should also decrease the time it takes to make this information available to the public. The time required for NMFS to process such information should be established in a rule.

*Response:* NMFS makes every attempt to provide timely reports of shark catches to constituents on a frequent basis in order for fishermen to plan their activities accordingly. However, it is also necessary to ensure that shark landings data are accurate prior to making them available to the public. NMFS will attempt to provide more frequent shark landings updates in the future.

## 7. Seasons

*Comment 1:* The change to one commercial season would lead to derby fishing.

*Response:* NMFS believes that a commercial season that opens January 1 and remains open until 80-percent of the quota is achieved, coupled with the significantly reduced retention limits for directed permit holders, should adequately prevent derby fishing. Derby fishing is more likely when seasons are shorter in duration, and when retention limits are large enough to encourage targeting of a specific species. The final action results in one season, opening January 1. Additionally, the season is expected to remain open for most of the year as fishermen outside the research fishery are not expected to make trips targeting non-sandbar LCS because of reduced retention limits and the

prohibition on the retention of sandbar sharks.

*Comment 2:* NMFS received several comments including a comment from the State of Florida regarding the proposal to open shark seasons on January 1, including: NMFS should consider the fact that not all shark species are present in all regions in equal abundance on January 1; July may be a more appropriate time to open the season; January 1 may be good for sandbar sharks but not other species; opening the season at another time may result in the quota being filled before sharks arrive in some regions; the season should be opened on January 1.

*Response:* NMFS is aware of the fact that sharks are migratory and present in different areas, at different levels of abundance, at different times of the year. In this final action, NMFS will only allow landings of sandbar sharks by a limited number of vessels selected to participate in a shark research fishery. Therefore, only vessels participating in this fishery will be authorized to target sandbar sharks, and only when a NMFS-approved observer is on board. Vessels outside the research fishery would be allowed to keep 33 non-sandbar LCS for directed permit holders and 3 non-sandbar LCS for incidental permit holders. NMFS anticipates that this reduced retention limit will likely result in directed shark fishermen no longer targeting non-sandbar LCS outside the research fishery. Rather, shark fishermen would be authorized to keep non-sandbar LCS incidentally caught while targeting other species. Given that fishermen outside the research fishery are not expected to target non-sandbar LCS, NMFS expects that the shark seasons would be open longer, and fishermen in the regions that have non-sandbar LCS present later in the year would still be able to harvest non-sandbar LCS when they are present. In addition, opening the season on January 1 should allow the shark fishery to overlap with open seasons for other non-shark species and may reduce regulatory discards that may occur as a result of keeping the shark season closed until later in the year.

*Comment 3:* NMFS received numerous comments, including comments from the ASMFC and the State of Florida that NMFS should open the season in July instead of January 1 so the season would be open when sharks are present in all areas and to prevent fishing mortality during shark pupping season. Other comments included: NMFS should not allow shark fishing during April, May, and June as these months are when shark pupping occurs and state waters should be closed

from May 15 through July 15 to protect pupping; considering the size of the quota, shark migration patterns, and the ASMFC closure, it is likely that the quota would be harvested before sharks become available to fishermen in the North Atlantic; beginning the fishing season on July 16 would allow the quota to be shared geographically; opening the fishing season in July would reduce mortality of pregnant females and ensure that northern states have access to the fishery.

*Response:* Opening the season on January 1 and keeping it open until 80-percent of a quota is achieved may result in pregnant or neonate sharks being landed along with other sharks. However, given the low retention limits for non-sandbar sharks outside the research fishery and because fishermen will not be allowed to retain sandbar sharks outside the research fishery, NMFS expects that fishermen with directed shark permits outside the research fishery will no longer target non-sandbar LCS. This should reduce overall shark mortality, including mortality of pregnant females during pupping season. The retention limits should also allow fishermen to keep non-sandbar LCS that they catch while targeting other species. If the season is closed from April through June or July, vessels that land sharks while targeting other species will have to discard all sharks. The ASMFC is implementing a Coastal Shark FMP for sharks in state waters from Maine through Florida. Since most shark pupping occurs in state waters, NMFS feels the ASMFC plan may be more appropriate for addressing fishing mortality of pregnant females or neonate sharks. However, now that the ASMFC plan is expected to be implemented in 2009, NMFS may modify the season closure in the future as a result of the ASMFC shark plan.

*Comment 4:* NMFS should provide more advance notice of season openings because fishermen have had a hard time planning how much bait they need to buy, planning for freezer spaces, etc.

*Response:* NMFS must complete proposed and final rulemaking prior to the establishment of shark seasons. Under any final action establishing an annual shark season, NMFS will open the fishing season on or about January 1 of each year (except 2008). The season will likely remain open longer than usual, dependent upon available quota. Rulemaking in the **Federal Register** prior to the opening of the subsequent season's start date (on or around January 1) will provide the available quota, retention limits, and other pertinent information.

*Comment 5:* NMFS should implement one shark fishing season.

*Response:* NMFS is implementing one season, starting January 1 each year. This date is more likely to overlap with open seasons for other BLL and gillnet fisheries, and also provides fishermen a full calendar year to harvest available quota.

*Comment 6:* NMFS should ensure that smaller amounts of shark are consistently available throughout the year to help increase the price and marketability of sharks since restaurants would know they could count on it year round. Currently, with such short seasons, there is not really a market.

*Response:* Short seasons under existing trip limits may quickly flood markets, depressing prices for some shark products, particularly shark meat. Shark meat prices are more likely to be affected by the short seasons because there is less demand for shark meat than for shark fins. The majority of shark fins are exported to other countries and prices for shark fins tend to remain higher and more stable than shark meat. In the past, fishermen with directed shark permits were able to make profitable trips exclusively for sharks. Reduced retention limits and prohibition on retaining sandbar sharks outside the research fishery should reduce the likelihood that fishermen will make trips targeting non-sandbar LCS outside the research fishery. Rather, fishermen are more likely to harvest non-sandbar LCS incidentally while targeting other species. NMFS expects that a fishing season that opens on January 1 each year with lower retention limits will result in smaller quantities of shark product being available for a larger proportion of the year. This could conceivably increase demand and marketability of shark products because the availability of meat and fins would be more reliable throughout the year compared to the past when shark seasons were only open for short periods of time. This increased demand for shark products on behalf of wholesalers may translate to elevated prices received by shark fishermen for shark meat and fins.

*Comment 7:* NMFS should elaborate on the reasons that trimesters were originally implemented for the commercial shark fishery. Trimesters may still be necessary to reduce fishing mortality.

*Response:* Trimesters were originally implemented as a way to increase the availability of shark meat throughout the year while also reducing fishing mortality during peak pupping seasons and addressing other bycatch concerns. This final action implements significant

measures to reduce fishing mortality of sharks (predominantly by modifying quotas, retention limits, and species authorized to be landed in commercial and recreational fisheries) and also implements measures that are expected to result in small amounts of shark meat to be available in the markets year-round.

These final measures should reduce the mortality of pregnant females. Furthermore, the closed area off the coast of North Carolina, which is important habitat for dusky and sandbar sharks, will continue to be in effect. NMFS does not expect that fishermen will be able to make a profitable trip "targeting" sharks with the preferred retention limits and because of the fact that sandbar sharks may not be possessed outside the shark research fishery. The resulting incidental fishery will likely translate into significant benefits to shark populations as a whole while also eliminating the need to maintain trimesters.

*Comment 8:* Closing the season when landings reach the 80-percent threshold should be sufficient, but can the other 20-percent of the quota be filled in five days? NMFS should consider closing the shark fishery at 90 to 95-percent of the quota and consider re-opening a season if the quota has not been caught for a given season.

*Response:* NMFS requested public comment specifically on setting 80-percent as a threshold for closing the fishery because it allows a substantial percentage of the allowable harvest to occur, yet allows a sufficient buffer to prevent overharvest from the time the 80-percent is reached until the time NMFS can actually close the fishery. NMFS' goal is to allow fishermen to harvest the full quota without exceeding it in order to maximize economic benefits to stakeholders while achieving long-term conservation goals and preventing overfishing. Closing the fishery via appropriate rulemaking, while providing at least a five-day notice of a closure (upon filing of the final rule with the Office of the Federal Register and the availability of the final rule for public inspection), should allow fishermen to complete fishing trips that have already been initiated and/or provide fishermen the chance to catch additional quota if they embarked on additional trips prior to the closure. As mentioned previously, the reduced retention limits and the fact that fishermen outside the research fishery will not be allowed to land sandbar sharks is expected to reduce the number of trips targeting non-sandbar LCS and keep the shark season open year-round. Additionally, NMFS must take into

account state landings that continue to occur after closure of the Federal fishery.

NMFS believes that, given the two week reporting period for dealer reports and the potential for late reporting, closing the fishery when landings reach 90- to 95-percent of the quota would likely result in overharvests. Overharvests will result in reduced quotas in the future since all overharvests will be accounted for when establishing subsequent seasons and quotas.

*Comment 9:* NMFS should allow more time prior to closing the seasons. A 5-day notice will not work for PLL fishermen because their trips are long.

*Response:* PLL gear is not the primary gear-type used to harvest sharks. Most sharks are landed on BLL or gillnet gear on trips that last several days. Fishermen deploying PLL gear generally target tunas and/or swordfish depending on the time of the year and location. Therefore, NMFS does not expect the rulemaking process for closing the shark fishery, which would provide at least a five day notice upon filing of the final rule with the Office of the Federal Register and the availability of the final rule for public inspection, to have adverse impacts on vessels deploying PLL gear. Before the 1999 FMP for Atlantic Tunas, Swordfish, and Sharks, the shark fishery was closed via appropriate rulemaking with five days' notice; therefore, there is a precedent for this amount of time prior to taking action.

*Comment 10:* NMFS should consider a 3-day warning prior to closing seasons to prevent overharvests, consistent with the notice granted in the bluefin industry. This would better assure that quotas are not exceeded. If NMFS does not decrease the closure time to three days, and instead keeps five days, NMFS should adopt the trigger of 70-percent rather than 80-percent.

*Response:* In closing the fishery through appropriate rulemaking, NMFS will provide at least a five day notice for closures to maximize the proportion of the quota that fishermen may harvest without exceeding the quota and to allow time for notifying fishermen of a closure. When the final rule is filed with the Office of the Federal Register and available for public inspection, NMFS will send out e-mail notices and other outreach materials to notify the public of the fishery closure within at least 5 days. NMFS anticipates that the notice will publish in the **Federal Register** approximately one day after filing, and then the fishery would officially close no earlier than five days from the original filing date. NMFS believes

closing the fishery for individual species or species complexes with at least five days notice upon filing in the **Federal Register** is adequate to prevent overharvests. Historically, shark trips have been 1-4 days. Therefore, a minimum of five days' notice should be adequate because it should give fishermen enough time to complete trips that are already in progress. Significant reductions in retention limits and the fact that fishermen outside the research fishery cannot retain sandbar sharks should also reduce the potential for overharvests in the period between meeting the 80-percent threshold and when the fishery is actually closed a minimum of five days later.

*Comment 11:* NMFS should predict how long the season should remain open to fill the quota based on past catch rates.

*Response:* In recent years, seasons have been set based on available quota, past catch rates, and other considerations. Given the final action, NMFS feels that continuing this practice may continue to result in significant overharvests and may not be the best strategy for ensuring that sandbar, dusky, and porbeagle shark populations rebuild. Overharvests in 2006 and 2007 may be indicative of past catch rates not being appropriate indicators of future catch rates because of the fact that in those years, catch rates were greater and the quota was smaller, leading to overharvests. In addition, significant changes in quotas, authorized species, and retention limits would further complicate establishing seasons in advance.

*Comment 12:* NMFS needs to analyze the length of trips that land sharks and base the time needed to notify the fishery on the length of those trips.

*Response:* Observer data indicate that most trips targeting sharks last between 1-4 days depending on the region, season, and amount of sharks that are landed. However, this duration corresponds to past retention limits that are being reduced substantially for directed permit holders. Five days was selected as a reasonable minimum amount of time for fishermen to get word about a fishery closure and either finish a current trip without discarding dead sharks, or initiate a trip for another species prior to the closure while keeping the ability to land sharks incidentally. NMFS anticipates that the significant reduction in retention limits and the prohibition on retaining sandbar sharks outside the research fishery will result in most fishermen targeting other species and incidentally landing non-sandbar LCS.

*Comment 13:* NMFS needs to look at past data to determine whether a 80-percent threshold is adequate to prevent overharvests based on how much quota is caught after the seasons.

*Response:* NMFS selected the 80-percent threshold for closing the season, with a minimum of five days' notice upon filing of the final rule with the Office of the Federal Register, because it should ensure that the majority of the quota is harvested without exceeding the quota. Giving fishermen the opportunity to harvest most of the quota within a given season is important because the final action carries forward only underharvests for species that are not overfished, experiencing overfishing, or of unknown status.

### 8. Regions

*Comment 1:* NMFS received several comments regarding regions. Comments in favor of maintaining three regions under the status quo included: NMFS should assess the impacts of moving to one region; NMFS should describe the rationale for moving to one region; NMFS should not implement one region; having one region ignores the stock assessments and the temporal nature of the fishery; NMFS should implement separate permits, separate fishing zones, and separate quotas, so that fishermen in one zone are not penalized for a quota overharvest that occurs in another zone; the ASMFC requests a minimum of two management regions (Gulf of Mexico and Atlantic States) to ensure equitable and biologically sound geographic distribution of quotas; a one-region plan could reduce or eliminate any quota for Atlantic States if Gulf of Mexico states overharvest; the Gulf States do not have coordinated management and have overharvested in excess of 200-percent in recent years; under one management region, the ASMFC would have reduced or zero quotas for years subsequent to Gulf overharvests.

NMFS also received several comments opposed to maintaining the three regions, including: NMFS should either divide quota equally among regions or have one region since quotas are so low; Gulf of Mexico and South Atlantic stocks should be managed as one unit.

NMFS received numerous comments from Texas Parks and Wildlife, the Gulf of Mexico Fishery Management Council, ASMFC, Mississippi Department of Marine Resources, and members of the general public in favor of maintaining more than one region. Commenters suggested reasons for maintaining more than one region, including: the best scientific evidence available indicates

that the Gulf of Mexico and the South Atlantic stocks are separate; genetic evidence has shown separate stocks of some species between the Gulf and South Atlantic; shark management should account for separate stocks and separate the quota accordingly; blacktip sharks are healthy in the Gulf of Mexico; bycatch issues are unique to each region; and, moving to one region ignores stock assessments and the temporal nature of the fishery, which was identified during the previous amendment.

*Response:* In the Draft EIS, NMFS proposed merging the status quo's three regions into one region to simplify quota monitoring and to prevent derby-style fishing and potential overharvests that could occur as a result of attempting to allocate smaller quotas to regional and trimester seasons. The impacts of establishing only one region instead of three were assessed in the Draft EIS for Amendment 2. The analyses indicated that the overall economic impacts could be negative in regions (i.e., North Atlantic) that do not have sharks present in their waters year-round if the fishery closed early in the year. The ecological impacts of implementing one region were expected to be neutral.

Based on public comment, NMFS has decided to implement two regions, the Gulf of Mexico and the Atlantic, rather than one region as originally proposed. Maintaining two regions has several advantages, including: it adheres to the stock assessment for blacktip sharks which assessed this species separately in the Gulf of Mexico and Atlantic; it accounts for overharvests that occurred in the Gulf of Mexico and Atlantic in 2007 more equitably; it allows for unique quotas to be implemented in each region that account for different species composition in each region; and it maintains the flexibility to implement unique regulations in the Gulf of Mexico and Atlantic Ocean.

The 2006 LCS assessment assessed blacktip sharks as two distinct populations in the Gulf of Mexico and Atlantic. Unique results were found for each population with the Gulf of Mexico population healthy and the Atlantic stock unknown. The assessment recommended maintaining current harvest levels in both regions. NMFS prefers measures consistent with the stock assessment by maintaining two regions: the Gulf of Mexico and Atlantic. The blacktip shark was the only species assessed as distinct, regional populations.

At this time, NMFS does not issue unique permits based on geography within the Atlantic, Caribbean, and Gulf

of Mexico. This type of permit was not considered during this rulemaking.

*Comment 2:* NMFS should have one region because, since NMFS went into regions, we have been going over the quota.

*Response:* There are several factors that may be the cause of recent overharvests. These overharvests have likely occurred because of increased fishing effort, inconsistent reporting on behalf of the dealers, and the fact that previous years' overharvests are taken off subsequent years' quotas resulting in smaller regional quotas. As quotas decrease and effort stays the same, the likelihood of overharvests increases. The rationale for two regions is provided in response to Comment 1 directly above and elsewhere in the preamble to this rulemaking.

*Comment 3:* NMFS should describe the original reasoning for establishing the three regions.

*Response:* The regions were established in regulations implementing Amendment 1 to the 1999 FMP in 2003 because of spatial differences in fishery practices, variable catch-per-unit-effort (CPUE) between regions, and to afford managers the flexibility to adjust regional quotas to reduce mortality of juvenile and pregnant female sharks.

*Comment 4:* NMFS should create a separate region for the Caribbean.

*Response:* The Caribbean is currently managed as part of the South Atlantic region. This final action includes the Caribbean in the Atlantic region. Permit data indicate that there are not any commercial shark fishing permits and only one shark dealer permit in the Caribbean region. In addition, NMFS is in the process of initiating rulemaking to address some of the unique aspects of Caribbean fisheries for HMS.

*Comment 5:* NMFS should change the regions so that the Florida Keys are entirely in the South Atlantic or entirely in the Gulf of Mexico. The State of Florida recommends that the existing regions be maintained, however, both the Gulf and Atlantic coasts of Florida should be kept in the same region to facilitate improved management and enforcement.

*Response:* NMFS implemented separate regions for the Gulf of Mexico and South Atlantic in Amendment 1 to the 1999 FMP. The existing boundary between the regions was adopted because it is consistent with the boundary defined by the Gulf of Mexico and South Atlantic Fishery Management Councils and by ASMFC. However, since implementing that boundary, NMFS has consistently considered, for quota monitoring purposes, any landings in the Florida Keys to be part

of the Gulf of Mexico region. As such, in this final action and based on the comments received, NMFS is matching practice with the regulations, and is redefining the Gulf of Mexico to ensure that catch near or directly south of the Florida Keys is considered to be within the Gulf of Mexico region. NMFS does not expect this to change fishing practices as logbook data indicates that most fishing in the areas occurs near and within the Florida Keys.

#### 9. Recreational Measures

*Comment 1:* NMFS should maintain the same standards for recreational and commercial fisheries. Since the commercial industry reports many unidentified or unclassified sharks, the commercial industry should be regulated based on misidentification as well.

*Response:* The majority of sharks landed commercially are reported as unclassified by shark dealers, not fishermen. NMFS has implemented shark identification workshops for shark dealers which are expected to provide shark dealers with the knowledge and skills to properly identify the sharks that they purchase. Recreational fishermen generally do not see sharks as often as commercial fishermen targeting sharks. Thus, commercial fishermen may be more adept at shark identification.

*Comment 2:* The preferred alternative would set a bad precedent in allowing a fishery that caused the decline in shark populations to continue on a limited basis, while the public cannot fish for the same shark species. The commercial fishermen should be allowed to catch the same shark species as the recreational fishermen. The ASMFC requests allowing recreational possession/take of all species that may be harvested by commercial fishermen to keep the shark fishery equitable to all sectors and help establish identical species groups.

*Response:* The final action allows recreational permit holders to possess all non-ridgeback LCS and tiger sharks. These species of sharks have external characteristics that are easy for recreational anglers to properly identify. NMFS proposed to add blacktip, spinners, bull, and finetooth sharks to the list of prohibited shark species in the draft Amendment 2 to the Consolidated HMS FMP. However, based on public comment, NMFS decided to allow recreational anglers to land these sharks. NMFS is allowing recreational anglers to land these species because of extensive public comment that was received in favor of allowing recreational anglers to land

these species. NMFS is not authorizing recreational anglers to land sandbar sharks and silky sharks because recreational anglers may confuse these species with dusky sharks, which are on the list of prohibited shark species. NMFS is only allowing participants in the shark research fishery to land sandbar sharks commercially, thus, precluding the vast majority of commercial fishermen from landing sandbar sharks.

Silky sharks are authorized for landing in commercial fisheries because there is a higher likelihood that these sharks may be discarded dead than if they were landed in recreational fisheries. Moreover, commercial fishermen are more adept at distinguishing between silky sharks and sandbar or dusky sharks. Prohibiting silky sharks in commercial fisheries would result in more significant economic consequences than prohibiting them in recreational fisheries because commercial fishermen are allowed to sell the fins and flesh of sharks that are caught in accordance with applicable regulations. There is not a significant targeted fishery among recreational or CHB anglers for spinner sharks, therefore, economic impacts would be less severe among this group of stakeholders.

*Comment 3:* The recreational and commercial sectors contribute nearly equivalently towards mortality of sharks, and reductions in mortality are absolutely necessary.

*Response:* NMFS is implementing measures consistent with recent stock assessments to prevent overfishing and/or to rebuild stocks of porbeagle, dusky, and sandbar sharks. Concurrently, NMFS has decided not to allow increased landings of blacktip sharks in the Gulf of Mexico and Atlantic Ocean. Both commercial and recreational shark landings are included in stock assessments. While commercial fisheries generally comprise the majority of shark landings, recreational landings are also a significant component of overall shark mortality. Additional measures are necessary to reduce fishing mortality on several shark species. Modifications to quotas, authorized species, and retention limits are expected to prevent overfishing and to rebuild overfished stocks. For example, sandbar sharks will only be landed by a small number of commercial participants in the shark research fishery subject to a commercial quota that represents an 80-percent reduction in landings of sandbar sharks compared to previous years. Recreational fishermen will not be able to retain sandbar sharks due to their

overfished status and the potential for confusion with prohibited dusky sharks.

*Comment 4:* NMFS should consider additional alternatives for the recreational industry. The alternative suites contain either status quo or closure of all the recreational fisheries.

*Response:* The analysis of recreational measures includes more alternatives than status quo and closing the fishery. Alternative suites 2 through 4 in the Amendment 2 to the Consolidated HMS FMP would modify the authorized shark species for recreational fishermen to include those that can be positively identified. These alternatives have been modified in the Final Amendment 2 to the Consolidated HMS FMP to include all non-ridgeback LCS and tiger sharks as authorized species in recreational shark fisheries.

*Comment 5:* NMFS should describe the data or analysis used to justify the proposed authorized species for recreational fisheries. There is no precedent for "easily-identifiable." NMFS needs to make an effort to educate anglers before assuming they cannot identify what they are catching. The State of Georgia commented that NMFS should only allow sharks without an interdorsal ridge to be landed, thereby improving identification and reducing confusion. The State of Florida indicated that sandbar and dusky sharks can easily be differentiated from many other shark species by the presence of an interdorsal ridge.

*Response:* NMFS only included shark species that are readily identifiable by recreational participants who may not interact with a large number of sharks and therefore may not be able to accurately identify sharks. NMFS specifically requested public comment on the proposed list to be authorized for recreational participants and has modified the final list as a result. The final measures allow any non-ridgeback LCS, tiger sharks and the current list of pelagic and SCS to be landed by recreational anglers. The absence of an interdorsal ridge and/or the distinctive black vertical stripes on tiger sharks should allow recreational anglers to determine if a shark may be possessed or not. NMFS intends to disseminate information for recreational permit holders on HMS regulations and external characteristics for positive identification of authorized shark species.

*Comment 6:* The recreational fishery should be subject to 100 percent observer coverage.

*Response:* Recreational permit holders can request to take an observer onboard to monitor fishing activities; however, they are not required to carry observers.

Observers are placed on commercial fishing vessels as a requirement of the biological opinion for the shark fishery, to verify logbook and dealer reports, and to aid managers in understanding the fishery. To date, the biological opinion issued under the Endangered Species Act for the shark fishery has not required observer coverage in the recreational fishery. In addition, recreational fishing vessels are not required to obtain a U.S. Coast Guard safety inspection, which is a requirement for placing observers on commercial vessels to ensure that the vessels have all the required safety equipment. As such, it is difficult to place observers on recreational vessels.

*Comment 7:* NMFS received several comments regarding outreach efforts on shark identification to the recreational sector, including: NMFS should release an identification guide similar to the Rhode Island Sea Grant guide; recreational fishermen care about positive identification; NMFS should send all permit holders the \$20 shark identification book instead of shutting down the fishery; NMFS should explore identification workshops for recreational fishermen; NMFS needs to find better ways to educate the public to ensure positive identification; NMFS should use educational tools to improve identification; and, recreational fishermen may confuse porbeagle sharks with shortfin makos.

*Response:* In 2003, NMFS, in conjunction with Rhode Island Sea Grant, released a guide to Sharks, Tunas, and Billfishes of the U.S. Atlantic and Gulf of Mexico. While the guide is currently out of print, additional copies are being printed and should be available by late summer. Additional materials containing similar information are currently available at: <http://seagrants.gso.uri.edu/bookstore/index.html>.

NMFS is also working on additional outreach materials such as a one page quick identification guide to improve identification and understanding of regulations among recreational anglers. These outreach materials would be either free or available at a low cost to ensure that all permit holders have access to them. NMFS has recently implemented shark identification workshops for shark dealers and other interested members of the public. While not mandatory for recreational anglers, participants in any HMS sector or the general public may attend. These workshops provide anglers, dealers, and commercial fishermen with the ability to properly identify shark carcasses.

*Comment 8:* NMFS received several comments, including comments from

the State of Florida, the State of Mississippi, the Gulf of Mexico Fishery Management Council, Texas Parks and Wildlife Department, South Carolina Department of Natural Resources, and the ASMFC regarding the shark species that should be included on the list of recreationally authorized shark species. Comments included: spinner, silky, bull, and blacktip sharks should be included in the list of species authorized for recreational anglers because fishers are capable of accurately identifying shark species; common thresher sharks should stay on the list of species authorized for recreational anglers; NMFS should not propose restricting recreational anglers from keeping blacktip sharks in the Gulf of Mexico if the stock is not overfished or experiencing overfishing; spinners are not endangered, nor are they depleted; the status of spinner or bull sharks has not been assessed, therefore, prohibiting the capture of blacktip and bull sharks would be an overly risk-averse strategy considering that the status of blacktip sharks (at least in the Gulf of Mexico) is satisfactory; identification is only a problem for species that cannot be identified externally; eliminating the retention of a healthy species of sharks, based on the assumption that they might be misidentified is subjective and is definitely not sound fishery management practice; NMFS is mandated under the Magnuson-Stevens Act (NS 1) to strive for optimum sustainable yield and blacktip status in the Gulf of Mexico is healthy; NMFS' stated reason is concern over angler misidentification with sandbar and dusky sharks, however, these species may be readily identified by their interdorsal ridges; the list is acceptable, except for oceanic whitetip and hammerhead sharks. Do not allow the recreational catch of these two species as scientific studies show they are in decline; allowing the recreational harvest of blacktip and spinner sharks would therefore have no negative impact on sandbar and dusky sharks; silky sharks can be confused with dusky sharks and should remain off the list that recreational anglers may land; NMFS should not prohibit recreational anglers from landing bull, blacktip, bull, spinner, and finetooth sharks because these species represent 37-percent of recreational shark landings off the State of Florida.

*Response:* The final action will allow recreational anglers to possess all non-ridgeback LCS, including blacktip sharks, tiger sharks, and the currently allowed SCS and pelagic sharks. The presence/absence of an interdorsal ridge

and other morphological characteristics, coupled with outreach materials on shark identification for recreational anglers, are likely to reduce the incidence of misidentification in this fishery. Common threshers would also continue to be authorized for landing in recreational shark fisheries as these were not proposed to be prohibited for recreational anglers. NMFS had originally proposed that blacktip and spinner sharks not be authorized in recreational fisheries because the morphological differences between the two sharks are not obvious to anglers who are unfamiliar with sharks, and because NMFS wanted to ensure that recreational anglers were only landing sharks that could be positively identified. Based on extensive public comment in support of being able to land blacktip, spinner, and bull sharks and the ability of anglers to use the interdorsal ridge (or lack of the interdorsal ridge) to more positively identify sharks, the final action allows these sharks to be landed. Further, NMFS will enhance outreach efforts to ensure that recreational shark fishermen are positively identifying the sharks they catch.

*Comment 9:* NMFS should address the fact that recreational anglers in Delaware, Maryland, and New Jersey are catching lots of pregnant thresher sharks during certain times of the year.

*Response:* NMFS is concerned about recreational anglers catching pregnant female thresher sharks. Recreational fisheries do not have closed seasons like commercial fisheries; therefore, pregnant females may be caught and possessed by recreational anglers. However, a minimum size limit of 54 inches fork-length and a bag limit of one shark (except bonnethead and Atlantic sharpnose) per vessel per trip should minimize the potential for negative impacts to populations of common thresher sharks. Furthermore, this species may be afforded additional protection by shark tournaments that limit the sharks that may be landed to those that are actually eligible to win a prize category.

*Comment 10:* NMFS received a comment suggesting that hammerheads may need to be prohibited for recreational anglers because the IUCN considers them threatened and it is not easy to distinguish between scalloped and great hammerhead sharks.

*Response:* NMFS is not implementing management measures specific to scalloped or great hammerhead sharks in recreational fisheries at this time. NMFS has not yet reviewed stock assessments on these species. A stock assessment has been completed for

hammerhead sharks as a dissertation for a graduate student; however, the assessment has not undergone extensive peer-review which is necessary prior to NMFS making any decisions about or based on the assessment.

The IUCN determined that the scalloped hammerhead is "lower risk, near threatened" with an unknown population trend in 1994. In 2001, the IUCN listed great hammerhead sharks as "endangered" with a decreasing population trend. The recreational bag limit (1 vessel/day) and minimum size (> 54 inch fork length) should preclude overfishing of the scalloped hammerhead shark species. NMFS intends to improve outreach materials available so that recreational anglers would have the tools necessary to distinguish between scalloped and great hammerheads.

*Comment 11:* NMFS should consider the impacts of recreational fishing for sharks and its implications on populations. Specific comments received include: shark tournaments since the 1980s are responsible for a 50-percent reduction in dusky sharks and a 35-percent reduction in sandbar sharks; the stock assessment does not say that recreational anglers have a significant impact on the shark stocks; the recreational angling public has a virtually imperceptible impact on LCS because recreational anglers practice catch and release and have very conservative size limitations.

*Response:* NMFS is aware of the practices of recreational fisheries and their impacts on shark populations. Recreational data have been used in past stock assessments for both sandbar and dusky sharks. Thus, the impact of recreational mortality on shark stocks has been included in these stock assessments. NMFS has implemented a size and bag limit for recreational fishermen to limit effort and protect sharks that have not reached sexual maturity. The Final Amendment 2 to the Consolidated HMS FMP provides recreational landings by species.

*Comment 12:* NMFS should increase enforcement of recreational regulations because participants are not adhering to the 54-inch minimum size for sharks.

*Response:* NMFS intends to take steps to improve outreach to recreational shark anglers to ensure that the public is aware of all the regulations in place for recreational shark fisheries.

*Comment 13:* NMFS should not allow shark tournaments that give monetary prizes. The impacts of such tournaments are unknown and public perception of them is poor.

*Response:* HMS tournament participants are required to possess the

necessary HMS permits, to register their tournaments, submit data if selected, and abide by all HMS and tournament regulations for sharks. The shark tournaments are subject to the recreational shark bag and size limits which are quite restrictive in the recreational fishery (1 shark over 54 inches per vessel per day) and, therefore, it is not likely that the majority of fishing mortality is occurring in shark tournaments. Specific measures concerning tournaments were not proposed, or analyzed, in this rulemaking.

*Comment 14:* NMFS should not propose that recreational fishermen cannot land sandbars and then account for recreational landings by removing the recreational landings (27 mt dw) in establishing the commercial quota for sandbar sharks.

*Response:* Accounting for the recreational landings (27 mt dw) between 2003–2005 is necessary to ensure rebuilding of sandbar sharks and that all fishing mortality is within the TAC. Sandbar sharks can be landed in recreational fisheries outside of NMFS jurisdiction (i.e., state waters), could be landed illegally in federal waters, or may die as a result of post-release mortality. If NMFS did not account for recreational and other mortality of sandbar sharks, efforts to prevent overfishing and rebuild sandbar sharks would be compromised.

*Comment 15:* Why were the effects of Katrina to the Texas recreational industry not analyzed?

*Response:* Consistent with NS1 of the Magnuson-Stevens Act, NMFS is required to implement management measures to rebuild overfished shark species and prevent overfishing. The impacts to the recreational shark fishing industry as a result of Katrina were not specifically analyzed in this rulemaking. Rather, the impacts of the proposed measures that would affect the recreational shark fishing industry in states impacted by Hurricane Katrina were evaluated.

*Comment 16:* NMFS should require that recreational anglers practice only catch and release and report any and all interactions with protected species.

*Response:* Alternative suite 5 proposed prohibiting the possession of sharks in both commercial and recreational fisheries, but it was not the preferred alternative because of the adverse economic impacts that would be incurred by these fisheries. The stock status of many shark species does not warrant a requirement to only catch and release all shark species landed recreationally. The bag limit and minimum size requirements are

sufficient to conserve shark stocks, and NMFS does not believe a prohibition on landing all sharks in recreational fisheries is warranted at this time.

*Comment 17:* A typo was made regarding allowable recreational species. On the HMS website copy of the proposed Amendment, the spinner shark was included on the recreational list. On a slide prepared for the public hearings, which was formerly posted on the HMS website, the spinner shark was not included on the recreational list. NMFS should update the draft document on the HMS website so that the commenting public would have access to the proper information necessary to adequately prepare their comments.

*Response:* The typographical errors in the draft Amendment 2 to the Consolidated HMS FMP have been addressed. An errata sheet describing these errors was posted to the HMS website on November 19, 2007, prior to the end of the public comment period and is available at: [http://www.nmfs.noaa.gov/sfa/hms/sharks/Amendment%202/Errata\\_Sheet\\_for\\_DEIS.pdf](http://www.nmfs.noaa.gov/sfa/hms/sharks/Amendment%202/Errata_Sheet_for_DEIS.pdf).

*Comment 18:* NMFS should consider the cumulative impacts on CHB operators who also fish for sharks in light of measures that have been imposed on this industry for other fisheries such as snapper. Snapper business is down 75-percent and proposed measures for the shark recreational fishery are "the nail in the coffin for CHB"; and, NMFS is violating NEPA by limiting recreational alternatives and through limited cumulative impact analysis by not analyzing impacts such as those caused by red snapper regulations.

*Response:* NEPA requires all Federal agencies to consider and analyze a range of alternatives to achieve the stated objective and analyze cumulative impacts of proposed actions. NMFS considered the cumulative impacts by analyzing permits that participants held in other fisheries and considering the impacts on those other fisheries. Based on public comment, NMFS is modifying the shark species that can be retained by recreational anglers to include all non-ridgeback LCS and tiger sharks. This modification should allow CHB operators to continue to retain blacktip, spinner, finetooth, and bull sharks which had originally been proposed to be prohibited for recreational anglers due to concerns about anglers' ability to positively identify these species.

*Comment 19:* Party charter operators have to submit Vessel Trip Reports (VTRs) for every trip. NMFS should look

into those to get a handle on recreational catches.

*Response:* VTR data were considered for the final rule, however, these data showed only four porbeagle sharks landed by party headboats. MRFSS and LPS are the only databases that NMFS has to track recreational landings. However, for some species, like porbeagle sharks, the timing of these programs do not necessarily capture when porbeagle sharks are caught by recreational fishermen in New England. As such, NMFS is considering ways to improve its recreational landings data collection. NMFS is interested in gathering more shark landings data from tournaments with prize categories for sharks, especially porbeagle sharks.

*Comment 20:* NMFS received numerous comments, including one from the South Carolina Department of Natural Resources, stating that NMFS should increase the retention limit for Atlantic sharpnose per vessel in the for-hire fishery. Recreational fishermen cannot avoid sharpnose sharks and the recent stock assessment declared that they were not overfished or subject to overfishing.

*Response:* Modifying the retention limits for Atlantic sharpnose was not considered in this amendment. Measures concerning Atlantic sharpnose sharks and other small coastal sharks (SCS) will be included in Amendment 3 to the HMS FMP based on recent (2007) stock assessments for SCS (May 7, 2008, 73 FR 25665).

#### 10. SAFE Report and Stock Assessment Frequency

*Comment 1:* NMFS should implement the preferred alternative 9 for SAFE report frequency, which would allow NMFS to publish a SAFE report by the fall of each calendar year.

*Response:* NMFS is implementing alternative 9, which modifies the existing regulations by requiring the publication of a SAFE report in the fall of each year. This should allow NMFS more flexibility to balance other responsibilities throughout the calendar year, as necessary, and will give NMFS the opportunity to include data for the SAFE report that is typically collected at the beginning of each calendar year.

*Comment 2:* Within the annual SAFE report, NMFS needs to correctly identify the overfished and overfishing status of every managed shark species by species, rather than by complex.

*Response:* The SAFE report follows the guidelines specified for NS2 and is used by NMFS to develop and evaluate regulatory adjustments under the framework procedure or the FMP amendment process. Within each SAFE

report, NMFS lists the status determination of each stock. If the stock is managed within a species complex, then NMFS would report the status of the complex. For sharks, NMFS does not have the necessary information to conduct separate stock assessments for each species. Therefore, NMFS cannot make species-specific stock status determinations for every species of shark that is commercially harvested. Therefore, those species are managed within a species complex. NMFS is moving towards more species-specific management as available data allows, as is the case with sandbar sharks, which will be managed separately from the LCS complex based on measures implementing the Final Amendment 2 to the Consolidated HMS FMP.

*Comment 3:* NMFS should implement the preferred alternative 7 for shark stock assessments, which would allow NMFS to conduct shark stock assessments at least once every five years.

*Response:* Because of the time necessary to modify management measures consistent with stock assessments, NMFS is implementing the preferred alternative 7 and will conduct shark stock assessments at least once every five years. This should provide sufficient time for existing or forthcoming management measures to take effect (i.e., a few years) prior to the next stock assessment.

*Comment 4:* NMFS received several comments in favor of the status quo for timing of stock assessments, including: NMFS should consider keeping the status quo for the timing of stock assessment for sharks; we are opposed to having an assessment at least once every five years; five years is too long to wait for an assessment; it is critical that stock assessments be regular and robust; NMFS should implement alternative 6, the status quo for the timing of shark stock assessments, with a mandate of stock assessments no less frequently than every 3 years; and, stock assessments should occur at least every 2 to 3 years without any further delays.

*Response:* Because of the time necessary to modify management measures consistent with stock assessments, NMFS is finalizing measures that increase the amount of time between stock assessments to allow existing or forthcoming measures to be in place and have an effect on the population before the next assessment takes place. In 2003, NMFS adopted the SEDAR process for completing shark stock assessments at the request of industry, environmentalists, and academics. This process increases the time necessary to complete a stock

assessment because it entails three workshops where data are reviewed, stock assessment models are run, and results are reviewed by an outside panel. Since this process alone may take over a year to complete, conducting assessments every 2 to 3 years is not practical. Allowing stock assessments to be conducted at least once every five years should allow research suggested by the last assessment to be completed before the next assessment is done, thus providing the necessary data for future assessments. It should also allow management measures, which need to be in place for several years to have an effect, to begin to achieve management objectives before a new assessment is done. For instance, the last stock assessment, which was completed in 2006, included data through 2004. NMFS is currently developing management measures based on that assessment, and those new management measures would be in place 30 days after publication of this rule. If the next stock assessment is conducted in 2009 (3 years from 2006), and includes data up through 2007 or 2008, the new management measures would not have had time to take effect as they would not have been in place for the time series of data used for a 2009 assessment. Decreasing the frequency to at least once every five years would result in the next assessment occurring no later than 2011, which could consider data up through 2009 and data collected under the new management measures.

*Comment 5:* The Georgia Coastal Resources Division believes that while conducting assessments every 2–3 years is too short for an accurate assessment, conducting stock assessments every five years is also too frequent for the rebuilding timeframes necessary for the concerned species and to evaluate the effects of management.

*Response:* Alternative 7 changes the current process outlined in the 1999 FMP by requiring stock assessments for sharks at least every five years instead of every two to three years. Stock assessments could occur more frequently; however, according to NMFS' policy adequate stock assessments are required at least once every five years. This timeframe ensures that NMFS can incorporate new data, use the best available data, and test the effectiveness of management measures. Waiting more than five years to conduct an assessment could lead to the need for greater changes leading to more uncertainty in the status of the stock and effectiveness of management.

### 11. Research Fishery/Preferred Alternative

*Comment 1:* NMFS should not finalize the proposed preferred alternative suite 4. The sandbar shark quota should be spread over 40–50 vessels making 1–2 trips annually rather than 5–10 vessels making more trips.

*Response:* The final action strikes a balance between positive ecological impacts that must be achieved to rebuild and stop overfishing on depleted stocks while minimizing the severity of negative economic impacts that could occur as a result of these measures. NMFS intends to address vital research concerns via the shark research fishery. By allowing a limited number of historical participants to continue harvesting sharks, NMFS ensures that data for stock assessments and life history samples will continue to be collected. The final action also allows a small pool of individuals to continue to collect revenues from sharks as they have in the past. Increasing the number of vessels included in the shark research fishery would simply provide a much smaller benefit for a larger pool of individuals. Furthermore, having fewer vessels involved in the research fishery ensures less variation among vessels and also maintains more consistent sampling protocols. Fewer vessels in the research fishery would also allow each vessel to make more sets targeting sandbar sharks throughout the year and within each region rather than a larger number of vessels only making one or two trips in a particular region/season. The selection process will take place each year in order to maximize the number of potential participants.

*Comment 2:* NMFS received several comments on research fishery vessel selection. These comments included: NMFS should select vessels based on a fisherman's income from the shark industry; NMFS should consider if a fisherman has helped with research in the past and consider whether or not the researchers had a positive experience; NMFS should consider any past violations, and if a vessel is conducive to research (i.e., enough deck space); captains and crew should have an understanding of why the research is being done, an understanding of the costs associated with the research, the ability to fish in multiple regions, and the ability to carry observers; past participation in the observer program and shark fishery should be considered; NMFS should create a point system based on criteria for selection of vessels and if there are more than 5–10 vessels, then a lottery should be used; NMFS should administer the research fishery

much like they do the EFP program; the shark research fishery should only include directed shark permit holders; NMFS should increase the number of vessels in the research fishery and decrease the amount of sandbars each vessel may land; observer coverage should still happen within the research fishery; NMFS needs to provide clarification as to how vessels will be selected to participate in the shark research fishery included in the preferred alternative; and who will pick the fishermen for the research fishery?

*Response:* Applications and permits for the shark research fishery will be administered through the HMS Exempted Fishing Permit program. The HMS Management Division will coordinate with NMFS scientists to determine research objectives. NMFS will publish an annual notice in the **Federal Register** that describes the expected research objectives, number of vessels needed, selection criteria, and the application deadline. Requested information could include, but is not limited to, name and address, permit information, number of expected trips to collect sharks, regions where fishing activities would occur, vessels employed, and gear used. NMFS will review all complete applications and rank vessels according to the ability of the vessel to meet research objectives, fish in the specified regions and seasons, carry a NMFS approved observer, and meet other criteria as published in the **Federal Register** notice. Establishing a point system or a lottery for selection of vessels may be considered as a means of selecting among qualified vessels interested in participating in a shark research fishery. NMFS will include the appropriate types of permit holders in the shark research fishery as determined by the research objectives on an annual basis.

*Comment 3:* NMFS should allow vessels participating in the research fishery and collecting data to make the most of what they catch.

*Response:* Non-prohibited sharks landed in the shark research fishery can be sold by fishermen. NMFS-approved observers onboard vessels in the shark research fishery will be authorized to collect any and all samples from any specimens retained during fishing activities to fulfill research goals.

*Comment 4:* Quota for the research fishery should be equally distributed geographically.

*Response:* NMFS will consider the geographic distribution of vessels selected to participate in the shark research fishery to reflect traditional participation by vessels targeting sharks and to ensure that data are maintained

for future stock assessments. Further, equal geographic distribution will allocate economic benefits to all regions affected by measures in the final rule and ensure that samples are collected from sandbar and other species of sharks throughout their geographic range.

*Comment 5:* NMFS should clearly state how the quota for sandbar sharks will be calculated.

*Response:* The sandbar shark quota was determined by the TAC recommended by the sandbar shark stock assessment for the species to rebuild by 2070. The available quota for commercial shark fishermen participating in the shark research fishery (116.6 mt dw) was determined based on the TAC while considering other sources of sandbar shark mortality in recreational fisheries and dead discards that occur in other fisheries. This quota will be reduced to 87.9 mt dw through the end of 2012. Additional detail on these calculations may be found in Appendices A and C of the Final Amendment 2 to the Consolidated HMS FMP.

*Comment 6:* Is NMFS going to provide flexibility regarding when and where vessels fish?

*Response:* Research vessels will have some flexibility with regard to timing of trips subject to the objectives and needs of the research fishery. Vessels selected for, and fishing under, the auspices of the shark research permit will be required to take a NMFS-approved observer on all trips. Therefore, observer availability may limit timing of individual trips by vessels. Similarly, NMFS intends the quota available for the shark research fishery to last throughout the year so that samples are collected from vessels fishing in all regions and seasons. As such, NMFS may not place observers on all trips that vessel operators of qualified vessels request to ensure that the sandbar research and the non-sandbar LCS research quotas, neither of which have regions, are available throughout the year. The number of available trips targeting sharks will be dependant on retention limits, success of other vessels targeting sharks, available quota, and other considerations.

*Comment 7:* NMFS received several comments on research fishery goals and science, including: NMFS should describe its data and research needs; a research plan needs to be developed; a research plan should be devised first before the vessels/fishermen are selected; and the design of the sandbar-oriented research fishery requires scientific input and oversight in order to fulfill a research mission.

*Response:* The research goals and objectives for the shark research fishery are being developed with NMFS scientists. Research objectives may vary from year-to-year, depending on scientific needs. Several research needs were identified by the peer-reviewers during the LCS stock assessment in 2006 and provide the basis for the shark research fishery goals for 2008, as outlined in the FEIS. Available data on LCS are also presented in the data workshop summary report which is located on the SEDAR website: ([http://www.sefsc.noaa.gov/sedar/Sedar\\_Workshops.jsp?WorkshopNum=11](http://www.sefsc.noaa.gov/sedar/Sedar_Workshops.jsp?WorkshopNum=11)). Each year, the objectives will be published and made available to the public in conjunction with the **Federal Register** notice that solicits applications from fishermen interested in participating in the shark research fishery. Research topics may include, but are not limited to: target and bycatch rates using circle and J-hooks with unique bait combinations; sandbar age at first maturity and maturity ogive (which is a description of the proportion of the individuals that are mature at a given age); reducing bycatch rates of protected resources and prohibited sharks; and, life history of coastal sharks.

*Comment 8:* NMFS received several comments about which permit holders should be able to participate in the shark research fishery, including: the research fishery should include CHB permit holders and NMFS should not allow incidental permit holders to apply for the research fishery.

*Response:* The research fishery might include any types of HMS permits, including CHB permits, depending on the research objectives for a given year. These objectives, and the types of vessels that will be considered, will be published annually in advance of research activities so that fishermen with the appropriate permits may apply.

Some of the objectives for the research fishery are to continue to collect sandbar shark landings data to ensure consistent time-series data for future stock assessments and to answer specific research questions concerning shark life history and mechanisms to reduce bycatch, among others. Incidental permit holders have contributed to limited landings of sandbar sharks in the past; therefore, some landings data for sandbar sharks from incidental permit holders in the shark research fishery may be warranted.

*Comment 9:* NMFS should not implement a research fishery because it will take quota away from U.S. fishermen.

*Response:* Quota will not be taken away from U.S. fishermen as a result of the shark research fishery; however, a reduced quota consistent with the recommended TAC will be implemented in this final rulemaking. All of the available sandbar shark quota will be harvested in the shark research fishery. Interested U.S. fishermen will have the opportunity to apply for, and participate in, this fishery which will allow fishermen to harvest and sell sandbar sharks.

*Comment 10:* The research fishery should be limited in its first year (maybe 25-percent of the sandbar quota) so NMFS could figure out how the research fishery process would work. For the rest of the fishery, fishermen could then land some sandbars.

*Response:* There is a limited amount of sandbar shark quota available compared to previous years because NMFS is implementing a TAC and commercial sandbar quota that are consistent with the 2005/2006 sandbar shark stock assessment. Overharvests of sandbar sharks from 2006 and 2007 must also be accounted for, resulting in an adjusted commercial sandbar quota of 87.9 mt dw between 2008–2012. Allocating a small portion of this reduced quota to fishermen outside the shark research fishery would reduce the quota available for the research fishery, limiting NMFS' ability to achieve research objectives.

*Comment 11:* There is an inconsistency in alternative suite 4 regarding the number of vessels that would be allowed to participate in the research fishery. In Chapter 2, it was stated that "[NMFS] is not certain regarding the number of vessels that may participate in the shark research fishery" (pg 2-8), yet in Chapter 4 (pg 4-77), it states "NMFS scientists and managers would select a few vessels (i.e., 5-10) each year to conduct the prescribed research."

*Response:* NMFS is not certain of the exact number of vessels that would be selected for the research fishery. The number of vessels selected depends on research objectives, the number of vessels that qualify to participate in the shark research fishery, and quota available. Inclusion of five to ten vessels in the draft documents associated with the proposed rule provided the public with an estimate of how many vessels may be needed, given historical retention limits and proposed commercial quotas, for the shark research fishery.

*Comment 12:* The Georgia Department of Coastal Resources supports alternative suite 4 but thinks that

unclassified sharks should be grouped as ridgeback and non-ridgeback.

*Response:* NMFS proposed counting unclassified sharks as sandbar sharks in the draft Amendment 2 to the Consolidated HMS FMP to provide an incentive for shark dealers to properly identify the sharks they purchase to the species level. Since the commercial quota for sandbar sharks is the lowest, NMFS had proposed an approach that would ensure that overfishing of sandbar sharks did not occur by providing an incentive for shark dealers to properly identify what they purchase and not list sharks as unclassified. However, NMFS is concerned that too many unclassified sharks being counted as sandbar sharks may fill the sandbar quota and close the shark research fishery prematurely. NMFS will use observer reports from outside the research fishery to determine species/complex (i.e., non-sandbar LCS, SCS, pelagic sharks, sandbar sharks) from which the unclassified sharks should be deducted. This should result in unclassified sharks being counted from a more appropriate assemblage than assuming all unclassified sharks are sandbar sharks and may result in the shark research fishery staying open for a longer period of time.

*Comment 13:* NMFS should implement alternative suite 4 because it will greatly improve data collection prior to the next SEDAR for LCS. It will help re-analyze the life history of sandbar sharks, especially.

*Response:* NMFS prefers alternative suite 4 because it implements a shark research fishery that should provide a limited number of fishermen with the economic incentive to collect valuable scientific data on sharks for NMFS. NMFS will attain information from this research that will help future stock assessments fill in some of the data gaps that previous stock assessments have identified.

*Comment 14:* Alternative suite 4 allows fishing to continue for shark species without having adequate information to responsibly do so. NMFS should limit shark fishing activities until the status of remaining (all sharks but sandbar, dusky, porbeagle) sharks has been determined.

*Response:* NMFS is implementing measures that should reduce fishing mortality of sharks significantly while collecting data for future stock assessments. Without this data, NMFS' ability to conduct future stock assessments would be hampered. Currently, NMFS and other collaborating fishery management entities have completed stock

assessments for all the shark species that have ample data available.

*Comment 15:* NMFS should not implement a lethal sandbar research fishery. NMFS should implement a tag and release research fishery.

*Response:* It is not possible to gather all the necessary biological samples, including reproductive organs and vertebrae, without some shark mortality. Commercial fishermen also need some incentive to participate in the shark research fishery as no other compensation would be provided. Therefore, the shark research fishery will allow data collection and the sale of animals collected to reduce dead discards and waste.

*Comment 16:* NMFS should address bycatch in alternative suite 4. This alternative suite is not adequate to ensure the recovery of depleted sandbar and dusky sharks.

*Response:* This final action should ensure that fishing effort targeting sandbar sharks and non-sandbar LCS is reduced, consistent with stock assessment recommendations. This reduction in fishing effort should result in reductions in bycatch and target catch. Landings of sandbar sharks are expected to decrease by 80-percent. Discards of dusky sharks are expected to decrease by 74-percent. Modifications to retention limits, quotas, and authorized species in commercial and recreational fisheries are expected to decrease bycatch and landings of target species to a level that is consistent with recommendations of the 2005/2006 LCS stock assessment and provides a mechanism for rebuilding of sandbar and dusky sharks.

*Comment 17:* Alternative suite 4 could shift effort to SCS and pelagics.

*Response:* Fishing effort directed at SCS and pelagics may increase; however, these quotas are traditionally not fully utilized and are not being modified at this time with the exception of porbeagle sharks. The commercial quota for porbeagle sharks is being established, based on historical commercial landings, to prevent fishing effort from increasing while the stock is being rebuilt. Should fishing effort increase to the extent that the best available science indicates overfishing is occurring or stocks are overfished or approaching an overfished condition, NMFS will take additional action.

*Comment 18:* The management measures in alternative suite 4 will not adequately prevent the quota overharvests that have historically occurred within this fishery.

*Response:* Maintaining 100-percent observer coverage in the shark research fishery should enable NMFS to monitor

landings in the shark research fishery in near real-time, reducing the likelihood of overharvests. Reducing retention limits outside the research fishery should reduce the number of non-sandbar LCS individual vessels may land each trip, which should prevent directed permit holders from targeting non-sandbar LCS. Instead, directed permit holders are anticipated to incidentally land non-sandbar LCS while they target other species. These measures, coupled with the fact that sandbar shark retention will be prohibited outside the research fishery, may reduce the number of overall trips landing sharks. Lastly, ensuring that shark dealer reports are received by NMFS within ten days of the 15<sup>th</sup> or 1<sup>st</sup> of every month should provide NMFS with the ability to provide more frequent landings updates and close the fishery if necessary to avoid overharvests.

#### 12. Comments on Other Alternative Suites and Management Measures

*Comment 1:* NMFS received several comments on the status quo alternative (alternative suite 1), including: NMFS should maintain the status quo; and NMFS should implement different measures because the status quo clearly is not working and should be abandoned.

*Response:* NMFS chose not to select the status quo alternative as the preferred alternative because it does not end overfishing or implement rebuilding plans for overfished stocks as required under the Magnuson-Stevens Act. NMFS is implementing alternative suite 4, with minor modifications based on further analysis and public comment, because it implements quotas and retention limits necessary to rebuild and end overfishing of several shark species. The final action maximizes scientific data collection by implementing a limited research fishery for sandbar sharks with 100-percent observer coverage. It also mitigates some of the significant economic impacts that are necessary and expected under all alternative suites to reduce fishing mortality as prescribed by recent stock assessments. Thus, the final action strikes a balance between positive ecological impacts that must be achieved to rebuild and end overfishing of depleted stocks while minimizing the negative economic impacts that could occur as a result of these measures.

*Comment 2:* NMFS received several comments on alternative suite 2, including: NMFS should not implement alternative suite 2 because it does not allow ILAP (Incidental Limited Access Permit) holders to land sandbar sharks;

NMFS should implement alternative suite 2 with the caveats that porbeagle sharks be authorized for recreational fishermen and sandbars should be allowed on PLL gear; alternative suite 2 is more protective of sandbar sharks than preferred Alternative 4.

*Response:* NMFS did not prefer alternative suite 2 because incidental permit holders would not be able to land any sharks, which could result in excessive dead discards. There would also be an increased reporting burden for shark dealers, which could result in negative economic impacts for shark dealers.

Under alternative suite 2, porbeagle sharks would be added to the prohibited list for commercial and recreational fishing because porbeagle sharks were determined to be overfished based on the 2005 Canadian stock assessment. In addition, porbeagle sharks often look similar to other prohibited species (i.e., white sharks). Therefore, placing porbeagle sharks on the prohibited species list would prohibit landings and help rebuild this overfished species. It may also stop commercial and recreational landings of other look-alike shark species, such as white sharks, which are also prohibited.

Alternative suite 2 is not more protective of sandbar sharks than alternative suite 4 (the final action). In fact, it could result in more sandbar shark discards compared to alternative suite 4 (43.2 mt dw compared to 13.1 mt dw). In addition, allowing directed shark permit holders to fish for sandbar sharks with PLL gear, especially in the mid-Atlantic closed area, could increase discards and overall mortality of dusky sharks. Thus, sandbar sharks would be prohibited on PLL gear under alternative suite 2 to offer dusky sharks more protection. NMFS estimated that prohibiting the retention of sandbar sharks on PLL gear under alternative suite 2 could reduce dusky discards to 8.6 mt dw per year.

This final action also reduces quotas and retention limits to rebuild depleted shark stocks and end overfishing of several shark species, while minimizing regulatory discards. In addition, the final action should allow for the collection of fishery dependent data for future stock assessments and biological samples for shark research, while also allowing a few shark fishermen to continue to fish and generate revenues from shark landings as they have in the past.

*Comment 3:* NMFS received several comments regarding alternative suite 3, including: NMFS should support a year-round incidental fishery where all participants could keep a few sharks

(including sandbars) to avoid dead discards; NMFS should eliminate the directed shark permit; if NMFS allowed a bycatch industry only, prices for meat might increase because there would be a consistent quantity of sharks year-round; alternative suite 3 is best for retention limits; NMFS should support a revised alternative suite 3 with current reporting requirements and no restrictions for recreational fishermen, except the current species limitations.

*Response:* Positive ecological impacts would likely be more pronounced for some species under the final action (preferred alternative suite 4) compared to alternative suite 3 because discards should be lower under alternative suite 4. For instance, sandbar discards under alternative suite 3 are estimated to be 23.5 mt dw per year, whereas under alternative suite 4, they would be approximately 13 mt dw. In addition, dusky discards under alternative suite 3 are estimated as 20.4 mt dw, whereas they are only 9.2 mt dw under alternative suite 4. Therefore, NMFS is implementing alternative suite 4 at this time.

Economic impacts under alternative suite 3 would vary depending on permit type. For instance, the retention limits under alternative suite 3 are higher than retention limits for incidental permit holders under alternative suite 4 (the final action), possibly resulting in positive economic impacts for incidental shark permit holders. In addition, under alternative suite 3, incidental and directed permit holders would have the same retention limit. This would presumably remove the difference and value between permit types, which may benefit incidental permit holders, but may be detrimental to directed permit holders. Under the final action, directed and incidental permit holders outside the research fishery would have different non-sandbar LCS retention limits based on permit type. This would allow the distinction and difference in value between directed and incidental permit types to continue. In addition, directed and incidental permit holders outside the research fishery would not be able to retain sandbar sharks. This would most likely result in fishermen no longer directing fishing effort on sharks outside the research fishery, which could have negative economic impacts on these fishermen. However, unlike alternative suite 3, in the final action, there will be a small research fishery, which would allow a few shark fishermen to direct effort on sharks and sell their catch. This research fishery would also allow the continuation of fishery dependent data collection to

help with future stock assessments. Therefore, NMFS is implementing alternative suite 4 at this time.

Retention limits under alternative suites 3 and 4 were designed to keep the shark fishery open longer than it has been in the past. This could allow shark products to be available year-round, and possibly avoid gluts in the market, as were experienced in the past when a majority of the shark products were available for a short period of time.

In addition, under alternative suites 3 and 4, NMFS would change the dealer reporting requirements, requiring dealers to mail reports so that they are received by NMFS within 10 days after the reporting period ends. This change should ensure more timely reporting and potentially avoid overharvests. Under alternative suite 3, NMFS considered a list of species that recreational anglers could land; this list did not include blacktip, bull, or spinner sharks because of potential misidentification issues with overfished shark species. However, based on public comment, NMFS is revising this list to allow recreational fishermen to land these species. The diagnostic characteristic for recreational anglers will be the lack of an interdorsal ridge. Recreational fishermen would be allowed to land non-ridgeback LCS plus tiger sharks. This characteristic should allow fishermen to land blacktip, bull, and spinner sharks, but not mistakenly land sandbar or silky sharks, which have an interdorsal ridge and are often mis-identified as dusky sharks. Therefore, given public comment and the revision in the allowable species for recreational anglers, NMFS is implementing alternative suite 4 at this time.

*Comment 4:* NMFS should not use the economic and historical significance of the directed fishery as a basis for selecting alternatives. NMFS did not prefer alternative suite 3 because "it diminishes the economic and historical significance of the directed fishery..." (72 FR 41400).

*Response:* NMFS did not select alternative suite 3 as the preferred alternative because the available sandbar and non-sandbar LCS quota would have been spread out over all directed and incidental permit holders, providing an extremely limited quota to a large number of fishermen. As described above in the response to comment 3 in this section, NMFS did not think this would be the best approach to rebuild the fishery. In addition, directed permit holders would have had the same retention limit as incidental permit holders, which would have diminished the value of directed

shark permits. Under the final action, NMFS is establishing a small research fishery where a small proportion of the directed shark fleet will be able to fish and harvest all shark species, except for prohibited sharks. In addition, NMFS evaluated retention limits of non-sandbar LCS for fishermen operating outside the shark research fishery. NMFS believes it is appropriate to preserve differences between directed and incidental permits and set separate retention limits based on permit type, allowing directed permit holders a higher retention limit than incidental permit holders. This affords directed permit holders, who presumably paid more for their directed shark permit and rely on shark products for a larger part of their income, a higher retention limit than if all permit holders had the same retention limit. Thus, in the final action, NMFS is establishing retention limits of 33 non-sandbar LCS for directed permit holders and 3 non-sandbar LCS retention limit for incidental permit holders.

*Comment 5:* All permit holders should be allowed to keep incidentally-caught sandbar sharks. NMFS should allow an incidental fishery, year-round, for all commercial permit holders.

*Response:* NMFS considered an alternative where all fishermen would be able to keep incidentally caught sandbar sharks under alternative suite 3. However, NMFS is implementing alternative suite 4 because it establishes a small shark research fishery where the sandbar quota would be harvested. This research fishery was not proposed under alternative suite 3, which would have compromised NMFS' ability to collect fishery dependent data needed for future stock assessments. This research fishery would allow NMFS to collect scientific data on sandbar sharks that is essential for future stock assessments. In addition, a few fishermen would be allowed to have some economic benefit from the sale of shark products. Spreading the sandbar shark quota among all fishermen with shark permits would not collect the data NMFS needs to produce accurate stock assessments and would result in low retention limits fleetwide. Therefore, NMFS is implementing alternative suite 4, which should end overfishing of depleted stocks while also mitigating negative economic impacts that would occur as a result of these measures.

*Comment 6:* NMFS received several comments regarding alternative suite 5, including: NMFS should close the shark fishery, considering the poor status of most of the species in the LCS complex, the uncertainty of the blacktip assessment, and the ineffectiveness of

NMFS shark recovery plans to date; a commercial fishery at this time is simply not acceptable; NMFS should support a catch, tag, and release (no finning) fishery only for all shark fisheries; NMFS should not support a commercial LCS fishery because it is not prudent or acceptable; NMFS should just close the sandbar and dusky fisheries; NMFS should be concerned about bycatch; NMFS should keep the Atlantic LCS fishery closed until more is known about these species; NMFS should narrow Alternative 5 to the commercial and large coastal fisheries; and NMFS should consider closing the commercial LCS fishery entirely.

*Response:* NMFS does not believe that closing the entire shark fishery, or establishing a catch and release only fishery, is warranted at this time. In implementing the final action, NMFS is following the recommendations of these latest stock assessments and taking significant steps in this amendment to rebuild overfished sharks, reduce fishing mortality, and allow shark species to rebuild while minimizing economic impacts and achieving optimum yield. While alternative suite 5 would have the most positive ecological impacts for sharks, protected resources, and essential fish habitat (EFH) of the alternative suites considered in this document, closing the Atlantic shark fishery would also incur unnecessary economic impacts on U.S. shark fishermen, shark dealers, shark tournament operators, and others involved in supporting industries. There are numerous species of shark that are not overfished or experiencing overfishing, such as the Gulf of Mexico blacktip sharks, and, therefore, a full closure of the shark fishery is not warranted at this time. Furthermore, by closing the shark fishery, NMFS would lose a valuable source of fishery dependent data (through logbooks and the shark BLL observer program) and biological samples that are essential for future shark stock assessments. Other alternative suites considered by NMFS would strike a balance between ending overfishing and allowing overfished shark stocks to rebuild and allowing some retention of sharks to meet the economic needs of the shark fishing community.

*Comment 7:* NMFS should reconsider a ban on BLL gear to reduce landings/mortality of sandbar and dusky sharks. The argument that more participants will transfer fishing effort to the gillnet fisheries for sharks is unpersuasive.

*Response:* BLL gear is the primary gear used to harvest sharks by shark permit holders and to target non-HMS (i.e., snapper-grouper, reef fish, and

tilefish). Many shark permit holders also maintain permits in these other non-HMS fisheries. Banning retention of sharks caught with BLL gear to reduce landings and mortality of sandbar and dusky sharks could result in regulatory discards of sharks because vessels deploying BLL gear in these other fisheries would have to discard all incidentally caught sharks in the pursuit of other non-HMS species with BLL gear. In addition, by banning BLL gear for sharks, sharks could only be harvested by gillnet gear, rod and reel, or PLL gear. Given concerns of protected species interactions in both the PLL and gillnet fisheries, NMFS concluded that it would not be appropriate to redistribute shark BLL effort into these fisheries. Therefore, NMFS is not banning BLL gear for sharks at this time.

*Comment 8:* NMFS should analyze an alternative suite that banned commercial shark fisheries without restricting the recreational shark fishery to lessen economic impact, overall.

*Response:* NMFS did not analyze a closure of only the commercial shark fishery, while allowing a recreational shark fishery to continue, due to concerns over equity to different sectors. National Standard 4 of the MSA requires that allocation of fishery resources be fair and equitable to all fishermen. Since shark species that are overfished and experiencing overfishing are caught both in the commercial and recreational fisheries, NMFS considered management measures that applied to both sectors that would help rebuild shark stocks and end overfishing. Additionally, since commercial fishermen may sell shark products where recreational fishermen cannot, closing the commercial shark sector could have the largest economic impact. There are also numerous species of shark that are not overfished or experiencing overfishing, and therefore do not warrant a full closure of the commercial or recreational Atlantic shark fishery at this time. Furthermore, by closing the shark fishery, NMFS would lose a valuable source of fishery dependent data (through logbooks and the shark observer programs) that would limit future shark stock assessments. Therefore, NMFS is implementing alternative suite 4.

*Comment 9:* NMFS should not establish a small research fishery because it would benefit few and disadvantage most of the shark fishermen. Everyone should get a chance at the quota, either through ITQs, or by having NMFS open up the fishery on January 1 every year and allowing all fishermen to catch sharks until the quota has been filled.

*Response:* NMFS is implementing the final action to allow for the collection of scientific data with the sandbar shark quota while at the same time allowing a few fishermen to have some economic benefit from the sale of sharks and shark products. Spreading the sandbar shark quota among all fishermen with shark permits would not foster sandbar shark research. While NMFS agrees that ITQs may be beneficial to fishermen, it would take NMFS several years to implement an ITQ system. NMFS is required to end overfishing and implement rebuilding plans for depleted shark stocks under the strict timeframe specified in the Magnuson-Stevens Act. Due to the complexities and time needed to develop and implement ITQs, the time period mandated by the Magnuson-Stevens Act does not allow sufficient time to establish an IFQ or LAPP for sharks. However, NMFS may consider developing an IFQ or LAPP for sharks, as well as other HMS, in the future.

*Comment 10:* The Georgia Coastal Resources Division requests that NMFS include an alternative that would eliminate gillnets because of their large bycatch.

*Response:* In the past, shark gillnet fishermen have had 100-percent observer coverage during the Atlantic Right Whale calving season and approximately 30-percent observer coverage during the rest of the year; with observers documenting all bycatch on observed trips. Based on this observer data, compared to other gear types, such as PLL gear, gillnet gear has relatively low bycatch, with finfish bycatch ranging from 1.3 to 13.3-percent and observed sea turtle and marine mammal bycatch of less than 0.1-percent. Given the reduction in trip limits as a result of this amendment, and the four to six vessels that currently use strike or drift gillnet gear for sharks, NMFS does not believe there would be a significant increase in shark gillnet fishing pressure in the future and, therefore, NMFS does not feel it is appropriate to eliminate gillnets as an authorized gear at this time.

*Comment 11:* None of the suites completely represent the interests of the fishery.

*Response:* The alternative suites represent a range of management measures derived from scoping and public comment that could be considered based on stock assessments. NMFS assessed the impacts of the alternative suites, reviewed all public comments, and utilized the best available data to make a final analysis. NMFS is implementing alternative suite 4 because it implements quotas and retention limits necessary to rebuild and

stop overfishing of several shark species. Alternative suite 4 maximizes scientific data collection by implementing a limited research fishery for sandbar sharks with 100-percent observer coverage. It also mitigates some of the significant economic impacts that are necessary and expected under all alternative suites to reduce fishing mortality as prescribed by recent stock assessments. Ultimately, the final action strikes a balance between positive ecological impacts that must be achieved to rebuild and stop overfishing of depleted stocks while minimizing the negative economic impacts that could occur as a result of these measures.

*Comment 12:* We are concerned about wasteful discards under the proposed alternatives. NMFS should encourage responsible and targeted fishing by providing incentives for fishermen who can fish without discards or minimal discards.

*Response:* NMFS believes that the reduced trip limits (which is approximately one quarter of the current trip limit for directed fishermen under the status quo) and the prohibition on retention of sandbar sharks outside the research fishery will likely result in directed fishermen no longer targeting non-sandbar LCS. Currently, most of the discards of dusky, sandbar, and other shark species come from the directed shark fishery. The only directed shark fishing that could occur under the final action would be within the research fishery. Thus, under the final action where most fishermen would target other species and only incidentally catch non-sandbar LCS, NMFS does not anticipate excessive shark discards. For instance, based on shark BLL observer program data, on average, non-shark BLL trips caught one sandbar shark per trip and 12 non-sandbar LCS. The retention limits of 33 non-sandbar LCS per trip for directed permit holders could allow fishermen to keep incidentally caught non-sandbar LCS as they target other species. In addition, these non-shark trips typically have much shorter soak times (2–3 hours) compared to shark trips (12–14 hour soak times). Thus, it is estimated that most sandbar bycatch could be released alive since they would be released from longline gear in a relatively short period of time.

### 13. Science

*Comment 1:* NMFS received several comments regarding the rebuilding timeframe for sandbar sharks stating that NMFS should take a more precautionary approach rather than the maximum rebuilding timeframe of 70 years for sandbar sharks and that NMFS

should consider a total ban on sandbar shark landings in all fisheries and an accelerated rebuilding timeframe of 38 years.

*Response:* The 2005/2006 LCS stock assessment discussed three rebuilding scenarios, including: rebuilding timeframe under no fishing; a TAC corresponding to a 50-percent probability of rebuilding by 2070; and a TAC corresponding to a 70-percent probability of rebuilding by 2070. Under no fishing, the stock assessment estimated that sandbar sharks would rebuild in 38 years. Under the NS 1 guidelines, if a species requires more than 10 years to rebuild, even in the absence of fishing mortality, then the specified time period for rebuilding may be adjusted upward by one mean generation time. Thus, NMFS added a generation time (28 years) to the target year for rebuilding sandbar sharks. The target year is the number of years it would take to rebuild the species in the absence of fishing, or 38 years for sandbar sharks. NMFS determined that the rebuilding time that would be as short as possible for sandbar sharks would be 66 years, taking into account the status and biology of the species and severe economic consequences on fishing communities. This would allow sandbar sharks to rebuild by 2070, given a rebuilding start year of 2004, the last year of the time series of data used in the 2005/2006 sandbar shark stock assessment. Since sharks are caught in multiple fisheries, to meet the rebuilding timeframe under a no fishing scenario, NMFS would have to implement restrictions in multiple fisheries to eliminate mortality, such as entirely shutting down multiple fisheries to prevent bycatch. If NMFS were to shut down the shark fishery completely, such action would likely have severe economic impacts on the fishing community and it would likely result in difficulties for Council-managed and Commission-managed fisheries, which often catch sharks as bycatch. In addition, prohibiting all fishing for sharks would impact NMFS' ability to collect data for future management.

The assessment assumed that fishing mortality from 2005 to 2007 would be maintained at levels similar to 2004 (the last year of data used in the stock assessment was from 2004) and that there would be a constant TAC between 2008 and 2070. Based in part on these assumptions, the assessment estimated that sandbars would have a 70-percent probability of rebuilding by 2070 with a TAC of 220 mt ww (158 mt dw)/year and a 50-percent probability of rebuilding by 2070 with a TAC of 240

mt ww (172 mt dw)/year. As described previously, NMFS is using the 70-percent probability of rebuilding to ensure that the intended results of a management action are actually realized given the life history traits of sandbar sharks.

*Comment 2:* NMFS received a comment stating disagreement with the science that suggests there is a decline in sandbar sharks because the industry went over their quota by 300-percent in two weeks and therefore shark populations are healthy and abundant.

*Response:* NMFS used the best available science and a rigorous SEDAR assessment process to make the determination that sandbar sharks are overfished. Recent landings and higher catch rates do not necessarily indicate errors in the stock assessment, or that the sandbar shark populations have recovered. Catch rates alone do not tell the whole story, nor do percentages because they may be a reflection of lower quotas as described in further detail below. Most catch rate series show stable or unclear trends in recent years, but large declines occurred in the late 1970s and 1980s. There has been a commercial quota imposed on the shark fishery since 1993; stable landings in the last decade most likely reflect the effect of a commercial quota, not necessarily a stable population. For instance, commercial catch declined from 162,000 individuals in 1989 to 72,600 individuals in 1993 prior to implementation of the commercial quota. A 300-percent overharvest of LCS does not necessarily mean that more sharks were being caught or that it represents a healthy shark population; rather, it may be the result of significantly reduced LCS quotas due to overharvests in recent years and fishermen continuing to fish at effort levels similar to those set in 2003 and 2004.

*Comment 3:* NMFS received a comment stating that fishermen/dealers do not properly identify what they are catching, which may have impacted the results of the stock assessment.

*Response:* Since 1993, species-specific reporting has been required for shark fishermen and shark dealers. However, some fishermen and dealers still report sharks in more general terms as "sharks" or "large coastal sharks". These unclassified sharks have been problematic for shark stock assessments. Fisheries observers are trained in species-specific identification and report the correct species-level data. Thus, NMFS uses observer data to determine species composition of unclassified sharks for stock assessment purposes. In addition, recognizing that

the accuracy of stock assessments and management can be improved with correct species identification, NMFS established mandatory shark identification workshops for shark dealers in regulations implementing the Consolidated HMS FMP. The objective of these workshops is to reduce the number of unknown and improperly identified sharks reported in the dealer reporting form, and to increase the accuracy of species-specific dealer reported information, quota monitoring, and the data used in stock assessments. These workshops train shark dealers to properly identify Atlantic shark carcasses. NMFS is also developing an identification guide of the authorized species for recreational anglers.

*Comment 4:* NMFS received a comment stating that 80-percent of the landings in the VIMS dataset were sandbar sharks. The VIMS data says there are no large sandbar sharks. However, we see large adult sandbar sharks all the time, and their size has not changed over time.

*Response:* The Virginia Institute of Marine Science's BLL survey examines catch rates for the LCS complex and sandbar sharks. This survey has sampled a set of seven stations since 1974. Over this time, the survey has collected over 5,200 sandbar sharks and more than 6,000 LCS. Over the course of the study (1974–2004), both the sandbar shark and the LCS complex showed significant declines, with no signs of recovery for all age classes. Because of a number of factors including environmental changes, the gear used, random sampling scheme used, and experience and efficiency of fishermen, the number of sharks seen by one person or in one year may not be representative of the stock as a whole. The stock assessment included a variety of data sources, which taken together indicated a decline in the sandbar shark population.

*Comment 5:* NMFS received several comments regarding the results of the 2005/2006 LCS stock assessments, specifically that 1) the science used in the LCS assessment for 2006 was questionable, and the stock assessment needs to be re-done before Amendment 2 is finalized, 2) the science regarding sandbar sharks is flawed, 3) that information/data was left out of the stock assessment, 4) that the stock assessment does not represent the best available science as indicated by the independent stock assessment specialists, and 5) that the specialists raised issues that needed future research.

*Response:* The 2005/2006 LCS complex, sandbar, and blacktip shark

stock assessments were conducted using the SEDAR process. SEDAR is organized around three workshops. The first is the data workshop, during which fisheries, monitoring, and life history data are reviewed and compiled. The second is the assessment workshop, during which assessment models are developed and population parameters are estimated using the information provided from the data workshop. The final workshop is the review workshop, during which independent experts review the input data, assessment method, and assessment products. All of the workshops are open to the public to ensure the assessment process is transparent. The review workshop panel consists of a chair and 2 reviewers appointed by the CIE, an independent organization that provides independent, expert reviews of stock assessments and related work. With regard to the LCS complex assessment, the review panel determined that the data utilized in the assessment were the best available at the time. For the sandbar shark assessment, the review panel concluded that the population model and resulting population estimates were the best possible given the available data. The review panel was also confident that the 2005/2006 sandbar shark assessment produced more reliable estimates of stock status than previous stock assessments because the SEDAR stock assessment resulted in a more thorough review at all stages of the process. For the blacktip shark assessment in the Atlantic and Gulf of Mexico, the review panel determined that the data were treated appropriately, were adequate for the models used to assess the stocks and represented the best estimates of assessment information currently available. As one of the Terms of Reference for the Review workshop, the review panel was asked to develop recommendations for future research for improving data collection and stock assessments. These research recommendations are customary not only during the review workshop but also during the data and assessment workshops and do not imply that the current research used in the stock assessment was insufficient. For a complete review of the documents used in the stock assessment, please visit <http://www.sefsc.noaa.gov/sedar/Workshops.jsp?WorkshopNum=11>.

Therefore, NMFS believes that the 2005/2006 LCS complex, blacktip and sandbar shark stock assessments represent the best available science and is not re-doing the stock assessments before implementing management

measures in Amendment 2 to the Consolidated HMS FMP. Under the NS1 Guidelines, if a stock is overfished, NMFS is required to "take remedial action by preparing an FMP, FMP amendment, or proposed regulation...to rebuild the stock or stock complex to the MSY level within an appropriate time frame" (50 CFR 600.310(e)(3)(ii)). Additionally, "in cases where a stock or stock complex is overfished, [the] action must specify a time period for rebuilding the stock or stock complex that satisfies the requirements of section 304(e)(4)(A) of the Magnuson-Stevens Act." Therefore, consistent with the results of the 2005/2006 LCS complex, blacktip and sandbar shark stock assessment results, the Consolidated HMS FMP and the Magnuson-Stevens Act, NMFS is implementing final management measures to rebuild sandbar, dusky, and porbeagle sharks while providing an opportunity for the sustainable harvest of blacktip sharks and other sharks in the LCS complex.

*Comment 6:* NMFS received a comment stating that offers from an industry representative to give shark fin data to NMFS were refused and therefore historic fin data must have been left out of the assessment.

*Response:* NMFS included all data from both the shark fin and carcass landings recorded and submitted by Federally permitted dealers, as required by the regulations at § 635.5(b)(1)(i), in the 2005/2006 LCS stock assessments. In addition, during the data workshop for the 2005/2006 LCS stock assessments, the public, including industry and environmental representatives, were invited to submit data in the appropriate format to be considered for the stock assessment. If the data were not submitted in the appropriate format for assessment scientists to determine the applicability of the data, then they were not included in the assessment. The public will have additional opportunities to submit data during the data workshop at the next LCS stock assessment. This data will be considered for the stock assessment provided that it is submitted in the appropriate format.

*Comment 7:* NMFS should have used the data from the Oregon II index which showed that the catch per unit effort was increasing.

*Response:* The NOAA Research Vessel Oregon II data was included in the 2005/2006 LCS complex, blacktip, and sandbar shark stock assessments. The SEFSC's Mississippi Laboratories has conducted standardized BLL surveys from the Oregon II in the Gulf of Mexico, Caribbean and Southern North Atlantic since 1995. The data were

reviewed by the indices working group at the data workshop. This data showed that blacktip shark catch rates, when combined with year, area, and depth as variables, increased in later years in the Gulf of Mexico and were low with breaks in the time series in the Atlantic south of 37°. The sandbar shark catch rates in the Gulf of Mexico and Atlantic, combined with year, area, and depth, stayed about the same over the data time series. This data set was just one of many data sets related to abundance indices included in the 2005/2006 stock assessment.

*Comment 8:* NMFS received a comment stating that NMFS should have included Mexican data of shark catches in the 2005/2006 LCS assessment.

*Response:* The 2005/2006 LCS complex, blacktip, and sandbar shark assessments did include detailed estimates of Mexican catches of blacktip and sandbar shark for the period of 1962–2000. Species composition in weight for different sharks taken in Mexican waters was estimated from the data given in several Mexican studies. These were then used to estimate the total weight and numbers caught of each species in each state. In addition, annual estimates from 2000–2004 of illegal catches of LCS from Mexican fishing vessels fishing in the U.S. EEZ were also included in the 2005/2006 LCS stock assessments.

*Comment 9:* NMFS received a comment stating that NMFS does not need to implement an amendment to the Consolidated HMS FMP until July 12, 2009.

*Response:* The mandate to rebuild overfished stocks is in section 304(e) of the Magnuson-Stevens Act. The Magnuson-Stevens Act states that for stocks identified as overfished or having overfishing occurring, the Secretary of Commerce or the relevant Council, as appropriate, shall prepare a fishery management plan, plan amendment, or proposed regulations for the fishery to end overfishing in the fishery and rebuild affected stocks within one year of that determination. NMFS satisfied that timing provision: sandbar sharks and dusky sharks were determined to be overfished with overfishing occurring on November 7, 2006 (71 FR 65086), and NMFS published the draft Amendment 2 to the Consolidated HMS FMP on July 27, 2007 (72 FR 41325). NMFS notes that the 2006 Magnuson-Stevens Fishery Conservation and Management Reauthorization Act amended section 304(e) to include a two-year timing provision for preparation and implementation of actions, and the new management

measures contained in 2006 Magnuson-Stevens Fishery Conservation and Management Reauthorization Act will be effective July 12, 2009.

*Comment 10:* NMFS received several comments regarding conflict of interest, including, 1) there was a conflict of interest at the LCS assessment workshop and review workshop; 2) several reviewers were biased against the industry; 3) the stock assessment is fixed to give a particular outcome based on pressures by conservationists, and; 4) there are conflicts of interest between NMFS employees and the American Elasmobranch Society which should invalidate all studies and assessments.

*Response:* NMFS does not believe that there was any conflict of interest on the part of participants or reviewers in the stock assessment process. The third workshop in the SEDAR process is the review workshop during which a panel of independent experts reviews the input data, assessment methods, and assessment products. This workshop is open to the public. The review workshop panel consists of a chair and two reviewers appointed by the CIE, an independent organization that provides independent, expert reviews of stock assessments and related work. The individuals appointed to the review panel can have no affiliation with any of the affected parties to the assessment, including government, industry, or advocacy groups. The review workshop chair is appointed by the CIE. Two additional reviewers, selected by the Shark SEDAR Coordinator for their expertise in shark stock assessments, were also included on the LCS shark complex review panel. The panel concluded that the data used in the analyses, the assessment approach, and overall conclusions of the assessment were valid. The panel provided no indication that there were any conflicts of interest during the assessment process.

The American Elasmobranch Society (AES) is a non-profit organization that seeks to advance the scientific study of living and fossil sharks, skates, rays, and chimaeras, and the promotion of education, conservation, and wise utilization of natural resources. The Society holds annual meetings and presents research reports of interest to students of elasmobranch biology. Those meetings are held in conjunction with annual meetings of the American Society of Ichthyologists and Herpetologists each year at rotating North American venues. Membership in the AES is open to any person who has an interest in the object of AES. Members of AES include, but are not limited to, representatives from state

and federal governmental and non-governmental organizations, and academic institutions. NMFS employees are not restricted from participating in professional societies and, to the extent that participation aids in the collaboration, communication, and peer-reviews in the scientific endeavors of NOAA's mission, employees are encouraged to participate. While participating, employees must differentiate between when they are providing their own personal opinion or when they are acting as a representative of NOAA. Therefore, participation of NMFS employees in AES activities does not necessarily constitute a conflict of interest. In this case, there is no evidence from which NMFS can conclude that a conflict of interest occurred.

*Comment 11:* NMFS should assess the eleven prohibited LCS species individually and in a public forum and the shark stock assessments should break out all sharks by species, especially bull sharks, scalloped hammerhead sharks, and tiger sharks.

*Response:* NMFS continues to collect species-specific data in support of species-specific stock assessments. To date, NMFS has conducted individual stock assessments for dusky, sandbar, blacktip, Atlantic sharpnose, finetooth, blacknose, and bonnethead sharks. As additional biological and fishery-related data become available, NMFS will conduct other species-specific stock assessments.

*Comment 12:* NMFS possessed certain species-specific knowledge regarding blacktip sharks that it failed to produce for the assessment.

*Response:* NMFS has included all the available data that were presented at the data workshop and has not withheld or failed to produce relevant datasets. NMFS held a data workshop for the 2005/2006 LCS stock assessment that was open to the public and requested that participants, including industry and environmental representatives, submit any relevant data or analysis in the form of working documents. During the assessment workshop, the assessment scientists determined the adequacy and appropriateness of the submitted data to be included in each assessment.

*Comment 13:* Why did the 2005/2006 LCS stock assessment not assess sandbars as two separate populations, one in the Gulf of Mexico and one in the Atlantic similar to what was done for blacktip sharks?

*Response:* During the data workshop portion of the LCS stock assessment, the life history working group looked at multiple studies and data sources to

summarize life history information such as stock definition, age, growth size at maturity, and mortality for sandbar and blacktip sharks that was then used in the stock assessments for each species. For sandbar sharks, after considering the available data, the working group decided that the stock definition should be the Western North Atlantic from southern New England to the Gulf of Mexico. Tagging studies suggest that one stock unit exists from Cape Cod south down the U.S. Atlantic coast and into the Gulf of Mexico, extending around the U.S. and Mexican portions of the Gulf of Mexico to the northern Yucatan peninsula. Genetic studies conducted on specimens from Virginia waters and the Gulf of Mexico further support the existence of a single stock that utilizes the area of Cape Cod to the northern Yucatan peninsula. For blacktip sharks, conventional tagging evidence suggests little exchange between the U.S. Atlantic Ocean and Gulf of Mexico. Genetic heterogeneity and female philopatry also demonstrates multiple genetic reproductive stocks among blacktip sharks in the Gulf of Mexico and South Atlantic Bight. Therefore, blacktip sharks were divided into two stocks: an Atlantic stock defined as extending from Delaware to the Straits of Florida, and a Gulf of Mexico stock designated as extending from the Florida Keys throughout the Gulf of Mexico.

*Comment 14:* NMFS received a comment asking who the peer reviewers were for the 2006 dusky assessment.

*Response:* In order to preserve the integrity of the independent review process of stock assessments, NMFS does not provide the names of the peer reviewers, including those used for the dusky shark assessment.

*Comment 15:* NMFS received several comments regarding the continuation of shark data collection once Amendment 2 is implemented, asking how NMFS would conduct stock assessments with no data from fishermen, and stating that NMFS should obtain more data from the fishermen by placing scientists on fishing vessels.

*Response:* This final action will establish a small research fishery to harvest the entire commercial sandbar shark quota. Vessels operating within the shark research fishery can also retain non-sandbar LCS, SCS and pelagic sharks. These vessels will also have 100-percent observer coverage. Vessels operating outside of the shark research fishery will only be able to retain non-sandbar LCS, SCS, and pelagic sharks. The vessels outside the shark research fishery will continue to be selected for observer coverage.

Observers provide baseline characterization information, by region, on catch rates, species composition, catch disposition, relative abundance, and size composition within species for the large coastal and small coastal shark BLL fisheries. NMFS will use observer data as well as logbook and shark dealer data and fisheries independent data to conduct stock assessments in the future.

*Comment 16:* NMFS received a comment supporting stock assessments that occur in the United States and not those that occur in other countries.

*Response:* To date, the United States has not conducted a stock assessment on porbeagle sharks. NMFS has reviewed the Canadian stock assessment and found that it made full use of all fishery and biological information available and therefore deems it to be the best available science and appropriate to use for U.S. domestic management purposes. Canada has conducted stock assessments on porbeagle sharks in 1999, 2001, 2003, and 2005. Reduced Canadian porbeagle quotas in 2002 brought the 2004 exploitation rate to a sustainable level. According to the 2005 recovery assessment report conducted by Canada, the North Atlantic porbeagle stock has a 70-percent probability of recovery in approximately 100 years if fishing mortality is less than or equal to 0.04. The Canadian assessment indicates that porbeagle sharks are overfished ( $SSN_{2004}/SSN_{MSY} = 0.15 - 0.32$ ;  $SSN$  is spawning stock number and used as a proxy for biomass). However, the Canadian assessment indicates that overfishing is not occurring ( $F_{2004}/F_{MSY} = 0.83$ ). Based on these results, NMFS determined that porbeagle sharks are overfished, but that overfishing is not occurring (71 FR 65086).

*Comment 17:* NMFS received a comment asking if shark migration patterns have been studied along with sea surface temperatures.

*Response:* Sea surface temperature is an important physical data parameter that is collected during investigations of shark migration patterns. The data workshop for the 2005/2006 LCS stock assessment included several studies investigating the correlation of sea surface temperature and shark migration patterns. A summary of these studies and reference citations can be found in the SEDAR 11 final stock assessment report available on the HMS website at [http://www.nmfs.noaa.gov/sfa/hms/hmsdocument\\_files/sharks.htm](http://www.nmfs.noaa.gov/sfa/hms/hmsdocument_files/sharks.htm).

*Comment 18:* Does NMFS have an idea of the status of common threshers? It seems that they are abundant.

*Response:* To date, NMFS has not conducted a species-specific stock

assessment for thresher sharks and their status in the Atlantic Ocean is unknown. However, commercial landings data compiled from the most recent stock assessment documents indicate that approximately 307,291 lb dw of thresher sharks have been landed from 2000 to 2005. Recreational landings data obtained from the recreational landings database for HMS indicates approximately 8,000 thresher sharks have been harvested in the Atlantic HMS recreational shark fishery from 1999 to 2005.

*Comment 19:* NMFS should implement the status quo, Alternative 1, because this is the only viable option for Amendment 2 until the scientific issues that have been raised are addressed and resolved.

*Response:* As described in response to comments 5 and 10 in this section, NMFS disagrees that the results of the LCS assessment should be put on hold due to concerns raised about the scientific validity and impartiality of reviewers. NMFS has carefully reviewed and considered all public comments received on the assessment and determined that the assessment was appropriate, used the best scientific data available, and is scientifically valid. The 2005 Canadian porbeagle shark stock assessment, the 2006 dusky shark assessment, and the 2005/2006 LCS stock assessment determined that porbeagle, dusky, and sandbar sharks are overfished. Overall, the status quo alternative, which would maintain the current annual LCS quota of 1,017 mt dw, in conjunction with the management measures mentioned above, would have negative ecological impacts on sandbar, dusky and porbeagle sharks, as well as protected resources and marine mammals. The social and economic impacts would likely be neutral because current fishing effort would remain the same in the short term. In the long term, as stocks continue to decline, profits may decrease as costs associated with finding and catching these depleted stocks increases. Management measures are needed to rebuild overfished stocks and prevent overfishing consistent with the mandates of the Magnuson-Stevens Act. Therefore, maintaining the LCS quota of 1,017 mt dw would be inconsistent with the Magnuson-Stevens Act and the recent LCS stock assessment that recommended a TAC of 158.3 mt dw for sandbar sharks in order for this species to rebuild by 2070. Current fishing effort, under the status quo alternative, would lead to continued overfishing of sandbar, porbeagle and dusky sharks, which would prevent these species from rebuilding in the

recommended timeframe. As a result, rather than implementing this alternative, NMFS is implementing the quotas and retention limits necessary to rebuild and stop overfishing of several shark species while maximizing scientific data collection by implementing a limited research fishery for sandbar sharks. The final management measures also mitigate some of the significant economic impacts that are necessary and expected under all alternative suites 2 through 5 to reduce fishing mortality as prescribed by recent stock assessments. The final management measures strike a balance between positive ecological impacts that must be achieved to rebuild and stop overfishing of depleted stocks while minimizing the severity of negative economic impacts that could occur as a result of these measures. By allowing a limited number of historical participants to continue to harvest sandbar sharks within the research fishery, NMFS ensures that data for stock assessments and life history samples would continue to be collected. Directed permit holders not selected to participate in the shark research fishery would still be authorized to land 33 non-sandbar LCS per vessel per trip and incidental permit holders would be authorized to land 3 non-sandbar LCS per trip. This should limit the number of trips targeting non-sandbar LCS sharks; however, it should still afford the opportunity to keep non-sandbar LCS that are landed incidentally, preventing excessive discards.

*Comment 20:* The stock assessment is flawed because sandbar sharks do not occur west of Mobile, Alabama.

*Response:* The stock assessment represents the best available science and included all data that was presented at the Data Workshop for the 2005/2006 LCS stock assessment. Included in the assessment are fishery independent shark surveys that were conducted from 1995–2005 from the NOAA Research Vessel Oregon II. The results of that survey can be found in LCS05–06–DW–27. This survey showed the capture of sandbar sharks in the Gulf of Mexico, including west of Mobile, Alabama (see Figure 4 within LCS05–06–DW–27).

#### 14. National Standards

*Comment 1:* The proposal to prohibit blacktip sharks in the recreational fishery violates NS2 of the Magnuson-Stevens Act because the stock assessment determined that blacktip sharks in the Gulf of Mexico are not overfished.

*Response:* NS2 requires that conservation and management measures be based upon the best scientific

information available. NMFS believes that the 2005/2006 LCS stock assessment constitutes the best available science. The 2005/2006 LCS complex, sandbar, and blacktip shark stock assessments were conducted using the SEDAR process. SEDAR is organized around three workshops. All of the workshops are open to the public to ensure that the assessment process is transparent. The review workshop panel consists of a chair and 2 reviewers appointed by the CIE, an independent organization that provides independent, expert reviews of stock assessments and related work. With regard to the LCS complex assessment, the review panel determined that the data utilized in the assessment were the best available for analysis at the time. For the sandbar shark assessment, the review panel concluded that the population model and resulting population estimates were the best possible given the available data. The review panel was also confident that the 2005/2006 sandbar shark assessment produced more reliable estimates of stock status than previous stock assessments because the SEDAR stock assessment resulted in a more thorough review at all stages of the process. For the blacktip shark assessment in the Atlantic Ocean and Gulf of Mexico, the review panel determined that the data were treated appropriately, were adequate for the models used to assess the stocks and represented the best estimates of assessment information currently available.

In the proposed rule, NMFS proposed an authorized recreational species list that was limited to those species that are easy to identify or that could not be misidentified with other species. NMFS originally proposed to prohibit the retention of blacktip sharks because of the potential for misidentification with spinner sharks, but specifically asked for public comment on the proposed list of prohibited species. As a result, based on public comments received and because blacktip sharks are healthy in the Gulf of Mexico, NMFS is implementing an amended authorized shark species list in the recreational fishery. The amended list is based on readily identifiable characters such as the lack of an inter-dorsal ridge, and allows the landing of non-ridgeback LCS plus tiger sharks. This amended list adds blacktip, spinner, finetooth, porbeagle and bull sharks to the list of authorized species for recreational anglers in all regions.

*Comment 2:* NMFS violated NS4 of the Magnuson-Stevens Act because the commercial fishery will be allowed to catch their TAC and the recreational

fishery cannot catch the same species of sharks.

*Response:* NS4 requires that conservation and management measures shall not discriminate between residents of different States, not between participants in different fisheries. The commenter is concerned about perceived discrepancies between allocations to the recreational versus commercial fisheries, which is not a NS4 issue. Based on public comments, NMFS is modifying the list of authorized species in the recreational shark fishery to address concerns expressed by certain states that prohibiting blacktip and other sharks would unfairly discriminate against the recreational fishery. This amended list more closely aligns with the authorized species in the commercial fishery. NMFS would continue to prohibit sandbar and silky sharks in the recreational fishery due to concerns of misidentification with dusky sharks and because sandbar sharks are overfished. However, most of the commercial sector will not be able to retain sandbar sharks unless fishermen participate in the shark research fishery. Thus, other than in the shark research fishery, NMFS is prohibiting the retention of sandbar sharks in both the commercial and recreational sectors.

*Comment 3:* NMFS violated NS8 of the Magnuson-Stevens Act because Port Aransas is a fishing community and was not treated as such in the analysis.

*Response:* NS8 requires that conservation and management measures shall, consistent with the conservation requirements of the Magnuson-Stevens Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities. NMFS recognizes the importance of Port Aransas, TX and numerous other communities as fishing communities. A social impact and community profile assessment was completed for the 2006 Consolidated HMS FMP. While this community profile assessment did not focus on Port Aransas, TX, Chapter 9 of the Consolidated HMS FMP includes an analysis of the State of Texas as a whole and makes note of specific fishing communities within the state that are important to HMS fishing, including Port Aransas, TX. Because this analysis was recently completed, it was not repeated for the Draft EIS for Amendment 2 to the Consolidated HMS

FMP; however, it was referred to in the Draft EIS for Amendment 2 to the Consolidated HMS FMP. The Final EIS for Amendment 2 to the HMS FMP includes a recently completed report by MRAG Americas, Inc., and Jepson (2008) that provides updates to the social impact and community profile assessments for HMS dependent fishing communities. This report can be found in Appendix E and includes Port Aransas.

*Comment 4:* NMFS violated NS9 of the Magnuson-Stevens Act because all the proposed prohibited species will be released and some will die and, thus, bycatch will not be minimized.

*Response:* NS9 says that conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch. The reduced commercial shark quotas and retention limits being finalized in this rule are expected to greatly reduce bycatch of target and non-target species. Because of the reduced retention limits outside the research fishery, it is likely that fishermen will not target non-sandbar LCS. In addition, retention limits under the final management measures are such that fishermen targeting non-shark species should be able to retain incidentally caught non-sandbar LCS. Soak times in non-shark BLL and gillnet fisheries are also much shorter than commercial shark sets; these shorter soak times should increase post-release survival of sandbar sharks. Regulatory discards were taken into consideration when determining the quotas and retention limits of sandbar and non-sandbar sharks both inside and outside of the research fishery. In addition, commercial fishermen using BLL and PLL gear are required to have specified safe handling and release gear on board, which should help release shark bycatch in such a manner as to maximize post-release survival. In the recreational fishery, NMFS is modifying the list of authorized species. This amended list more closely aligns with the authorized species in the commercial shark fishery. NMFS intends to increase educational outreach to the recreational fishing sector to increase shark identification to avoid misidentification with prohibited species. Bycatch in the recreational fishery is also minimized because soak times are considerably less than those in commercial fisheries.

#### 15. Economic Impacts

*Comment 1:* NMFS should consider an alternative suite that incorporates a "phase out" of the commercial shark

industry. The present stock situation is untenable. Prolonged rebuilding periods are not acceptable. Managing a minimal yet unsustainable large coastal shark fishery violates NS1 of the Magnuson-Stevens Act. The costs of management far outweigh the benefits to a small number of fishermen who target sharks commercially.

*Response:* NMFS did consider a suite in the Draft EIS that would have ended Atlantic commercial shark fishing, alternative suite 5. Under this proposed alternative, shark landings would be limited to research and the collection for public display via the HMS EFPs. Recreational fisheries would be catch and release only. However, after careful consideration of the other alternatives, this alternative suite was not selected.

Longer rebuilding periods are allowed under NS1 of Magnuson-Stevens Act when the following conditions specified in the NS 1 Guidelines (50 CFR 600.310(e)(4)(ii)(B)(3)):

[i]f the lower limit is 10 years or greater, then the specified time period for rebuilding may be adjusted upward to the extent warranted by the needs of fishing communities....except that no such upward adjustment can exceed the rebuilding period calculated in the absence of fishing mortality, plus one mean generation time or equivalent period based on the species' life-history characteristics.

NMFS recognizes that the costs of managing the shark fishery relative to the level of future shark fishing activity will be high. However, there are non-monetary benefits associated with maintaining a limited commercial shark industry. These benefits include the ability to continue gathering fishery data, maintenance of industry knowledge regarding shark fishing practices, and other potential cultural and social benefits. The final action attempts to balance the economic needs of fishing communities with the recommendations of recent stock assessments. BLL and gillnet gear will continue to be deployed in other fisheries that interact with sharks. Setting a retention limit that allows fishermen to keep a portion of these fish without targeting non-sandbar LCS should minimize dead discards while discouraging targeting of non-sandbar LCS. Allocating the entire sandbar shark quota to a shark research fishery quota should result in collection of data that could improve future stock assessments and the development of management measures for the fishery.

*Comment 2:* NMFS received several comments regarding an industry buyout/buyback. These comments include: the environmentalists should fund a buyout of the commercial shark fishery; NMFS should consider a buyout

to provide financial relief for the shark fishermen that will be put out of business as a result of the preferred alternative; NMFS should buy all of the directed shark permits for \$50,000 to \$100,000 because NMFS sold them to fishermen and created this problem; the industry is not in favor of a 5-percent tax to come up with buyout money; a buyout plan aimed at removing longline and gillnet vessels from the shark fishery and other fisheries would reduce fishing pressure, reduce bycatch and protected species interactions, and would address NMFS' concern that further reducing shark landing quotas will result in redistribution of fishing effort into other equally harmful fisheries.

*Response:* NMFS recognizes that some participants of the Atlantic shark fishery expressed interest in reducing fishing capacity for sharks via some form of buyout program. Buyouts can occur via one of three mechanisms, including: through an industry fee, via appropriations from the United States Congress, and/or funding provided from any State or other public sources or private or non-profit organizations. NMFS cannot independently initiate a buyout. Because NMFS is unable to implement a buyout as a management option, a buyout plan is not proposed in this amendment, despite requests for consideration from the HMS Advisory Panel and other affected constituents.

The shark fishery did develop an industry "business plan" that examined options for a buyout, which is further described in Chapter 1 of the Draft EIS.

*Comment 3:* NMFS should look at data on the number of commercial permit holders by state and the socio-economic impacts of the proposed measures on these fishermen.

*Response:* NMFS examined the number of commercial permit holders by state. This information was presented in Table 9.1 of the Draft EIS. The socio-economic impacts of the preferred measures were analyzed in Chapters 6, 7, and 8 of the Draft EIS for Amendment 2.

*Comment 4:* NMFS received several comments concerning the potential for severe economic impacts associated with all of the alternatives considered (other than status quo). Comments indicated a concern that many fishermen may not be able to survive economically until the next stock assessment. One dealer for example saw a 75-percent decrease in revenue in 2007 because of restrictions. The lack of a shark season in 2008 could bring about a financial collapse of the industry. The industry is completely based on sandbar sharks.

*Response:* NMFS has estimated that the alternatives considered, including the no action alternative, would result in economic consequences to the shark fishery. The severity of the economic consequences varies by alternative suite, with alternative suite 5, the complete closure of the Atlantic shark fishery, having the greatest economic impact. The economic impacts of the various alternative suites are summarized in Table 7.5 of the EIS for Amendment 2.

NMFS acknowledges that dealer impacts could also be substantial and could vary significantly by dealer, depending upon how important sharks are to their operations.

NMFS recognizes the importance of sandbar shark landings to the shark fishing sector. However, sandbar shark landings only comprised 30-percent of the estimated total value of the shark fishery in 2005 (\$602,764 in sandbar shark meat and \$1,181,803 in fins, versus a total shark fishery revenue of \$6,027,516).

Under the Magnuson-Stevens Act, NMFS is required to develop management measures to rebuild overfished shark stocks and prevent overfishing. The final action attempts to balance the economic needs of fishermen and fishing communities with this requirement.

*Comment 5:* NMFS should include an analysis of the negative economic impacts associated with prohibiting porbeagle sharks in shark tournaments, especially in New England. These tournaments have negligible impacts on porbeagle stocks. An example was provided regarding a tournament that has caught only 4 porbeagle sharks in the past 10 years.

*Response:* NMFS appreciates this additional information regarding the importance of porbeagle sharks in tournament fisheries. Additional information has been incorporated into the final EIS for Amendment 2 to further address the potential economic impacts of a prohibition of porbeagle landings. Based on public comments received, NMFS selected an alternative suite that permits the recreational retention of porbeagle sharks.

NMFS is reviewing existing data sources for recreational landings of porbeagle sharks. Efforts to expand recreational data collection may be necessary to improve information on porbeagle shark landings in recreational fisheries.

*Comment 6:* NMFS should specify what the \$1.8 million fishery-wide economic impacts include: recreational impacts, commercial impacts, or both. Recreational impacts would be significant if sandbar, bull, and blacktip

are not authorized to be landed in the recreational fishery. NMFS has grossly underestimated the impact to recreational fishermen in this proposal.

*Response:* The \$1.8 million discussed for the final action is the estimated reduction in gross revenues from sandbar and non-sandbar LCS resulting from the proposed quota reductions to the commercial shark fishery. Impacts to the recreational shark fishing sector were also analyzed. For the final action, these impacts included: the negative economic impacts resulting from the reduced number of sharks that could be legally landed by recreational anglers, particularly pronounced in areas where blacktip sharks are frequently encountered. In addition, tournaments offering prize categories for sharks could also experience negative economic impacts as a result of not allowing six additional species to be retained in recreational fisheries. Due to a lack of information regarding the relative preferences of shark fishermen to retain shark species over practicing catch-and-release shark fishing, NMFS was unable to quantitatively estimate the economic impacts of the proposed recreational measures restricting the authorized list of species that could be retained.

The final action allows recreational anglers to harvest blacktip, finetooth, bull, spinner, and porbeagle sharks.

*Comment 7:* Proposed measures will result in a year-round fresh shark meat product. Inconsistent seasons are not good for prices and shark meat is currently \$0.30/lb. because the market is flooded so quickly and then seasons are over so soon.

*Response:* NMFS recognizes that moving to one season for the shark fishery could alleviate some of the uncertainty in the market associated with varying shark seasons. Depending on the intensity of fishing effort at the beginning of the season, it is likely that the final action could result in a year-round fresh shark meat market. This could help improve the prices received for shark meat and help offset some of the negative economic impacts associated with this rule.

*Comment 8:* Dealers will not likely be interested in continuing to buy shark products when the proposed measures go into place.

*Response:* NMFS acknowledges that some dealers may opt to no longer participate in the shark fishery. However, the information available to NMFS indicates that several shark dealers already handle small quantities of shark products and, therefore, changes in the shark fishery are unlikely to cause them to change their business practices. Reduced domestic harvest of

sandbar sharks could potentially increase the value of harvest in the future due to reduced supplies. Furthermore, having the season open for a longer period of time each year, subject to reduced retention limits, may enhance the domestic shark meat market and increase prices.

*Comment 9:* Closing fisheries increases the quantity of fisheries products imported into the United States and other countries do not have the conservation measures that are present in the United States.

*Response:* The United States imports modest quantities of shark fishery products. According to U.S. Census Bureau data, the United States imported 459 mt of shark in 2006 with an estimated value of \$3.41 million. In contrast, the United States exported 1597 mt of shark in 2006 estimated to be worth \$6.17 million. The United States may be an important transshipment port for shark fins, which may be imported wet, and then processed and exported dried. The United States is, in fact, a net exporter of shark species. NMFS acknowledges that other countries may not have the same shark conservation measures as the United States.

*Comment 10:* Commenters suggested that NMFS should implement a retraining program for fishermen and families that are displaced by this action. Others suggested fishermen reconfigure their businesses towards providing tourism services.

*Response:* NMFS has worked with a number of other agencies/departments to explore programs that are available to fishermen and other businesses affected by fishery management measures. Some of these include retaining programs.

The Economic Development Administration (EDA) was created to create new jobs and retain existing jobs in economically stressed communities. Through a series of grant programs, the EDA helps distressed communities develop strategies to improve their own economic situation through a multifaceted cooperative effort. Most of the EDA activity affecting the fishing industry has been funded through the EDA's Public Works Program and the EDA's Economic Adjustment Program. The Public Works Program has funded port and harbor improvements. The Economic Adjustment Program helps communities adjust to serious changes in their economic situation, and proceeds from this program are generally used for organization, business development, revolving loan funds, infrastructure, and market research. Interested parties can learn more about these programs, including

eligibility requirements and contact information, by visiting the EDA website: <http://www.eda.gov/>.

The U.S. Department of Labor's Economic Dislocation and Worker Adjustment Assistance Act provides funds to States and local substate grantees so they can help dislocated workers find and qualify for new jobs. It is part of a comprehensive approach to aiding workers who have lost their jobs that also includes provisions of the Worker Adjustment and Retraining Notification Act and the Trade Adjustment Assistance program. Workers who have lost their jobs and are unlikely to return to their previous industries or occupations are eligible for the program. This includes workers who lose their jobs because of plant closures or mass layoffs; long-term unemployed persons with limited job opportunities in their fields; and farmers, ranchers and other self-employed persons who become unemployed due to general economic conditions. Services include retraining services, readjustment services, and needs-related payments. Interested parties can obtain more information about services available and contact information by visiting the following website: <http://www.doleta.gov/tradeact/>.

*Comment 11:* Commenters suggested that NMFS consider giving shark fishermen swordfish handgear permits in order to help offset negative economic impacts, while also increasing swordfish landings.

*Response:* NMFS did not propose changes to the swordfish handgear permit system, however, NMFS will take this suggestion under consideration for future actions. NMFS notes that the swordfish handgear permit is a limited access permit. Therefore, issuing new swordfish handgear permits may result in negative economic impacts to current holders of swordfish handgear permits. In addition, NMFS has been recently issued new regulations to revitalize the swordfish fishery and may consider additional measures in the future depending on the outcome of the current regulatory changes.

*Comment 12:* NMFS should consider the compound effect of this Amendment and the economic hardships that have been incurred by the Gulf of Mexico red snapper fishing industry.

*Response:* NMFS considered the cumulative impact of this Amendment with that of other regulatory changes in other fisheries, including the Gulf of Mexico red snapper fishing industry. This analysis is provided in Chapter 4 of the Draft EIS.

*Comment 13:* If NMFS does not maintain the status quo, NMFS should declare an emergency disaster.

*Response:* Section 312(a) of the Magnuson-Stevens Act addresses fisheries disaster relief. This section states:

At the discretion of the Secretary or at the request of the Governor of an affected State or a fishing community, the Secretary shall determine whether there is a commercial fishery failure due to a fishery resource disaster as a result of natural causes, man-made causes beyond the control of fishery managers to mitigate through conservation and management measures, including regulatory restrictions (including those imposed as a result of judicial action) imposed to protect human health or the marine environment, or undetermined causes.

All analyses for determinations (which can be at the request of a Governor or at the Secretary's own discretion) under section 312(a) must undergo a three-prong test: first, the Secretary must determine if there has been a commercial fishery failure; he must also determine that any such failure is the result of a fishery resource disaster; finally, the cause of that disaster must meet the articulated causes outlined in the statute.

*Comment 14:* NMFS should look into the impact of this Amendment on the consumer. How much will consumer costs increase as a result of your action?

*Response:* NMFS did not focus its analysis of the impacts of this Amendment on the consumer since shark is primarily exported. The domestic consumption of shark meat and shark fins is limited. It is unlikely that reduction in the production of shark fin will impact consumer prices in the United States. The consumption of fresh shark meat is somewhat limited and is not as widespread as that of other fish species in the U.S. market. There may be some impacts to domestic consumers of shark, especially sandbar sharks, as a result of the preferred management measures. However, it is unlikely that this Amendment will result in significant increases in consumer costs, especially given the estimates that shark meat could be landed in low limits year round, unlike current conditions where shark meat is available for only several weeks each year. Information available on consumer prices for shark and domestic demand of shark products is limited, making it infeasible to conduct a more quantitative analysis of the impacts on consumers.

*Comment 15:* NMFS received a comment questioning whether shark permits will still be worth anything after

the proposed management changes take place.

*Response:* It is uncertain what shark directed and incidental permits may be worth after the management changes associated with this Amendment are implemented. It is likely that shark permits may be worth less as a result of quota reductions and reduced retention limits. However, there will still be some demand for shark permits from new entrants into the commercial swordfish and tuna fisheries that require participants to hold all three HMS permits.

Note that under 50 CFR 635.4(a)(3), "Limited access vessel permits or any other permit issued pursuant to this part do not represent either an absolute right to the resource or any interest that is subject to the takings provision of the Fifth Amendment of the U.S. Constitution. Rather, limited access vessel permits represent only a harvesting privilege that may be revoked, suspended, or amended subject to the requirements of the Magnuson-Stevens Act or other applicable law."

*Comment 16:* NMFS received comments indicating that requiring fishermen to land sharks with fins on will change the entire pricing structure. NMFS could be changing the whole valuation process here by requiring that sharks have their fins on.

*Response:* The requirement to land sharks with their fins attached allows fishermen to leave the fins attached by just a small piece of skin so that the shark could be packed on ice at sea efficiently. Shark fins could then be quickly removed at the dock without having to thaw the shark. Sharks may be eviscerated, bled and the head removed from the carcass at sea. These measures should prevent any excessive amounts of waste at the dock, since dressing the shark (except removing the fins) can be performed while at sea. While this will result in some changes in how fishermen process sharks at sea, because the fins can be removed quickly once the shark has been landed, NMFS expects that the market will continue to receive sharks in their log form. While there may be some changes in the way sharks are marketed and priced, it is unlikely that the total ex-vessel value of sharks will change significantly due to the requirement to land sharks with their fins attached.

*Comment 17:* NMFS needs to reduce the number of limited access permits.

*Response:* Reducing the number of limited access permits was not proposed for this Amendment because of the ramifications that such a reduction could have on other fisheries and the overall HMS permit structure. NMFS

chose to limit effort via management measures in this final rule because these measures can be implemented with greater expediency and improve the likelihood that fishing mortality will be reduced consistent with NS1. NMFS may consider reductions in the number of permits in future actions.

#### 16. Miscellaneous

*Comment 1:* There should not be any netting allowed in the Delaware Bay as this is a nursery ground for sharks.

*Response:* The waters of the Delaware Bay are in state waters; therefore any management of sharks in Delaware Bay is conducted by the states of New Jersey, Delaware, and Pennsylvania. The Consolidated HMS FMP only regulates fisheries in Federal waters.

*Comment 2:* In the "old" Magnuson-Stevens Act (before reauthorization), there was a section indicating that if NMFS reduces incomes by 13-percent, then fishermen are supposed to receive due compensation.

*Response:* The current Magnuson-Stevens Act has no such provision.

*Comment 3:* NMFS should allow vessel owners to keep sharks that are dead at haulback if observers are onboard the vessel.

*Response:* NMFS did not consider modifying this provision in Amendment 2 to the Consolidated HMS FMP. Generally speaking, the observers are onboard to monitor fishing activities. It is the responsibility of the vessel operator and crew, not the responsibility of observer, to predict whether or not sharks caught during fishing activities would survive if released. All sharks that are not, or cannot be, possessed must be released in a manner that would maximize their chances of survival. Allowing dead sharks to be harvested only when observers are onboard could potentially put them in more of an enforcement role which is not the intent of the fisheries observer program. Furthermore, this might encourage fishermen to fish in a different manner when observers are onboard. Modifying the soak time or types of hooks and bait deployed to ensure that more sharks are dead at haulback would not provide the observer program with data that is representative of fishing behavior when observers are not present. Increasing the number of sharks that are harvested in this manner may have negative ecological impacts on shark populations.

*Comment 4:* NMFS should consider making video copies of the shark identification workshops, so that those who do not have the money to travel may watch the presentation.

*Response:* NMFS may consider alternative methods for shark dealers to renew their shark identification certificates as long as the original objectives of the identification workshops are met. Alternative methods may include, but are not limited to, renewing identification certificates via the Internet.

*Comment 5:* NMFS should manage all fish caught on BLL gear collectively, including grouper and tilefish. When fishing for sharks, we cannot keep snapper, yet we have a combined fishery. These should not be managed separately.

*Response:* The HMS Management Division is responsible for managing Atlantic sharks, tunas, billfish, and swordfish. Currently, Fishery Management Councils recommend management measures for grouper and tilefish to NMFS. The relevant Council or Councils depends upon the specific region(s) involved. NMFS may consider more cooperative management initiatives in the future, as necessary.

*Comment 6:* Will shark fishing be closed until this Amendment is implemented?

*Response:* Fishing for large coastal sharks will be closed through the second trimester. A final rule describing the seasons and quota for the first and second trimester of 2008 was published in the **Federal Register** on November 29, 2007 (72 FR 67580).

*Comment 7:* NMFS needs to realize that fishermen are still going to go fishing for other species year-round. As a result, fishermen are going to end up killing sharks and discarding them dead. Another fishery is going to get more pressure as a result of these measures because shark fishermen are not going to stop fishing.

*Response:* NMFS understands that participants in the shark fishery also participate in numerous other fisheries. Reductions in fishing mortality that result from this amendment will likely result in fishing effort shifting from the shark fishery to other fisheries in which participants maintain permits. Reduced retention limits and the fact that sandbar sharks will only be landed in the shark research fishery are expected to result in trips targeting other species. NMFS has devised retention limits and seasons such that fishermen targeting other non-shark species will be able to possess a limited number of non-sandbar LCS incidentally, minimizing the need to discard sharks dead.

*Comment 8:* NMFS should clarify what the gear limitations within the shark research fishery are and whether or not participants would be able to

possess sandbar sharks if they have an observer onboard.

*Response:* Gear limitations within the shark research fishery will depend on annual research objectives. An objective of the shark research fishery is to continue to collect fishery-dependent data that reflects how the fishery operated historically. Therefore, BLL gear will likely be the predominant gear deployed. However, research objectives might also require participants to deploy alternative gear types to discern their feasibility and impacts on target and non-target catch. Vessels issued a shark research permit will only be able to possess sandbar sharks when they have a NMFS-approved observer onboard.

*Comment 9:* NMFS should not require fishermen to fill out a logbook when they only use dealer data. Instead of logbooks, NMFS should use carbon copies of trip tickets that are submitted to dealers.

*Response:* NMFS uses logbook data in addition to data collected from dealer reports. Logbooks provide vessel specific landings and effort data that are not reflected in shark dealer data. These data can be used by managers and scientists in a variety of ways to aid in managing and understanding the fishery. Sharks dealer data are used specifically for quota monitoring and stock assessments but are often combined and used with logbook data for other management purposes.

*Comment 10:* NMFS should consider reducing soak time as a means of reducing the number sandbar shark dead discards.

*Response:* NMFS has examined the regulation of soak times to reduce fishing mortality and dead discards, however, NMFS found that it would be extremely difficult to monitor and enforce soak times.

*Comment 11:* NMFS should consider placing observers on all vessels and letting all fishermen continue to fish for sharks. That is how NMFS will get accurate data.

*Response:* NMFS is requiring that observers are present on all trips within the shark research fishery. A limited number of vessels selected to participate in the research fishery will continue to be able to fish for sharks, including sandbar sharks, subject to available quota. NMFS is also attempting to maintain adequate observer coverage outside the research fishery.

*Comment 12:* These measures will cause a large increase in dead discards, which equals wasted fish and wasted money.

*Response:* The final action effectively creates an incidental fishery for sharks.

The allowance for incidental landings and seasons that are open longer than they have been historically should minimize a large increase in dead discards. Dead discards could potentially increase if there were a reduced retention limit or if the shark season were closed for extensive periods during which all sharks would be discarded at sea.

*Comment 13:* NMFS should consider physically enhancing habitat to protect these species.

*Response:* Habitat enhancement does not address removal of sharks. Existing fishing mortality levels for sandbar and dusky sharks indicate that these species are experiencing overfishing and that the stocks have been overfished. Habitat enhancement was not considered in this action because, in isolation, it does not address overfishing or rebuilding of overfished stocks.

*Comment 14:* NMFS should require shark fishermen to take the shark dealer identification course.

*Response:* The public, including shark fishermen, is welcome to attend the shark identification courses provided by NMFS. It is currently voluntary for shark fisherman to participate in shark identification courses. NMFS wants to ensure that shark dealers are aware of how to properly identify sharks because NMFS uses information from shark dealer reports to monitor the quota during the fishing season. Further, shark dealer reports play a critical role in conducting stock assessments. NMFS may consider expanding the groups of participants required to complete these workshops in the future.

*Comment 15:* The Magnuson-Stevens Act says to rebuild overfished stocks by 2012. NMFS should not use rebuilding schedules that require hundreds of years.

*Response:* Longer rebuilding periods are allowed under NS1 of Magnuson-Stevens Act when the following conditions specified in the NS1 Guidelines are met, which is the case with the species that are being rebuilt in this amendment. The regulatory text at 50 CFR 600.310(e)(4)(ii)(B)(3) states:

[I]f the lower limit is 10 years or greater, then the specified time period for rebuilding may be adjusted upward to the extent warranted by the needs of fishing communities....except that no such upward adjustment can exceed the rebuilding period calculated in the absence of fishing mortality, plus one mean generation time or equivalent period based on the species' life-history characteristics.

*Comment 16:* NMFS should not require the public to attend identification workshops for sharks when shark fishing will essentially be banned.

*Response:* While shark fishing will be substantially reduced under this Amendment, there will still be incidentally caught sharks. Accurate shark identification will be important for gathering information for future management.

*Comment 17:* Fishermen should be allowed to keep dead dusky sharks on haulback because discarding dead sharks is a waste.

*Response:* Dusky sharks are a prohibited species that must be released. NMFS has determined that dusky sharks are a prohibited species because their life history is not conducive to commercial or recreational fisheries targeting them. Dusky sharks are late-maturing and have very few offspring. Further, these species do not have high post release survival on longline gear. NMFS continues to discourage fishermen from targeting dusky sharks because the recent stock assessment indicates that dusky sharks are overfished and experiencing overfishing despite being listed as a prohibited species since 2000.

*Comment 18:* NMFS needs to consider an exit strategy in case things do not work out as planned in the amendment.

*Response:* NMFS believes that this Amendment allows for sufficient flexibility to make adjustments as conditions may change in the fishery. Furthermore, regulations are constantly being reviewed for their utility and whether or not they are meeting their stated objectives. Additional regulations are expected as new stock assessments become available.

*Comment 19:* NMFS needs to improve international management with Mexico to manage sharks throughout their range.

*Response:* NMFS is currently working through the appropriate international forums to improve shark management in Mexico.

*Comment 20:* NMFS should consider adding a "use it or lose it" requirement on shark permits.

*Response:* Measures requiring shark fishermen to demonstrate landings history or risk losing their commercial shark fishing permit were not considered in this amendment. The addition of a "use it or lose it" condition on shark permits may actually result in increased pressure on sharks if holders of latent permits are compelled to use their permits sufficiently to avoid losing them in the future.

*Comment 21:* There is an inconsistency in the Draft EIS, Chapter 3 page 16. This presents state regulations, and fails to mention that longline gear is also prohibited in Georgia's state waters. Additionally,

Georgia's Small Shark Composite should have the acronym SSC, not SCS, which is the federal Small Coastal Sharks management group.

*Response:* These inconsistencies have been addressed in the Final EIS.

*Comment 22:* There is new scientific evidence that oceanic whitetip shark stocks have declined.

*Response:* NMFS has not conducted a stock assessment for oceanic whitetips. NMFS will continue to work with international partners and ICCAT towards more species-specific assessments for pelagic sharks. Data may be a limiting factor, however, as there are limited landings data for oceanic whitetip sharks. To date, ICCAT has completed assessments for blue and shortfin mako sharks. There is scant data available on oceanic whitetip landings.

*Comment 23:* The Draft EIS does little to address bycatch of protected species aside from the suggestion that the preferred alternative may provide a mechanism to conduct the field trials necessary to appropriately assess the efficacy of circle hooks for reducing bycatch and post-hooking mortality of sea turtles in the BLL fishery. While both the pelagic and BLL fisheries are required to carry tools to remove gear from turtles before they are released, there are no performance goals for removing gear or a requirement to use circle hooks for bycatch of protected species.

*Response:* NMFS may consider additional management measures for reducing bycatch in the future. NMFS has prepared a new BiOp regarding the proposed actions under Amendment 2 to the Consolidated HMS FMP, which was released on May 20, 2008. The May 2008 BiOp concluded based on the best available scientific information, the proposed action is not likely to jeopardize the continued existence of endangered green, leatherback, and Kemp's ridley sea turtles; the endangered smalltooth sawfish; or threatened loggerhead sea turtle. The proposed actions are not expected to increase endangered species or marine mammal interaction rates. Furthermore, the BiOp concluded that the proposed actions are not likely to adversely affect any of the listed species of marine mammals, invertebrates (i.e., listed species of coral) or other listed species of fish (i.e., Gulf sturgeon and Atlantic salmon) in the action area. HMS is implementing Amendment 2 to the Consolidated HMS FMP consistent with the May 2008 BiOp.

*Comment 24:* If Atlantic and Gulf of Mexico fisheries are to continue, 100–

percent observer coverage should be required.

*Response:* In 2007 and 2008, NMFS is implementing 100-percent observer coverage for vessels operating in the Gulf of Mexico with PLL gear. Outside of this period, a statistically significant level of observer coverage will be used that is consistent with relevant Biological Opinions and other factors.

*Comment 25:* Deepwater sharks need protection. This group of sharks is simply too vulnerable to sustain fisheries so NMFS should prevent the development of fisheries before any fishermen invest in them. The deep water shark complex needs attention and it was a major mistake to remove deep water sharks from the management unit as was done in Amendment 1 to the 1999 FMP and it should not be repeated in this Amendment through benign neglect.

*Response:* Deepwater sharks were previously removed from the management unit in Amendment 1 to the 1999 FMP. There are no fisheries targeting deepwater sharks and no data from fisheries that catch deepwater sharks as bycatch. The referenced changes clarify the regulations by linking the definition of "shark" more directly to the definition of the shark "management unit." The only regulation prior to this time (2003) was the ban on shark finning, however, this was addressed in the SFPA of 2000. NMFS will continue to collect information on deepwater sharks and may add them to the management unit or implement additional management measures to protect them in the future.

*Comment 26:* NMFS claims that dusky bycatch will decrease, however, the species will nonetheless be subject to an increased non-sandbar LCS retention limit. This means that the actual catch of dusky sharks is not likely to significantly decrease. Catch of dusky sharks must be significantly reduced in order for the species' population to rebuild.

*Response:* Unlike the sandbar shark assessment, which recommended a specific TAC, or the blacktip stock assessments, which recommended specific catch levels, the dusky shark assessment did not give specific mortality targets. In addition, even if NMFS stopped all shark fishing in the Atlantic, dusky sharks would still be caught as bycatch in BLL and gillnet fisheries targeting other non-shark species. Even though NMFS placed this species on the prohibited species list in 2000, discards continue. NMFS estimated a reduction in dusky mortality as a result of sandbar and non-sandbar LCS management actions.

Based on the reduced quotas and trip limits, NMFS estimates that dusky shark mortality could be reduced from 33.1 mt dw to 9.1 mt dw per year. This is a 73-percent reduction in mortality compared to the status quo, and should afford dusky sharks more protection compared to the status quo.

*Comment 27:* The proposed rule does not offer protection for Small Coastal Sharks (SCS).

*Response:* NMFS is planning to address SCS in a future FMP amendment based on the 2007 SCS stock assessment (May 7, 2008, 73 FR 25665).

*Comment 28:* NMFS should consider impacts of gear (longline, gillnet) on EFH and coral reefs.

*Response:* NMFS is currently developing a draft Amendment 1 to the Consolidated Atlantic HMS FMP to address EFH issues, including gear impacts on HMS and non-HMS habitat.

*Comment 29:* Is a "suite" a new concept or term for alternatives? The suite format is very effective.

*Response:* The term "suite" is used here to group regulatory alternatives created to address the objective of a rulemaking. The suite concept is used to help facilitate the communication of logical groupings of potential management measures that could be used in conjunction to address the objectives of this rulemaking. The suite approach also allows for a more holistic analysis of the overall benefits and costs associated with the major regulatory alternatives considered. For example, the specific quotas implemented in this rule also corresponds to modified retention limits, reporting requirements, and regions.

*Comment 30:* All commercial fish profiteers should be banned from catching any sharks at any time.

*Response:* NMFS manages commercial fisheries for authorized species in the Exclusive Economic Zone of the United States. Under the Magnuson-Stevens Act, NMFS must manage fisheries to achieve optimum yield and must also consider economic and social impacts on individual businesses and communities. Alternative suite 5 included measures that would have closed all shark fisheries. This alternative suite is not preferred because of the significant economic impacts it would have caused, the fact that all sharks would have to be discarded, often dead, and because that alternative would preclude NMFS from gathering biological and fishery dependent data information needed to accurately assess the status of the stocks.

## Changes from the Proposed Rule (72 FR 41392, July 27, 2007)

In addition to the correction of minor edits throughout, NMFS has made several changes to the proposed rule. These changes are outlined below.

1. In § 635.2, the definition of "naturally attached" was added. The definitions of "dress" and "dressed weight" were modified to clarify the regulation requiring commercial vessel operators to keep the fins on the shark carcass through offloading.

2. In § 635.2, the definition of "first receiver" was revised based on public comment and discussions with NOAA's Office of Law Enforcement. The revised definition matches more fully with other definitions of first receivers in other fishery regulations (see 50 CFR parts 622 and 648) and clarifies who needs to have a shark dealer permit.

3. In § 635.2, the definition of "shark research permit" was modified to specify that the permit is specific to the vessel and owner combination, not just the vessel. This change will ensure that owners who are chosen to participate in the shark research fishery and who are trying to sell their vessel, do not try to sell their shark research permit with their vessel, since the particular applicant was chosen by NMFS to conduct the research based on certain factors.

4. In § 635.5(b)(1)(i), a clarification is made that shark dealers must report fin weight and meat weight separately, as specified on the forms. Additionally, after publication of this final rule, NMFS intends to seek approval, pursuant to the Paperwork Reduction Act (PRA), to require dealers to check a box on the dealer form to indicate whether sharks were landed with the fins attached or not. This requirement would be made effective when OMB approves the information collection under Control Number 0648-0040. Notification of approval will be published in the **Federal Register**.

5. In § 635.21(d)(1)(iii), the definitions of the MPAs are modified to match the final areas recommended by the South Atlantic Fishery Management Council in the summer of 2007.

6. In § 635.22(c), the list of species that can be landed under the recreational retention limit was modified to include non-ridgeback species of LCS, tiger sharks, small coastal sharks, and pelagic sharks based on public comment. In the proposed rule, the harvest of certain species that NMFS felt were difficult to identify correctly, such as bull, spinner, and blacktip sharks, was proposed to be prohibited by recreational fishermen.

NMFS feels that the species that are finalized in this action are easily identified and more closely match the intent of the proposed regulation. Additionally, the entire paragraph was reorganized for clarity.

7. Section 635.24(a) was modified to update the commercial retention limits based on public comment, additional analyses, and changes to the proposed quotas. Specifically, an adjusted retention limit for non-sandbar LCS from the effective date of this rule through 2012 was added to account for overharvests in 2007. Additionally, a paragraph has been added to prohibit the highgrading of sharks by commercial fishermen based on public comment and a request from enforcement.

8. In § 635.27(b), the commercial quotas were modified based on public comment and additional analyses. Specifically, a porbeagle shark quota was added, unclassified sharks will be counted towards the appropriate species quota based on ratios in observer data and/or on shark dealer reporting forms, the non-sandbar LCS quota was split into two regions (modified from the current definition to clarify that the Florida Keys are located in the Gulf of Mexico region), and an adjusted base quota from the effective date of this rule through 2012 (five years) was added to account for overharvests in 2007. Future overharvests will generally be taken off the following year, as proposed. However, depending on the amount of future overharvests, NMFS may deduct the overharvests over several years up to a maximum of five years. Spreading the overharvests out should, among other things, ensure that the shark research fishery can continue to collect much-needed data each year.

Additionally, NMFS clarified the section on adjusting quotas based on underharvests to clarify that if a species in a particular quota group (e.g., non-sandbar LCS) were overfished, overfishing were occurring, or had an unknown status, then NMFS would not adjust the quota based on underharvests.

9. In § 635.28(b), the section was modified, based on public comment, to allow for all species groups and regions to be closed separately, instead of together as proposed, when the fishery is expected to reach 80 percent of the relevant quota.

10. In § 635.30(c)(2) and (3), sentences were added, corresponding to the added definitions of “naturally attached” and “dress,” to clarify the regulation to keep all fins attached to the corresponding shark carcass, including the upper lobe of the tail, through offloading and to state specifically that no shark fins are

allowed on a vessel unless the fins are naturally attached to a shark carcass.

11. In § 635.31, paragraph (c)(1) was added to clarify that persons may only sell sharks if both the fishery and/or region is open.

12. In § 635.32(f), additional specifics regarding the required items on the application and the process for issuing shark research permits were added based on public comment, requests by NOAA's Office of Law Enforcement, and requests by NMFS scientists. These specifics include the requirement for vessels to have complied with observer coverage regulations and HMS fishery regulations to be eligible for a shark research permit under this part. Additional clarifications on how NMFS will select vessels have been added.

13. In § 635.71, various prohibitions have been updated or modified based on the changes listed above.

#### **Commercial Fishing Season Notification**

The 2008 adjusted commercial quotas for each shark species group is as follows: sandbar shark (shark research fishery only) = 87.9 mt dw; non-sandbar LCS = 615.8 mt dw; pelagic sharks other than blue or porbeagle = 488 mt dw; blue shark = 273 mt dw; porbeagle shark = 1.7 mt dw; and SCS = 454 mt dw. The non-sandbar LCS commercial quota is further split by region and fishery as follows: Atlantic region = 187.8 mt dw; Gulf of Mexico region = 390.5 mt dw; and shark research fishery = 37.5 mt dw.

On July 24, 2008, the sandbar, non-sandbar LCS, pelagic shark, blue shark, porbeagle shark, and SCS fisheries will open under the quotas noted above. All of these fisheries will remain open through December 31, 2008, unless the quota for that shark species group (or in the case of non-sandbar LCS, regional area) is projected to reach 80 percent of its available quota. When calculating the percent of the available quota caught for each species and/or region, NMFS will include landings from January 1, 2008, through July 24, 2008. As specified in § 635.27(b)(1), once the landings for that shark species group or regional area reach 80 percent of its quota, NMFS will file for publication with the Office of the Federal Register an appropriate rulemaking for that shark species group that will be effective no fewer than 5 days from date of filing. From the effective date and time of the closure, until NMFS announces via a notice in the **Federal Register** that additional quota is available, the fishery for that shark species group and/or regional area is closed, even across fishing years.

When the fishery for a shark species group and/or regional area is closed, a

fishing vessel issued an Atlantic Shark LAP pursuant to § 635.4 may not possess or sell a shark of that species group, except under the conditions specified in § 635.22(a) and (c) or if the vessel possesses a valid shark research permit under § 635.32 and a NMFS-approved observer is onboard. A shark dealer issued a permit pursuant to § 635.4 may not purchase or receive a shark of that species group from a vessel issued an Atlantic Shark LAP, except that a permitted shark dealer or processor may possess sharks that were harvested, off-loaded, and sold, traded, or bartered, prior to the effective date of the closure and were held in storage. In the case of non-sandbar LCS, during a regional fishing closure, a fishing vessel issued an Atlantic Shark LAP pursuant to § 635.4 and operating in region(s) closed to shark fishing may not possess or sell a shark of that species group, except under the conditions specified in § 635.22(a) and (c). A shark dealer issued a permit pursuant to § 635.4 and located in the closed region may not purchase or receive a shark of that species group from a vessel issued an Atlantic Shark LAP, except that a permitted shark dealer or processor may possess sharks that were harvested, off-loaded, and sold, traded, or bartered, prior to the effective date of the closure and were held in storage. Under a closure for a shark species group and/or regional closure, a shark dealer issued a permit pursuant to § 635.4 may, in accordance with state regulations, purchase or receive a shark of that species group if the sharks were harvested, off-loaded, and sold, traded, or bartered from a vessel that fishes only in state waters and that has not been issued a Shark LAP, HMS Angling permit, or HMS CHB permit pursuant to § 635.4. Additionally, under a closure for a shark species group and/or regional closure, a shark dealer issued a permit pursuant to § 635.4 may purchase or receive a shark of that species group if the sharks were harvested, off-loaded, and sold, traded, or bartered from a vessel issued a valid shark research permit (per § 635.32) that had a NMFS-approved observer on board during the trip during which sharks were collected.

#### **Classification**

The Assistant Administrator for Fisheries determined that Amendment 2 to the Consolidated HMS FMP is necessary for the conservation and management of the Atlantic shark fishery and is consistent with the Magnuson-Stevens Act and other applicable laws.

NMFS prepared a FEIS for this FMP amendment. The FEIS was filed with the Environmental Protection Agency on April 11, 2008. A notice of availability was published on April 18, 2008 (73 FR 21124). In approving the FMP amendment, NMFS issued a Record of Decision (ROD) on June 6, 2008, identifying the selected alternatives. A copy of the ROD is available from NMFS (see **ADDRESSES**).

This final rule has been determined to be not significant for purposes of Executive Order 12866.

This final rule contains a collection-of-information requirement subject to the PRA and which has been approved by OMB under Control Number 0648-0471. Public reporting burden for the HMS EFP, SRP, display permit, shark research permit, and letter of authorization information collection is estimated to average 2 hours per scientific research plan; 40 minutes per application, including the shark research permit application; 15 minutes per request for amendment to the EFP; 1 hour per interim report; 2 minutes per "no catch" report; 40 minutes per annual report; 5 minutes per departure notification regarding collection of display animals; 10 minutes per notification call for observer coverage for the shark research fishery; and 2 minutes per tag application. These burden estimates include the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information.

This rule also contains revisions to collection of information 0648-0040. The revisions are subject to review and approval by OMB under PRA. Currently, this collection of information is under review at OMB for revisions other than those contained in this rule (73 FR 18473, April 4, 2008). Once OMB approves the revisions in that rule, NMFS will submit a PRA package to OMB for approval regarding the addition of a check box on the dealer form. This check box would allow the dealer to note whether the shark fins were attached to the shark at landing or not. NMFS does not expect that the addition of a check box regarding shark fins would add to the reporting burden. NMFS will publish a document in the **Federal Register** to announce the effective date of the information collection.

Send comments regarding these burden estimates or any other aspect of this data collection, including suggestions for reducing the burden, to NMFS (see **ADDRESSES**) and by e-mail to

David\_Rostker@omb.eop.gov, or fax to 202-395-7285.

Notwithstanding any other provision of the law, no person is required to respond to, and no person shall be subject to penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB control number.

With the release of the proposed rule on July 27, 2007, NMFS determined that the management measures in this rule will be implemented in a manner that is consistent, to the maximum extent practicable, with the enforceable policies of the approved coastal management programs of states with Coastal Zone Management Act (CZMA) programs that are located in the Atlantic Ocean and Gulf of Mexico. This determination was submitted for review by the responsible state agencies under section 307 of the CZMA. On October 10, 2007, Georgia's Department of Natural Resources (GDNR) objected to NMFS' consistency determination that the provisions in Amendment 2 to the Consolidated HMS FMP are consistent, to the maximum extent practicable, with the enforceable policies of the Georgia Coastal Zone Management Program (GCZMP). The October 10, 2007, letter stated that NMFS failed to consider the elimination of the use of shark gillnets in Amendment 2 to the Consolidated HMS FMP. GDNR claims that the use of gillnets in Federal waters is inconsistent with the GCZMP because the program bans the use of gillnet and longline gear in state waters to address bycatch of protected species and marine mammals.

NMFS considered the comments in the October 10, 2007, letter and, for the reasons stated below, has determined that the final actions in Amendment 2 to the Consolidated HMS FMP, including allowing the use of gillnet gear in the Atlantic shark fishery, are consistent to the maximum extent practicable with the enforceable policies of the GCZMP, 15 CFR 930.32.

NMFS shares the State of Georgia's concern regarding the impact of the shark gillnet fishery on threatened and endangered species. Given these impacts, NMFS will not implement measures that increase fishing effort with this gear type, such as setting gillnet specific retention limits for blacktip sharks. However, NMFS also recognizes that the data currently available indicate relatively low rates of bycatch and bycatch mortality of protected species and other finfish in the shark gillnet fishery compared to other HMS and non-HMS fisheries. It is worth noting that observer coverage rates in the shark gillnet fishery are

higher than in other fisheries because of Atlantic Large Whale Take Reduction Plan requirements. Increased observer coverage reduces the associated error that can be introduced when calculating bycatch and protected resource interactions on non-observed trips. For instance, observer reports indicate that finfish bycatch in shark gillnet fishery during 2007 ranged from 1.7 to 13.3 percent of the total catch. In addition, observed protected species bycatch (sea turtles and marine mammals) was less than 0.1 percent of the total catch. Therefore, NMFS does not believe it is appropriate to eliminate this fishery and shift its associated effort to other fisheries that have higher interaction rates with protected resources and marine mammals.

In addition, according to recent observer reports, only four to six vessels use shark gillnet gear, therefore, the cumulative impact of this fishery is not expected to have significant ecological impacts on non-target species. The incidental capture of endangered species in the shark gillnet fishery is regulated under the Endangered Species Act (ESA). A BiOp issued May 20, 2008, in response to the actions taken in the Final Amendment 2 to the Consolidated Atlantic Highly Migratory Species Fishery Management Plan, concluded, that the continuation of the shark gillnet (including strikenets, drift gillnets, and sink gillnets) fishery would not likely jeopardize the continued existence of protected species or result in the destruction or adverse modification of critical habitat. Furthermore, the BiOp indicated that shark strikenets are not likely to have much impact on sea turtle or smalltooth sawfish takes because deployment of this gear currently results in very few takes. Interactions with protected resources occur more frequently with drift or sink gillnets than using strikenets, but gillnet gear interactions with protected resources are still minimal compared to longline fishing.

In addition, currently, all shark gillnet vessels are required to carry VMS and are subject to observer coverage during and outside of the right whale calving season. The most recent regulations amending the Atlantic Large Whale Take Reduction Plan were published in the **Federal Register** on June 25, 2007 (72 FR 34632), and on October 5, 2007 (72 FR 57104). These regulations include a variety of measures aimed at reducing the likelihood of an interaction between shark gillnet gear and right whales. These regulations include, but are not limited to, prohibiting all gillnet fishing from November 15 through April 15 of each year in Federal waters off the

state of Georgia. NMFS will continue to work with the take reduction teams and relevant Fishery Management Councils to examine methods to reduce bycatch.

NMFS acknowledges the concerns raised by the State of Georgia regarding protected resources interactions and bycatch that occurs in gillnet gear. Under the Magnuson-Stevens Act National Standards (16 U.S.C. 1851(a)(1), (3), (8), and (9)), NMFS must, among other things, implement conservation and management measures to prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery; manage stocks throughout their range to the extent practicable; minimize adverse economic impacts on fishing communities to the extent practicable; and minimize bycatch and bycatch mortality to the extent practicable. Gillnets are the commercial gear that are used to primarily target small coastal sharks (SCS) and blacktip sharks. The SCS complex was assessed in 2007; three of the four species of SCS have been determined to not be overfished with overfishing not occurring. Blacknose sharks have been determined to be overfished with overfishing occurring; therefore, NMFS has initiated development of a rebuilding plan for this species and measures to end overfishing. These measures may include changes to the shark gillnet fishery, as necessary. However, the latest blacktip stock assessment recommended not changing catches of blacktip sharks in the Atlantic Ocean. Therefore, based on the best scientific information available, Amendment 2 to the Consolidated HMS FMP would manage the fishery for optimum yield by keeping the SCS quota at the status quo level and setting a non-sandbar large coastal shark (LCS) quota (including blacktip sharks) based on historical landings. Given that the non-sandbar LCS quota is based on the latest blacktip shark assessment, closing the shark gillnet fishery in Federal waters off Georgia would not facilitate achieving the optimum yield from the fishery and managing the stocks throughout their range. Thus, NMFS is not prohibiting shark gillnet gear at this time due to the negative social and economic impact this would have on the four to six vessels actively fishing in the shark gillnet fishery. In addition, NMFS has implemented high-levels of observer coverage on gillnet vessels targeting sharks as well as those targeting other species to monitor bycatch and interactions with protected resources; NMFS can take additional action if interactions with protected

resources in the this fishery become a problem.

At this time, there is not sufficient information to support a closure of the shark gillnet fishery in Federal waters adjacent to Georgia, pursuant to the Coastal Zone Management Act. This decision is consistent with National Standard 2 of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 *et seq.*) (Magnuson-Stevens Act), which requires that management measures be based on the best scientific information available including the BiOp. NMFS has determined that the final actions in Amendment 2 to the Consolidated HMS FMP and its implementing rule are consistent to the maximum extent practicable with the enforceable policies of the GCZMP. Accordingly, this rule, which finalizes Amendment 2 to the Consolidated HMS FMP, will not ban gillnet gear in the Atlantic shark fishery.

#### *Summary of the Final Regulatory Flexibility Analysis*

A final regulatory flexibility analysis (FRFA) was prepared. The FRFA incorporates the IRFA, a summary of the significant issues raised by the public comments in response to the IRFA, NMFS' responses to those comments, and a summary of the economic analyses completed to support the action. A summary of the analysis, which addresses each of the requirements in 5 U.S.C. 604(a)(1)-(5), can be found below. A copy of the full analysis is available in Amendment 2 to the Consolidated HMS FMP (see **ADDRESSES**).

#### *Statement of the Need for and Objectives of this Final Rule*

The need for and objectives of the final rule are fully described in the preamble of the proposed rule (72 FR 41392, July 27, 2007) and in Final Amendment 2 to the Consolidated HMS FMP and are not repeated here (5 U.S.C. 604(a)(1)). In summary, the selected actions in this final rule will rebuild overfished shark fisheries by: reducing the commercial quotas, adjusting the commercial retention limits, establishing a shark research fishery, requiring commercial vessels to maintain all fins on the shark carcasses through offloading, establishing two regional quotas for non-sandbar large coastal sharks (LCS), establishing one annual season for commercial shark fishing, changing the reporting requirements for dealers (including swordfish and tuna dealers), establishing additional time/area closures for BLL fishermen, and

changing the authorized species for recreational fishermen. This rule also establishes the 2008 commercial quota for all shark species groups. These changes affect all commercial and recreational shark fishermen and shark dealers.

#### *A Summary of the Significant Issues Raised By the Public Comments in Response to the IRFA, a Summary of the Assessment of NMFS of Such Issues, and a Statement of Any Changes Made in the Rule as a Result of Such Comments*

A FRFA is also required to include a summary of the significant issues raised by the public comments in response to the IRFA, a summary of the assessment of the issues raised, and a statement of any changes made in the rule as a result of the comments (5 U.S.C. 604(a)(2)). NMFS received many comments on the proposed rule and draft EIS during the public comment period. A summary of these comments and NMFS's responses are included above. The specific economic concerns raised in comments are also summarized here.

NMFS received a comment that NMFS should consider an alternative suite that incorporates a "phase out" of the commercial shark industry. NMFS did consider such an alternative in the Draft EIS that would have ended Atlantic commercial shark fishing, Alternative Suite 5. Under this alternative, shark landings would have been limited to research and the collection for public display via the HMS Exempted Fishing Program. Recreational fisheries would have been catch and release only. However, after careful consideration of the other alternatives, this alternative suite was not preferred due to the economic costs associated with a complete closure as discussed in Chapter 6 of Amendment 2 to the Consolidated HMS FMP.

NMFS received several comments regarding an industry buyout/buyback. NMFS recognizes that some participants of the Atlantic shark fishery expressed interest in reducing fishing capacity for sharks via some form of buyout program. Buyouts can occur via one of three mechanisms, including: through an industry fee, via appropriations from the United States Congress, and/or with funds provided from any State or other public sources or private or non-profit organization. A buyout plan is not proposed in this rulemaking, despite requests for consideration from the HMS Advisory Panel and other affected constituents, because NMFS is unable to independently implement a buyout as a management option. Buyouts must be initiated via one of the aforementioned

mechanisms. The shark fishery did develop an industry "business plan" that examined options for a buyout, which is further described in Chapter 1 of the Draft Amendment 2 to the Consolidated HMS FMP.

NMFS received several comments concerning the potential for severe economic impacts associated with all of the alternatives considered (other than status quo). Comments indicated a concern that many fishermen may not be able to survive economically until the next stock assessment. NMFS estimated that the alternatives considered, including the no action alternative, would result in economic consequences to the shark fishery. The severity of the economic consequences varies by alternative suite, with alternative suite 5, the complete closure of the Atlantic shark fishery, having the greatest economic impact.

It was also suggested that NMFS should include analysis of the negative economic impacts associated with prohibiting porbeagle sharks in shark tournaments, especially in New England. NMFS appreciates this additional information regarding the importance of porbeagle sharks in tournament fisheries. Additional information has been incorporated into the final EIS for Amendment 2 to the Consolidated HMS FMP to further address the potential economic impacts of a prohibition of porbeagle landings. However, based on strong support from the public not to prohibit retention of porbeagle sharks and NMFS' recognition of the negative impacts of such a prohibition, NMFS is choosing not to prohibit the recreational retention of porbeagle sharks.

Comments indicated that economic impacts on recreational fisheries would be significant if sandbar, bull, and blacktip sharks were prohibited in the recreational fishery. Comments indicated that the negative economic impacts resulting from the reduced number of sharks that could be legally landed by recreational anglers would be particularly pronounced in areas where blacktip sharks are frequently encountered. In addition, tournaments offering prize categories for sharks could also experience negative economic impacts as a result of not allowing six additional species to be retained in recreational fisheries. Due to a lack of information regarding the relative preferences of shark fishermen to retain shark species over practicing catch-and-release shark fishing, NMFS was unable to quantitatively estimate the economic impacts of the proposed recreational measures restricting the authorized list of species that could be retained. In part

to mitigate these impacts, the final preferred alternative suite would allow recreational anglers to retain blacktip, finetooth, blacknose, bull, spinner, and porbeagle sharks.

Comments also indicated a concern that dealers will not likely be interested in continuing to buy shark products when the proposed measures go into place. NMFS acknowledges that some dealers may opt to no longer participate in the shark fishery due to the decrease in volume of shark product that is anticipated under the reduced quotas. Handling low volumes of shark product may not be profitable for some dealers. However, the information available to NMFS indicates that several shark dealers already handle small quantities of shark products, and therefore, changes in the shark fishery are unlikely to cause them to change their business practices. Reduced domestic harvest of sandbar sharks could potentially increase the value of shark product in the future due to reduced supplies. Furthermore, having the season open for a longer period of time each year, subject to reduced retention limits, may enhance the domestic shark meat market and increase prices.

Several comments suggested NMFS should implement a retraining program for fishermen and families that are displaced by this action. Others suggested that fishermen reconfigure their businesses towards providing tourism services. NMFS has worked with a number of other agencies/departments to explore programs that are available to fishermen and other businesses affected by fishery management measures. Some of these include retraining programs and financial assistance and would mitigate some of the economic impacts of this rule. These programs are further discussed in response to comments provided above.

Commenters also suggested that NMFS consider giving shark fishermen swordfish handgear permits in order to help offset negative economic impacts, while also increasing swordfish landings. NMFS did not propose changes to the permit system pursuant to the rulemaking; however, NMFS will take this suggestion under consideration for future actions. NMFS notes that the swordfish handgear permit is a limited access permit. Therefore, issuing new swordfish handgear permits may result in negative economic impacts to current holders of swordfish handgear permits. In addition, NMFS recently issued new regulations to revitalize the swordfish fishery and may consider additional measures in the future depending on the

outcome of the current regulatory changes.

NMFS received a comment questioning whether shark permits will still have any value after the proposed management changes take place. It is difficult to predict the value of shark directed and incidental permits before management measures associated with this Amendment are implemented. It is likely that the value of shark permits may be decreased as a result of quota reductions and reduced retention limits. However, there will still be some demand for shark permits by new entrants into the commercial swordfish and tuna fisheries who will need all three HMS permits to fish.

NMFS received comments indicating that requiring fishermen to land sharks with fins on will change the entire pricing of shark product. Commenters suggested that NMFS could be changing the whole valuation process by requiring that sharks have their fins on. The requirement to land sharks with their fins attached would allow fishermen to leave the fins attached by just a small piece of skin so that the shark could be packed efficiently on ice at sea. Shark fins could then be quickly removed at the dock without having to thaw the shark. Sharks may be eviscerated, bled, and the head removed from the carcass at sea. These measures should prevent any excessive amounts of waste at the dock, since dressing the shark (except removing the fins) can be performed while at sea. While this will result in some changes to the way fishermen process sharks at sea, the transfer of shark product to dealers could remain relatively unchanged because the fins can be removed quickly once the shark has been offloaded. NMFS expects that the market will continue to receive sharks in their log form. While there may be some changes in the way sharks are marketed and priced, it is unlikely that the total ex-vessel value of sharks will change significantly due to the requirement to land sharks with their fins attached.

#### *Description and Estimate of the Number of Small Entities to Which the Final Rule Would Apply*

NMFS considers all HMS commercial permit holders to be small entities because they either had average annual receipts less than \$4.0 million for fish-harvesting, average annual receipts less than \$6.5 million for charter/party boats, 100 or fewer employees for wholesale dealers, or 500 or fewer employees for seafood processors (5 U.S.C. 604(a)(3)). These are the Small Business Administration (SBA) size standards for defining a small versus

large business entity in this industry. A full description of the fisheries affected and the categories and number of permit holders can be found in Amendment 2 to the Consolidated HMS FMP.

The final rule would apply to the 527 commercial shark permit holders in the Atlantic shark fishery based on an analysis of permit holders on October 1, 2007. Of these permit holders, 231 have directed shark permits and 296 hold incidental shark permits. Not all permit holders are active in the fishery in any given year. NMFS estimates that there are 143 vessels with directed shark permits and 155 vessels with shark incidental permits that could be considered actively engaged in fishing, since they reported landing at least one shark in the Coastal Fisheries Logbook from 2003 to 2005.

In addition, the reporting requirements in the final alternatives would also apply to Federal shark dealers. As of October 1, 2007, there were a total of 269 Atlantic shark dealer permit holders. Based on NMFS' understanding of HMS dealer operations, NMFS assumes that each of these dealers would be considered a small business entity with 100 or fewer employees.

The final measures being considered may also impact the types of services HMS CHB permit holders may provide. As of October 1, 2007, there were 4,899 HMS CHB permit holders. It is unknown what portion of these permit holders actively participate in shark fishing or market shark fishing services for recreational anglers.

In addition, some businesses, such as marinas or specialized tournament organizers that hold tournaments may be considered small entities. HMS tournaments are required to register with NMFS. As such, NMFS has estimates on the number of HMS tournaments. However, NMFS may not necessarily know the number of businesses behind the tournament name and contact. Tournaments offering prize categories for sharks may also experience negative economic impacts as a result of NMFS prohibiting two additional species of sharks for retention in recreational fisheries in alternative suites 2 through 4, as well as alternative suite 5 which would allow no possession of any sharks and only allow catch and release fishing. The majority of tournaments specializing in sharks are in the North Atlantic region, specifically Rhode Island, New York, and Massachusetts. In 2007, there were 59 tournaments with prize categories for pelagic sharks and 42 (combined) tournaments for LCS and SCS.

*Description of the Projected Reporting, Recordkeeping, and Other Compliance Requirements of the Final Rule, Including an Estimate of the Classes of Small Entities Which Would Be Subject to the Requirements of the Report or Record*

The final action requires modifying existing reporting and recordkeeping requirements (5 U.S.C. 604(a)(4)). The research program component in this final rule requires modifications to the existing EFP program and dealer reporting requirements.

The final action modifies the reporting frequency for dealers. The current requirement for dealer reports to be post-marked within 10 days after each reporting period (1<sup>st</sup> through 15<sup>th</sup> and 16<sup>th</sup> through last day of month), would be modified to state that dealer reports must be received by NMFS not later than 10 days after each reporting period (i.e., 25th and 10th of each month). Shark, swordfish, and tuna dealers would have to submit these reports in advance of the 10th and 25th of each month to ensure adequate time for delivery, depending on the means employed for report submission. Requiring that all dealer reports are actually received by NMFS in a more timely fashion would provide more frequent reports of shark landings in order to better assess quantities of sharks landed and whether or not a closure or other management measure is warranted to prevent overfishing. Dealers would still be required to submit reports indicating that no sharks were purchased during inactive periods. NMFS also intends to add a check box to the dealer form for dealers to note whether sharks were landed with fins naturally attached. Requirements for vessel logbooks and observer coverage would remain unchanged. Additional burden is not expected as a result of modifying the regulations to ensure that dealer reports are actually received within 10 days.

The final rule would also create a limited shark research program that would result in changes to existing reporting requirements. Entry into the shark research program would require vessels to submit an application, which would add to the reporting burden for those vessels wishing to apply. Applicants selected to participate in the shark research program under this alternative would also be subject to 100 percent observer coverage as a requirement for eligibility to participate in the program. In addition, selected vessels would continue to report in their normal logbook in addition to the observer program. Vessels in the shark

research program, however, would not need to report in the same way as other EFP holders even though they are being issued permits under the EFP program. For example, vessels in the research fishery would not be required to submit interim or annual reports describing their fishing activities. Rather, they would only be required to submit their logbooks per current regulations. Vessels outside the shark research program would still be required to carry an observer if selected and all vessels would still be required to complete logbooks within 48 hours of fishing activity and then submit the logbooks to NMFS within seven days.

*Description of the Steps NMFS Has Taken to Minimize the Significant Economic Impact on Small Entities Consistent with the Stated Objectives of Applicable Statutes, Including a Statement of the Factual, Policy, and Legal Reasons for Selecting the Alternative Adopted in the Final Rule and the Reason That Each One of the Other Significant Alternatives to the Rule Considered by NMFS Which Affect Small Entities Was Rejected*

One of the requirements of a FRFA is to describe any alternatives to the proposed rule which would accomplish the stated objectives and which minimize any significant economic impacts (5 U.S.C. 604(a)(5)). Additionally, the Regulatory Flexibility Act (5 U.S.C. 603(c)(1)-(4)) lists four general categories of "significant" alternatives that would assist an agency in the development of significant alternatives. These categories of alternatives are:

1. Establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;
2. Clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities;
3. Use of performance rather than design standards; and,
4. Exemptions from coverage of the rule for small entities.

In order to meet the objectives of this final rule, consistent with the Magnuson-Stevens Act and the Endangered Species Act (ESA), NMFS cannot exempt small entities or change the reporting requirements only for small entities because all the entities affected are considered small entities. Thus, because NMFS considers all HMS permit holders to be small entities, there are no alternatives discussed that fall under the first and fourth categories described above. NMFS does not know of any performance or design standards

that would satisfy the aforementioned objectives of this rulemaking while, concurrently, complying with the Magnuson-Stevens Act. Thus, there are no alternatives considered under the third category. As described below, NMFS analyzed seven different alternatives in this rulemaking and provides justification for selection of the final action to achieve the desired objective.

The alternatives considered and analyzed have been grouped into five alternative suites. Alternative suite 1 would maintain the current Atlantic shark fishery (no action). Alternative suite 2 would allow only directed shark permit holders to land sharks. Alternative suite 3 would allow directed and incidental shark permit holders to land sandbar and non sandbar LCS as well as SCS and pelagic sharks. Alternative suite 4 would establish a program where vessels with directed or incidental shark permits could participate in a research fishery for sandbar sharks. Only vessels participating in this program could land sandbar sharks. Vessels not participating in the research program could land non-sandbar LCS, SCS, and pelagic sharks. Finally, alternative suite 5 would shut down the commercial Atlantic shark fishery and only allow a catch and release recreational shark fishery. The preferred alternative is suite 4, which would establish a program where a limited number of vessels with directed or incidental shark permits could participate in a research fishery for sharks dependent on the research needs of NMFS.

#### 1. *Alternative Suite 1*

Alternative suite 1, the status quo alternative, would not impose any significant new economic impacts to small businesses in the HMS Atlantic shark fishery because under this alternative the current LCS quota of 1,017 mt dw, in conjunction with the 4,000 lb LCS directed shark permit trip limit, would be maintained. Under this alternative, the current fishing effort would not likely change which could lead to economic benefits from reduced market uncertainty for fishermen and related businesses in the short term. If gross revenues for directed and incidental permit holders is averaged across the approximately 298 active directed and incidental shark permit holders, then the average annual gross revenues per shark fishing vessel is just over \$20,000. However, long term, negative economic impacts could occur if current fishing mortality of sandbar sharks, an economically important species, is not decreased as

recommended by the LCS stock assessment, and this species continues to be overfished.

The status quo alternative would maintain the existing closures and would not add any new closures. The three management regions would also remain unchanged. There would also be no additional reporting requirements. Alternative suite 1 would also maintain the trimester seasons, which provides fishermen and dealers with more open seasons. With an annual LCS quota of 1,017 mt dw, spreading the seasons out over the calendar year could potentially result in greater economic stability for fishermen and associated communities. However, if quotas are reduced to those in the final action to comply with the recommendations from the LCS stock assessment, while also maintaining the trimester seasons under status quo, trimester seasons could become less economically stable for fishermen and dealers because of the reduced amount of quota and fishing effort during the calendar year. Maintaining existing closures, reporting requirements, and management regions would likely have little to no economic impacts on effected small businesses.

Alternative suite 1 would also maintain the current bag limit for HMS Angling permit holders at one shark greater than 54 inches per vessel per trip as well as one sharpnose and one bonnethead shark (both of which are in the SCS complex) per person per trip. This would likely result in no new economic impacts for businesses operating recreational fishing charter trips targeting sharks and shark fishing tournaments in the short term.

Overall, alternative suite 1 would likely have the lowest economic impact on small businesses. However, this alternative would likely not meet the objectives of this action. Maintaining the LCS quota of 1,017 mt dw would be inconsistent with the Magnuson-Stevens Act and the recent LCS stock assessment that recommended a TAC of 158.3 mt dw for sandbar sharks for this species to rebuild by 2070. Current fishing effort, under the status quo alternative, would lead to continued overfishing of sandbar, porbeagle and dusky sharks, which could potentially prevent these species from rebuilding in the recommended timeframe. As a result, this alternative was not selected.

#### 2. *Alternative Suite 2*

Alternative suite 2 would allow only directed shark permit holders to land sharks. In addition, this alternative would remove sandbar sharks from the LCS complex and establish a separate category for sandbar sharks from the

LCS complex. The quotas for landing sandbar and non-sandbar LCS would also be reduced. Incidental shark permit holders would not be permitted to land sharks under alternative suite 2. As of 2007, there were 231 directed shark permit holders, 296 incidental shark permit holders, and 269 shark dealer permit holders. One hundred forty-three vessels with directed shark permits and 155 vessels with shark incidental permits reported landing at least one shark in the Coastal Fisheries Logbook from 2003 to 2005 and could be considered active.

Data on gross annual revenues indicate that implementation of alternative suite 2 would result in a significant reduction in revenue for directed shark permit holders. On average, directed permit holders landed 1,286,447 lb dw of sandbar sharks and 1,498,111 lb dw of non-sandbar LCS from 2003 to 2005 based on Federal and state shark dealer reports (landings by permit type were based on percentage of total landings by permit type in the Coastal Fisheries and HMS logbooks). In 2006 ex-vessel prices, this is equivalent to gross revenues of \$4,702,031 (assuming 5 percent of the landings are fins and 95 percent of the landings are carcass weight). If gross revenues for directed permit holders are averaged across the approximately 143 active directed shark permit holders, then the average annual gross revenues per shark fishing vessel is just under \$33,000 from shark revenues. Under alternative suite 2, gross revenues for directed permit holders would be estimated to be \$1,333,417. This is a 72-percent overall reduction in gross revenues compared to the period from 2003 to 2005. These reduced gross revenues averaged across the 143 active directed permit holders are just over \$9,000 per directed shark fishing vessel. This estimated reduction in revenue from shark landings could affect the profitability and even viability of some marginal shark fishery operations. Operations that have permits in other fisheries and can easily diversify are less likely to be as affected as those marginal operations. Nevertheless, the profitability of all directed shark fishing vessels would likely be reduced. Because the states of Florida, New Jersey, and North Carolina have the most directed shark permits, these states would be most negatively impacted by alternative suite 2.

Directed shark permit holders using PLL gear would also see reduction of revenues under alternative suite 2 because retention of sandbar sharks on PLL gear would be prohibited. On average, 80,825 lb dw of sandbar sharks were reported landed on PLL gear by

directed shark permit holders from 2003 to 2005 (HMS logbook data). In 2006 ex-vessel prices, this is equivalent to \$117,510 in gross revenues. Given an average of 16.7 vessels landing sandbar sharks with PLL gear from 2003 to 2005, prohibition of sandbar sharks on PLL gear could result in a loss of gross revenues of \$7,037 per vessel.

Data on the reduction of per trip revenues also show a decline in revenue for directed permit holders. Under alternative suite 2, directed permit holders would be limited to 8 sandbar sharks per trip and 21 non-sandbar LCS per trip. In comparison, data indicate that under status quo, which has a 4,000 lb dw LCS trip limit, the average number of sandbars and non-sandbar LCS landed per trip is 35 sandbars and 32 non-sandbar LCS for all gear types reported in the Coastal Fisheries and HMS Logbooks. Based on 2006 ex-vessel prices, this is equivalent to \$4,101 per trip. Revenue estimates on a regional trip basis of the status quo alternative were also based on species composition data attained from the BLL observer program data. Observer data indicate that between 2005 and 2006, 69 sandbar sharks and 35 non-sandbar LCS were caught per trip in the South Atlantic region, and 30 sandbar sharks and 83 non-sandbar LCS were caught per trip in the Gulf of Mexico region. Based on these numbers and 2006 ex-vessel prices, revenues from South Atlantic trips are currently averaged at \$4,743/trip and Gulf of Mexico trip revenues averaged \$4,101 per trip.

Thus, given that the retention limits under alternative suite 2 (8 sandbars/trip and 21 non-sandbar LCS/trip), the average revenue per trip is estimated to decrease. The reduced non-sandbar LCS retention limit of 21 sharks per trip is based on the average ratio of sandbars to non-sandbar LCS caught in the South Atlantic and Gulf of Mexico regions to limit sandbar shark discards by fishermen deploying non-selective gear. In the Gulf of Mexico, the ratio of sandbars to other LCS caught is 1:4 which, based on an 8 sandbar per trip retention limit, would equal 32 non-sandbar LCS per trip. However, such a high non-sandbar LCS retention limit would result in sandbar discards in the South Atlantic (approximately 65.3 mt dw). Therefore, a 21 non-sandbar LCS/trip retention limit was set to balance discards versus catch in the two regions. This results in approximately 5 sandbar sharks being caught in the Gulf of Mexico region when the non-sandbar LCS retention limit/trip is filled (and therefore, only 86.1 mt dw of the sandbar quota would be filled). Therefore, gross revenues on a trip basis

are estimated to be \$1,262 per trip in the South Atlantic and \$1,333 per trip in the Gulf of Mexico. From 2003 to 2005, there were 124 vessels that averaged more than 324 lb dw (or 8 sandbar sharks) of sandbar/trip.

Incidental permit holders would also experience revenue declines under alternative suite 2 because they would be prohibited from landing sharks. On average, 66 incidental permit holders landed 12,994 lb dw per year of sandbar sharks and 46,333 lb dw per year of non-sandbar LCS from 2003 to 2005 based on Federal and state shark dealer reports and Coastal Fisheries and HMS logbook data. Using 2006 ex-vessel prices, this is equivalent to gross revenues of \$106,491 (assuming 5 percent of the landings are fins and 95 percent of the landings are carcass weight). Gross revenues averaged across the 66 vessels with incidental permits landing sharks were \$1,614 per vessel. Since incidental permit holders would not be able to land any sharks under alternative suite 2, the 66 active vessels would be most negatively affected by this alternative suite. The states of Florida, Louisiana, New Jersey, and North Carolina had the most incidental shark permit holders as of 2007 (144, 37, 20, and 16, respectively).

Alternative suite 2 would also require dealers to submit reports within 24 hours of shark products being purchased. There could be negative economic impacts to Atlantic shark dealers as a result of the increased reporting requirement associated with this alternative. Currently, shark dealer reports are required to submit bimonthly reports, regardless of whether the dealer actually purchased any shark products. Reporting frequency would be increased to 24 hours of when shark products were purchased. While the increased reporting burden would not result in direct costs to the shark dealer, it would result in additional time spent submitting dealer reports. This represents an opportunity cost for dealers since that time could have been spent conducting other activities related to their business. Furthermore, since submitting the reports via regular mail would no longer be feasible, in order to comply with the requirement that dealer reports must be received by NMFS within 24 hours, it is assumed that dealers would have to submit dealer reports electronically or via facsimile. Dealers that do not currently possess a computer or fax machine would have to purchase one of these items. The increased reporting burden implemented in this alternative suite would be subject to approval under the PRA. Reporting requirements for shark

vessel permit holders, including the need to carry an observer if selected and the need to submit vessel logbooks within seven days of completing a fishing trip would not be modified, resulting in neutral economic impacts.

The other provisions of alternative suite 2 are the same as in alternative suite 4, which is the final action for this rulemaking. These provisions include: maintaining the 60 mt shark display and research quota; placement of porbeagle sharks on the prohibited list; quota carryover limited to 50 percent of base quota for species not overfished; no carryover for overfished, overfishing or unknown species; sharks fins must remain on the shark; removal of regions and seasons; and limiting the shark species that can be landed recreationally. The effects of these provisions are set forth in the discussion of alternative suite 4.

This alternative suite was not selected for two primary reasons. First, this alternative does not address the impacts of continuing to catch sandbar sharks incidentally. These vessels will likely continue to incidentally catch sandbar sharks but then, under this alternative, those sharks would be required to be discarded. These discards would reduce potential revenues and possibly operating efficiency of vessels possessing incidental shark permits. Regulatory discards would likely lead to increases in mortality and slow efforts to end overfishing. Second, the 24 hour dealer reporting that would be required to effectively manage quotas would result in a significant increase in reporting burden for dealers. This alternative would therefore not minimize the economic cost to dealers in comparison to the preferred alternative.

### 3. Alternative Suite 3

Under alternative suite 3, the quotas for landing sandbar and non-sandbar LCS would also be reduced to the same level as that in alternative suite 2. However, because alternative suite 3 would allow directed and incidental shark permit holders to land sandbar and non-sandbar LCS as well as SCS and pelagic sharks, the available sandbar and non-sandbar LCS quota would be spread over a larger universe of commercial permit holders. Unlike the status quo or alternative suite 2, the retention limits for sandbar sharks and non-sandbar LCS would be the same for both directed and incidental permit holders. Since directed permit holders presumably make a greater percentage of their gross revenues from shark landings, they are expected to have larger negative socioeconomic impacts

compared to incidental permit holders. (Revenues for incidental permit holders are actually expected to increase under this alternative.) The states of Florida, New Jersey, and North Carolina have the most directed permit holders. As with alternative suite 2, shark dealers could also experience negative impacts due to the reduction in the sandbar and other LCS quotas and retention limits, which would reduce the overall amount of sharks being landed.

As stated under alternative suite 2, on average, directed permit holders landed 1,286,447 lb dw of sandbar sharks per year and 1,498,111 of non-sandbar LCS per year from 2003 to 2005 based on Federal and state shark dealer reports and logbook data. In 2006 ex-vessel prices, this is equivalent to gross revenues of \$4,702,031 (assuming 5 percent of the landings are fins and 95 percent of the landings are carcass weight). However, under alternative 3, the available sandbar and non-sandbar LCS quota would be spread over directed and incidental permit holders. Based on the retention limit of 4 sandbar sharks and 10 non-sandbar LCS per vessel per trip, it is estimated that 105.9 mt dw (233,467 lb dw) of the sandbar quota and 229.2 mt dw (505,294 lb dw) of the non-sandbar LCS quota could be landed under alternative suite 3. Logbook data from 2003 and 2005 showed that directed permit holders take, on average, 1,108 trips per year; the total number of shark trips taken by all permit holders was 1,143 trips. Thus, directed permit holders exhibited approximately 78 percent of the total fishing effort for sharks from 2003-2005. Based on this past effort, NMFS estimates that of the total sandbar and non-sandbar LCS quotas, approximately 83 mt dw (183,073 lb dw) of sandbar quota and 180 mt dw (396,225 lb dw) of the non-sandbar LCS quota would be harvested by directed permit holders. Based on 2006 ex-vessel prices, this is equivalent to \$1,015,162 gross revenues for directed permit holders. These gross revenues indicate a 78 percent overall reduction compared to the period from 2003 to 2005 (gross revenues based on current directed permit holders' landings were \$4,702,031). Again, the states of Florida, New Jersey, and North Carolina have the most directed permit holders.

The data indicate that directed shark permit holders would experience a loss in revenue under alternative suite 3 greater than under alternative suite 2, given that the available quota is shared with incidental permit holders under alternative suite 3. As stated in alternative 2, the status quo revenue was based on a 4,000 lb dw LCS trip limit

for directed shark permit holders with average gross revenues in the South Atlantic of \$4,743 per trip and average gross revenues in the Gulf of Mexico of \$5,853 per trip. Under alternative suite 3, the retention limits would be 4 sandbars per trip and 10 non-sandbar LCS per trip. However, since the ratio of sandbars to non-sandbar LCS caught in the Gulf of Mexico is 1:4, NMFS estimates that approximately 3 sandbar sharks would be caught in the Gulf of Mexico region when the 10 non-sandbar LCS retention limit/trip is filled (10 non-sandbar LCS / 4 = 2.5 sandbar sharks). Therefore, gross revenues on a trip basis are estimated to be \$610 per trip in the South Atlantic and \$670 per trip in the Gulf of Mexico. From 2003 to 2005, there were 128 vessels that averaged more than 163 lb dw (or 4 sandbar sharks) of sandbar/trip. Therefore, these vessels would be most negatively affected by retention limits under alternative suite 3.

The revenue of incidental shark permit holders is expected to increase under alternative suite 3. On average, incidental permit holders landed 12,994 lb dw of sandbar sharks and 46,333 lb dw of non-sandbar LCS based on Federal and state shark dealer reports and logbook data. In 2006 ex-vessel prices, this is equivalent to gross revenues of \$106,491 (assuming 5 percent of the landings are fins and 95 percent of the landings are carcass weight). The available sandbar and non-sandbar LCS quotas would be averaged over directed and incidental permit holders under alternative suite 3. Based on past effort, it was assumed 305 trips could be made by incidental permit holders. This is 22 percent of the expected fishing effort. Therefore, given the 105.9 mt dw (233,467 lb dw) of the sandbar quota and 229.2 mt dw (505,294 lb dw) of the non-sandbar LCS quota that could be landed under alternative suite 3, approximately 23 mt dw (50,395 lb dw) of sandbar quota and 50 mt dw (109,069 lb dw) of the non-sandbar LCS quota are anticipated to be landed by incidental permit holders. Based on 2006 ex-vessel prices, this is equivalent to \$279,441 gross revenues for incidental permit holders. This would result in gross revenues that are 2.7 times higher compared to 2003 to 2005 (gross revenues based on current incidental permit holders' landings were \$106,491).

This increase in gross revenues is due to the increase in retention limits for incidental permit holders. Under the status quo, incidental permit holders can retain 5 sharks from the LCS complex. However, under alternative suite 3, incidental permit holders would

be able to retain 4 sandbars and 10 non-sandbar LCS or 14 LCS total. This retention limit is almost 3 times higher than what is currently allowed under the status quo. On average, incidental permit holders have been landing 2 sandbar sharks and 3 non-sandbar LCS per trip. Based on 2006 ex-vessel prices, this is equivalent to \$307 per trip. However, under alternative suite 3, incidental permit holders would make equivalent gross revenues per trip as directed permit holders: \$610 per trip in the South Atlantic and \$670 per trip in the Gulf of Mexico. This would result in gross revenues for incidental permit holders that are 2 to 3 times higher than gross revenues in 2003 to 2005 depending on future fishing effort and catch composition. Therefore, there would be positive economic impacts for incidental permit holders under alternative suite 3. Since approximately 66 vessels with incidental permit holders landed sandbar sharks or non-sandbar LCS in 2003 to 2005 in the Coastal Fisheries and HMS Logbooks, these 66 vessels would have the largest economic benefits under alternative suite 3. However, if sharks become profitable for incidental permit holders under alternative suite 3, then more vessels with incidental permits may actively land sandbars and non-sandbar LCS in the future. Finally, the states of Florida, Louisiana, New Jersey, and North Carolina had the most incidental shark permit holders in 2007. Therefore, these states would see the largest socioeconomic benefits for incidental permit holders under alternative suite 3.

The other provisions of alternative suite 3 are the same as alternative suite 4, which is the final action for this rulemaking. These provisions include maintaining the 60 mt shark display and research quota; placement of porbeagle sharks on the prohibited list; quota carryover limited to 50 percent of base quota for species not overfished; no carryover for overfished, overfishing or unknown species; sharks fins must remain on the shark; dealer reports received within 10 days of purchase; removal of regions and seasons; and limiting the shark species that can be landed recreationally.

This alternative suite was not selected as the preferred alternative primarily based on its failure to achieve the ecological objectives of this rule and its economic impacts. Despite the time/area closures, alternative suite 3 would have a smaller reduction in dead discards of dusky sharks compared to alternative suite 2 since sandbar sharks would be allowed to be retained on PLL gear under alternative suite 3.

Negative economic impacts under alternative suite 3 are expected for directed permit holders (78-percent reduction in gross revenues compared to the status quo) as a result of the four sandbar per vessel per trip retention limit. Given that retention limits for sandbar and non-sandbar LCS are significantly lower than the limit under the status quo (91 and 69-percent reduction in sandbar and non-sandbar LCS retention limits, respectively, for directed permit holders), it is anticipated that there would be no directed shark fishery as a result of alternative suite 3. While an observer program would still operate under alternative suite 3, without a directed shark fishery, it is anticipated that the fishery dependent data collection would be limited, which could compromise data collection for future stock assessments. Alternative suite 4 should accomplish the necessary reductions in quota, retention limits, and fishing effort to prevent overfishing and allow stocks to rebuild while collecting valuable scientific data for NMFS. Therefore, due to concerns over dusky discards, quota monitoring, and data collection, NMFS is not implementing alternative suite 3 at this time.

#### 4. Alternative Suite 4

Alternative suite 4, the final action, establishes a program where vessels with directed or incidental shark permits could participate in a small research fishery for sandbar sharks that would harvest the entire 116.6 mt dw sandbar quota. There would be 100 percent observer coverage on each research vessel, and only vessels participating in this program could land sandbar sharks. Vessels not participating in the research program could land non-sandbar LCS, SCS, and pelagic sharks.

Alternative suite 4 was selected because it meets the objectives of this rulemaking while minimizing some of the economic impacts. Those objectives include: implement rebuilding plans for sandbar, dusky, and porbeagle sharks; provide an opportunity for the sustainable harvest of blacktip sharks and other sharks, as appropriate; prevent overfishing of Atlantic sharks; analyze BLL time/area closures and take necessary action, as appropriate; and improve, to the extent practicable, data collections or data collection programs. As detailed in the economic analysis in chapters 4 and 6 of Amendment 2 to the Consolidated HMS FMP, it is estimated that vessels in the shark research fishery could make \$437,963 in gross revenues of sandbar and non-sandbar LCS landings under the adjusted quota.

Since 5 to 10 vessels are anticipated to participate in the research fishery, NMFS estimates that an individual vessel could make between \$87,593 (i.e., 5 boats) to \$43,796 (i.e., 10 boats) in gross revenues on sandbar shark and non-sandbar LCS landings. However, the vessels operating outside of the research fishery would have an adjusted regional non-sandbar LCS base quota of 187.8 mt dw in the Atlantic region and 390.5 mt dw in the Gulf of Mexico region. In 2006 ex-vessel prices, this is equivalent to \$516,285 in the Atlantic region and \$1,273,269 in gross revenues in the Gulf of Mexico region. Divided by the remaining vessels it is estimated that the average gross revenues from shark per vessel would be just over \$2,000 per trip.

In addition, under the final action, porbeagle sharks would be authorized in recreational and commercial fisheries, but under a reduced TAC of 11.3 mt dw. Of the TAC, 1.7 mt dw would be available for harvest in commercial fisheries. Currently, the commercial quota for porbeagle sharks is 92 mt dw per year, however, this commercial quota has never been met. NMFS set new TAC and commercial quotas for porbeagle sharks based on present effort levels. Based on quota monitoring (which includes vessel trip reports) from 2003 to 2006, on average, 3,867 lb dw (1.7 mt dw) of porbeagle sharks were landed per year. Based on 2006 ex-vessel prices, this is equivalent to \$7,378 in gross revenues. Since commercial fishermen would be allowed to continue to land porbeagle sharks at this level, there are no anticipated economic impacts of implementing the TAC. In addition, recreational anglers would still be allowed to land porbeagle sharks. Therefore, there are no negative economic impacts for recreational fishermen associated with the TAC.

Data indicate that the preferred alternative maintains the annual gross revenues per vessel for vessels operating in the research fishery, while allowing other vessels outside of the research fishery to generate revenues at reduced levels. For example, in the no action alternative, it was estimated that if gross revenues for directed and incidental permit holders are averaged across the approximately 296 active directed and incidental shark permit holders, then the average annual gross revenues per shark fishing vessel is just over \$20,000. Using the average landings for directed permit holder from 2003 to 2005, it is estimated that the 143 active directed permit holders generated average annual gross shark revenues of just under \$33,000 from sharks. Under alternative

2, the reduced gross revenues averaged across the 143 active directed permit holders are estimated to be just over \$9,000 per directed shark fishing vessel and \$1,221 per vessel per year for incidental permit holders that land sharks. Under alternative 3 this is reduced further to approximately \$7,000 (\$1,015,162 gross revenues/143 vessel) per directed shark fishing vessel per year.

Alternative suite 4 has less economic impact on shark fishermen than alternative suite 5 (discussed below), but has greater impacts in the short-run than the status quo alternative. By allowing a limited number of historical participants to continue to harvest sharks under the research fishery, NMFS ensures that data for stock assessments and life history samples would continue to be collected. After comparing the alternative suites, NMFS determined that alternative suite 4 is the alternative that best meets the objectives of this rule while minimizing the economic impacts to shark permit holders.

#### 5. Alternative Suite 5

Alternative suite 5 would have significant economic and social impacts on a variety of small entities, including: commercial shark permit holders, shark dealers, CHB and tournament operators, gear manufacturers, bait and ice suppliers, and other secondary industries dependent on the shark fishery. The level of economic impact would be directly proportional to the amount of revenues that each entity has realized from past participation in the shark fishery. Permit holders would be impacted differently depending on the quantity of sharks landed in the past.

Vessels targeting sharks (directed permit holders) landed an average of 1,263 mt dw of LCS, 223 mt dw SCS, and 173 mt dw pelagic sharks per year between 2003 to 2005 based on shark dealer landings and effort data from the Coastal Fisheries and HMS logbooks. The gross revenues based on 2006 ex-vessel prices of these landings are estimated at \$4,702,031, \$681,880, and \$764,512 for LCS, SCS, and pelagic sharks, respectively. While it is assumed that few directed shark permit holders subsist entirely on revenues attained from the shark fishery, impacts would still be severe for those participants that depend on income from the directed shark fishery at certain times of the year. Because of the extensive economic impacts to shark directed permit holders as a result of this alternative suite, it is assumed that directed permit holders would likely pursue one of the following options as a result of closing

the Atlantic shark fishery: (1) transfer fishing effort to other fisheries for which they are already permitted (snapper grouper, king and Spanish mackerel, tilefish, lobster, dolphin/wahoo, etc), (2) acquire the necessary permits to participate in other fisheries (both open access and/or limited access fisheries), or (3) relinquish all permits and leave the fishing industry.

Incidental permit holders would face negative economic and social impacts as a result of closing the Atlantic shark fishery; however, these impacts would not be as severe as those experienced by directed permit holders. It is assumed that incidental permit holders receive the majority of their fishing income from participation in other fisheries, depending on the region and the type of gear predominantly fished (i.e., swordfish, tunas, snapper grouper, tilefish, dolphin/wahoo, lobster, etc.). NMFS estimates that, on average, between 2003 and 2005 incidental permit holders landed 26.9 mt dw LCS, 17.3 mt dw SCS, and 45.5 mt dw pelagics per year based on shark dealer landings and effort data from the Coastal Fisheries and HMS logbooks. This equates in gross revenues, based on 2006 ex-vessel prices for these landings, of \$106,491, \$52,882, and \$201,061 for the respective species complexes. Incidental permit holders would likely have to increase effort in these other fisheries to replace lost revenues from landing sharks. Furthermore, these vessels may seek other permits (open access or limited access transferred from another vessel) or leave the fishing industry entirely.

This alternative suite could also have negative economic and social impacts for shark dealers as they would no longer be authorized to purchase shark products from Federally permitted shark fishermen. Shark dealers also maintain permits to purchase other regionally caught fish products. Due to the brevity of the LCS shark fishing season, which is the shark fishery that accounts for the majority of the shark product revenue due to the fin value, many dealers also get revenue from purchasing fish products other than sharks. The majority of shark dealer permit holders hold permits to purchase other fish products, including swordfish, tunas, snapper grouper, tilefish, mackerel, lobster, and dolphin/wahoo among others. It is difficult to estimate, on an individual dealer basis, the percentage of revenues received exclusively from shark products.

Shark fin dealers, specializing in the purchase of shark fins from Federal and state permitted dealers, would also experience negative social and

economic impacts as a result of closing the shark fishery. These dealers receive virtually all of their income from purchasing shark fins and shipping them to exporters. Exporters then transport the fins to global and domestic markets. This alternative suite would likely force shark fin dealers to leave the industry or focus on purchasing other fishery products, resulting in significant economic impacts to the individuals involved in this trade.

It is difficult to estimate the economic and social impacts that would be experienced by various small entities that support the shark fishery, e.g., purveyors of bait, ice, fishing gear, and fishing gear manufactures. However, these impacts would likely be negative. It is difficult to estimate these impacts as it is uncertain to what extent vessels that were fishing for sharks would redistribute their fishing effort to other fisheries, or simply cease fishing operations. If the majority of vessels affected by a shark fishery closure simply displace effort to other fisheries, it is assumed that they would still be dependent on small entities for their bait, ice, and gear as these are products essential for fishing excursions targeting any species. Redistributing effort to other fisheries would mitigate negative economic impacts. However, if a significant number of vessels simply cease fishing operations or scale back considerably, then severe economic consequences would be imparted on these support industries as a result.

Reporting and observer requirements would also change under alternative suite 5. Alternative suite 5 would increase the proportion of fishermen completing the Coastal Fisheries Logbook who are then selected to report information on fish that are discarded. Currently, 20 percent of the fishermen completing this logbook are selected. This percentage would be increased to facilitate improved data available for shark interactions with longline and gillnet gear. This information would be especially useful because sharks could no longer be landed and the existing logbook only requires fishermen to provide data on landed fish. Increasing the number of fishermen who are selected to provide this data would result in negative economic and social impacts because it would require additional paperwork to be filled out. Because NMFS would close the fishery under this alternative suite, vessels would no longer be required to take an observer. Shark dealers would also no longer be required to submit dealer reports regarding sharks purchased.

Seasons and regions for the commercial Atlantic shark fishery

would no longer apply as this alternative suite would close the fishery.

Closing the Atlantic recreational shark fishery would have negative economic and social impacts, particularly for CHB operators who specialize in landing sharks and operators of shark tournaments that have prize categories for landing sharks. It is difficult to estimate the number of CHB operators that specialize in shark charters as the permit covers any participant targeting swordfish, sharks, tunas, and billfish. Many CHB operators target a variety of species depending on client interests, weather, time of year, and oceanographic conditions. CHB operators specializing in shark fishing charters would have to target other HMS or non HMS species to replace revenues lost as a result of customers not being able to land sharks. However, not all customers necessarily want to land sharks. CHB operators would still be able to catch sharks; however, all sharks (regardless of species) would need to be released in a manner that maximizes their chances of survival. Catering business operations to clientele interested in catch and release fishing for sharks might mitigate some of the negative economic impacts. Shark tournaments that reward prizes for landing sharks would be negatively impacted as a result of this alternative suite. In 2007, there were 59 tournaments with prize categories for pelagic sharks and 42 (combined) tournaments for LCS and SCS. The majority of these tournaments target pelagic sharks and are held in the North Atlantic and Gulf of Mexico regions. These tournaments would either modify their rules to only allow points/prizes for released sharks or these tournaments would cease to exist. Economic impacts on small entities such as restaurants, hotels, gear manufacturers, retail stores selling fishing supplies, and marinas in the vicinity of where these tournaments are held would also experience negative economic impacts.

HMS Angling permit holders would also experience negative impacts, despite the fact that they would still be able to catch and release sharks. Landings would not be permitted by any recreational anglers as a result of this alternative suite.

Closing the Atlantic shark fishery would have negative economic impacts on global shark fin markets. As a result of this alternative suite, U.S. flagged vessels would no longer be able to contribute to the global demand for shark fins. This would disadvantage U.S. shark fishermen as global markets would likely need to purchase their shark fins from other markets. However,

the United States is not a significant producer of shark products globally. Based on data from the United Nations Food and Agriculture Organization (FAO), less than one percent of global shark landings occur in the U.S. Atlantic Ocean.

While alternative suite 5 would meet the objectives of this rule, it would have the highest negative economic impacts of the alternatives considered. There would be significant reductions in revenues for shark dealers and fishing vessels involved in the shark fishery. Some small businesses dependent on commercial shark fishing may cease operating as a result of prohibiting the commercial harvest of shark species. Therefore, this alternative was not selected.

#### Small Entity Compliance Guide

Section 212 of the Small Business Regulatory Enforcement Fairness Act of 1996 states that, for each rule or group of related rules for which an agency is required to prepare a FRFA, the agency shall publish one or more guides to assist small entities in complying with the rule, and shall designate such publications as "small entity compliance guides." The Agency shall explain the actions a small entity is required to take to comply with a rule or group of rules. Copies of the compliance guide for this final rule are available (see **ADDRESSES**).

#### List of Subjects

##### 50 CFR Part 600

Fisheries, Fishing, Fishing vessels, Foreign relations, Penalties, Reporting and recordkeeping requirements.

##### 50 CFR Part 635

Fisheries, Fishing, Fishing vessels, Foreign relations, Imports, Penalties, Reporting and recordkeeping requirements, Treaties.

Dated: June 16, 2008.

**John Oliver,**

Deputy Assistant Administrator for Operations, National Marine Fisheries Service.

■ For the reasons set out in the preamble, 50 CFR parts 600 and 635 are amended as follows:

#### Chapter VI

### PART 600—MAGNUSON-STEVENSON ACT PROVISIONS

■ 1. The authority citation for part 600 continues to read as follows:

**Authority:** 5 U.S.C. 561 and 16 U.S.C. 1801 *et seq.*

■ 2. In § 600.1203, paragraph (a)(9) is revised to read as follows:

#### § 600.1203 Prohibitions.

(a) \* \* \*

(9) Fail to maintain a shark in the form specified in §§ 600.1204(h) and 635.30(c) of this chapter.

\* \* \* \* \*

■ 3. In § 600.1204, paragraphs (h) and (j) are revised to read as follows:

#### § 600.1204 Shark finning; possession at sea and landing of shark fins.

\* \* \* \* \*

(h) A person who owns or operates a vessel that has been issued a Federal Atlantic commercial shark limited access permit and who lands shark in or from the U.S. EEZ in an Atlantic coastal port must comply with regulations found at § 635.30(c) of this chapter.

\* \* \* \* \*

(j) No person aboard a vessel that has been issued a Federal Atlantic commercial shark limited access permit shall possess on board shark fins without the fins being naturally attached to the corresponding carcass(es), although sharks may be dressed at sea.

\* \* \* \* \*

### PART 635—ATLANTIC HIGHLY MIGRATORY SPECIES

■ 4. The authority citation for 50 CFR part 635 continues to read as follows:

**Authority:** 16 U.S.C. 971 *et seq.*; 16 U.S.C. 1801 *et seq.*

■ 5. In § 635.2, the definitions of "First receiver", "Naturally attached", "Non-sandbar LCS", and "Shark research permit" are added in alphabetical order and the definitions of "Dress" and "Dressed weight (dw)" are revised to read as follows:

#### § 635.2 Definitions.

\* \* \* \* \*

*Dress*, for swordfish, tunas, and billfish, means to process a fish by removal of head, viscera, and fins, but does not include removal of the backbone, halving, quartering, or otherwise further reducing the carcass. For sharks, dress means to process a fish by removal of head and viscera, but does not include removal of the fins, backbone, halving, quartering, or otherwise further reducing the carcass.

*Dressed weight (dw)*, for swordfish, tunas, and billfish, means the weight of a fish after it has been dressed. For sharks, dressed weight means the weight of a fish after it has been dressed and had its fins, including the tail, removed.

\* \* \* \* \*

*First receiver* means any entity, person, or company that takes, for

commercial purposes (other than solely for transport), immediate possession of the fish, or any part of the fish, as the fish are offloaded from a fishing vessel of the United States, as defined under § 600.10 of this chapter, whose owner or operator has been issued, or should have been issued, a valid permit under this part.

\* \* \* \* \*

*Naturally attached* refers to shark fins that remain attached to the shark carcass via at least some portion of uncut skin.

\* \* \* \* \*

*Non-sandbar LCS* means one of the species, or part thereof, listed under heading A of Table 1 in Appendix A of this part other than the sandbar shark (*Carcharhinus plumbeus*).

\* \* \* \* \*

*Shark research permit* means a permit issued to catch and land a limited number of sharks to maintain time series for stock assessments and for other scientific research purposes. These permits may be issued only to the owner of a vessel who has been issued either a directed or incidental shark LAP. The permit is specific to the commercial shark vessel and owner combination and is valid only per the terms and conditions listed on the permit.

\* \* \* \* \*

■ 6. In § 635.4, paragraphs (a)(5) and (g)(2) are revised to read as follows:

#### § 635.4 Permits and fees.

\* \* \* \* \*

(a) \* \* \*

(5) *Display upon offloading*. Upon offloading of Atlantic HMS, the owner or operator of the harvesting vessel must present for inspection the vessel's HMS Charter/Headboat permit; Atlantic tunas, shark, or swordfish permit; and/or the shark research permit to the first receiver. The permit(s) must be presented prior to completing any applicable landing report specified at § 635.5(a)(1), (a)(2), and (b)(2)(i).

\* \* \* \* \*

(g) \* \* \*

(2) *Shark*. A first receiver, as defined in § 635.2, of Atlantic sharks must possess a valid dealer permit.

\* \* \* \* \*

■ 7. In § 635.5, paragraphs (b)(1)(i), (b)(1)(ii), and (b)(1)(iv) are revised to read as follows:

#### § 635.5 Recordkeeping and reporting.

\* \* \* \* \*

(b) \* \* \*

(1) \* \* \*

(i) Dealers that have been issued or should have been issued an Atlantic

tunas, swordfish, and/or sharks dealer permit under § 635.4 must submit to NMFS all reports required under this section. All reports must be species-specific, must include information about all HMS landed, regardless of where harvested or whether the vessel is federally permitted under § 635.4 and, for sharks, must specify the total shark fin weight separately from the weight of the shark carcass. As stated in § 635.4(a)(6), failure to comply with these recordkeeping and reporting requirements may result in the existing dealer permit being revoked, suspended, or modified, and in the denial of any permit applications.

(ii) Reports of Atlantic tunas, swordfish, and/or sharks received by dealers from U.S. vessels, as defined under § 600.10 of this chapter, on the first through the 15<sup>th</sup> of each month, must be received by NMFS not later than the 25<sup>th</sup> of that month. Reports of Atlantic tunas, swordfish, and/or sharks received on the 16<sup>th</sup> through the last day of each month must be received by NMFS not later than the 10<sup>th</sup> of the following month. If a dealer issued an Atlantic tunas, swordfish, or sharks dealer permit under § 635.4 has not received any Atlantic HMS from U.S. vessels during a reporting period as specified in this section, he or she must still submit the report required under paragraph (b)(1)(i) of this section stating that no Atlantic HMS were received. This negative report must be received by NMFS for the applicable reporting period as specified in this section. This negative reporting requirement does not apply for bluefin tuna.

(iv) The dealer may mail or fax such report to an address designated by NMFS or may hand-deliver such report to a state or Federal fishery port agent designated by NMFS. If the dealer hand-delivers the report to a port agent, the dealer must deliver such report for Atlantic tunas, swordfish, or sharks no later than the prescribed received-by date for the reporting period, as required in paragraphs (b)(1)(i) and (ii) of this section.

■ 8. In § 635.21, paragraphs (d)(1)(i), (d)(1)(ii), and (d)(3)(ii) are revised, and paragraph (d)(1)(iii) is added to read as follows:

**§ 635.21 Gear operation and deployment restrictions.**

\* \* \* \* \*

(d) \* \* \*

(1) \* \* \*

(i) The mid-Atlantic shark closed area from January 1 through July 31 each calendar year;

(ii) The areas designated at § 622.33(a)(1) through (3) of this chapter, year-round; and

(iii) The areas described in paragraphs (d)(1)(iii)(A) through (H) of this section, year-round.

(A) *Snowy Grouper Wreck*. Bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	33°25'	77°04.75'
B	33°34.75'	76°51.3'
C	33°25.5'	76°46.5'
D	33°15.75'	77°00.0'
A	33°25'	77°04.75'

(B) *South Carolina A*. Bounded on the north by 32°53.5' N. lat.; on the south by 32°48.5' N. lat.; on the east by 78°04.75' W. long.; and on the west by 78°16.75' W. long.

(C) *Edisto*. Bounded on the north by 32°24' N. lat.; on the south by 32°18.5' N. lat.; on the east by 78°54.0' W. long.; and on the west by 79°06.0' W. long.

(D) *Charleston Deep Artificial Reef*. Bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	32°04'	79°12'
B	32°08.5'	79°07.5'
C	32°06'	79°05'
D	32°01.5'	79°09.3'
A	32°04'	79°12'

(E) *Georgia*. Bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	31°43'	79°31'
B	31°43'	79°21'
C	31°34'	79°29'
D	31°34'	79°39'
A	31°43'	79°31'

(F) *North Florida*. Bounded on the north by 30°29' N. lat.; on the south by 30°19' N. lat.; on the east by 80°02' W. long.; and on the west by 80°14' W. long.

(G) *St. Lucie Hump*. Bounded on the north by 27°08' N. lat.; on the south by 27°04' N. lat.; on the east by 79°58' W. long.; and on the west by 80°00' W. long.

(H) *East Hump*. Bounded by rhumb lines connecting, in order, the following points:

Point	North lat.	West long.
A	24°36.5'	80°45.5'
B	24°32'	80°36'
C	24°27.5'	80°38.5'
D	24°32.5'	80°48'
A	24°36.5'	80°45.5'

\* \* \* \* \*

(3) \* \* \*

(ii) *Handling and release requirements*. Sea turtle bycatch mitigation gear, as required by paragraph (d)(3)(i) of this section, must be used to disengage any hooked or entangled sea turtle as stated in paragraph (c)(5)(ii) of this section. This mitigation gear should also be employed to disengage any hooked or entangled species of prohibited sharks as listed under heading D of Table 1 of Appendix A of this part, any hooked or entangled species of sharks that exceed the retention limits as specified in § 635.24(a), and any hooked or entangled smalltooth sawfish. In addition, if a smalltooth sawfish is caught, the fish should be kept in the water while maintaining water flow over the gills and the fish should be examined for research tags. All smalltooth sawfish must be released in a manner that will ensure maximum probability of survival, but without removing the fish from the water or any research tags from the fish.

\* \* \* \* \*

■ 9. In § 635.22, paragraph (c) is revised to read as follows:

**§ 635.22 Recreational retention limits.**

\* \* \* \* \*

(c) *Sharks*. (1) One of each of the following sharks may be retained per vessel per trip, subject to the size limits described in § 635.20(e): any of the non-ridgeback sharks listed under heading A.2 of Table 1 in Appendix A of this part, tiger (*Galeocerdo cuvieri*), blue (*Prionace glauca*), common thresher (*Alopias vulpinus*), oceanic whitetip (*Carcharhinus longimanus*), porbeagle (*Lamna nasus*), shortfin mako (*Isurus paucus*), Atlantic sharpnose (*Rhizoprionodon terraenovae*), finetooth (*C. isodon*), blacknose (*C. acronotus*), and bonnethead (*Sphyrna tiburo*).

(2) In addition to the shark listed under paragraph (c)(1) of this section, one Atlantic sharpnose shark and one bonnethead shark may be retained per person per trip. Regardless of the length

of a trip, no more than one Atlantic sharpnose shark and one bonnethead shark per person may be possessed on board a vessel.

(3) No prohibited sharks, including parts or pieces of prohibited sharks, which are listed in Table 1 of Appendix A to this part under prohibited sharks, may be retained regardless of where harvested.

(4) The recreational retention limit for sharks applies to any person who fishes in any manner, except to persons aboard a vessel that has been issued an Atlantic incidental or directed shark LAP under § 635.4. If a commercial Atlantic shark quota is closed under § 635.28, the recreational retention limit for sharks and no sale provision in paragraph (a) of this section may be applied to persons aboard a vessel issued an Atlantic incidental or directed shark LAP under § 635.4, only if that vessel has also been issued an HMS Charter/Headboat permit issued under § 635.4 and is engaged in a for-hire fishing trip.

\* \* \* \* \*

■ 10. In § 635.24, paragraph (a) is revised to read as follows:

**§ 635.24 Commercial retention limits for sharks and swordfish.**

\* \* \* \* \*

(a) *Sharks.* (1) A person who owns or operates a vessel that has been issued a valid shark research permit under § 635.32(f) and who has a NMFS-approved observer on board may retain, possess, or land LCS, including sandbar sharks, in excess of the retention limits in paragraphs (a)(2) through (6) of this section. The amount of LCS that can be landed by such a person will vary as specified on the shark research permit. Only a person who owns or operates a vessel issued a valid shark research permit with a NMFS-approved observer on board may retain, possess, or land sandbar sharks.

(2) From July 24, 2008 through December 31, 2012, a person who owns or operates a vessel that has been issued a directed LAP for sharks and does not have a valid shark research permit, or a person who owns or operates a vessel that has been issued a directed LAP for sharks and that has been issued a valid shark research permit but does not have a NMFS-approved observer on board, may retain, possess, or land no more than 33 non-sandbar LCS per vessel per trip if the fishery is open per § 635.27 and § 635.28. Such persons may not retain, possess, or land sandbar sharks. As of January 1, 2013, a person who owns or operates a vessel that has been issued a directed LAP for sharks and does not have a valid shark research permit, or a person who owns or

operates a vessel that has been issued a directed LAP for sharks and that has been issued a shark research permit but does not have a NMFS-approved observer on board, may retain, possess, or land no more than 36 non-sandbar LCS per vessel per trip if the fishery is open per § 635.27 and § 635.28. Such persons may not retain, possess, or land sandbar sharks.

(3) A person who owns or operates a vessel that has been issued an incidental LAP for sharks and does not have a valid shark research permit, or a person who owns or operates a vessel that has been issued an incidental LAP for sharks and that has been issued a valid shark research permit but does not have a NMFS-approved observer on board, may retain, possess, or land no more than 3 non-sandbar LCS per vessel per trip if the fishery is open per § 635.27 and § 635.28. Such persons may not retain, possess, or land sandbar sharks.

(4) A person who owns or operates a vessel that has been issued a directed shark LAP may retain, possess, or land SCS and pelagic sharks if the SCS or pelagic shark fishery is open per § 635.27 and § 635.28. A person who owns or operates a vessel that has been issued an incidental LAP for sharks may retain, possess, or land no more than 16 SCS and pelagic sharks, combined, per trip, if the fishery is open per § 635.27 and § 635.28.

(5) A person who owns or operates a vessel that has been issued an incidental or directed LAP for sharks may not retain, possess, land, sell, or purchase prohibited sharks, including any parts or pieces of prohibited sharks, which are listed in Table 1 of Appendix A to this part under prohibited sharks.

(6) A person who owns or operates a vessel that has been issued either an incidental or directed LAP for sharks, and who decides to retain sharks, must retain, subject to the trip limits, all dead, legal-sized, non-prohibited sharks that are brought onboard the vessel and cannot replace those sharks with sharks of higher quality or size that are caught later in the trip. Any fish that are to be released cannot be brought onboard the vessel and must be released in the water in a manner that maximizes survival.

\* \* \* \* \*

■ 11. In § 635.27, paragraphs (b)(1) and (2) are revised to read as follows:

**§ 635.27 Quotas.**

\* \* \* \* \*

(b) \* \* \*

(1) *Commercial quotas.* The commercial quotas for sharks specified in paragraphs (b)(1)(i) through (b)(1)(vi) of this section apply to all sharks

harvested from the management unit, regardless of where harvested. Sharks taken and landed from state waters, even by fishermen without Federal shark permits, must be counted against the fishery quota. Commercial quotas are specified for each of the management groups of sandbar sharks, non-sandbar LCS, SCS, blue sharks, porbeagle sharks, and pelagic sharks other than blue or porbeagle sharks. Any sharks landed as unclassified will be counted against the appropriate species' quota based on the species composition calculated from data collected by observers on non-research trips and/or dealer data. No prohibited sharks, including parts or pieces of prohibited sharks, which are listed under heading D of Table 1 of Appendix A to this part, may be retained except as authorized under § 635.32.

(i) *Fishing seasons.* The fishing season for sandbar sharks, non-sandbar LCS, small coastal sharks, and all pelagic sharks will begin on January 1 and end on December 31.

(ii) *Regions.* (A) The commercial quotas for non-sandbar LCS are split between two regions: the Gulf of Mexico and the Atlantic. For the purposes of this section, the boundary between the Gulf of Mexico region and the Atlantic region is defined as a line beginning on the east coast of Florida at the mainland at 25°20.4' N. lat, proceeding due east. Any water and land to the south and west of that boundary is considered, for the purposes of quota monitoring and setting of quotas, to be within the Gulf of Mexico region. Any water and land to the north and east of that boundary, for the purposes of quota monitoring and setting of quotas, is considered to be within the Atlantic region.

(B) Except for non-sandbar LCS landed by a vessels issued a valid shark research permit with a NMFS-approved observer onboard, any non-sandbar LCS reported by dealers located in the Florida Keys areas or in the Gulf of Mexico will be counted against the non-sandbar LCS Gulf of Mexico regional quota. Except for non-sandbar LCS landed by a vessels issued a valid shark research permit with a NMFS-approved observer onboard, any non-sandbar LCS reported by dealers located in the Atlantic region will be counted against the non-sandbar LCS Atlantic regional quota. Non-sandbar LCS landed by a vessel issued a valid shark research permit with a NMFS-approved observer onboard will be counted against the non-sandbar LCS research fishery quota using scientific observer reports.

(iii) *Sandbar sharks.* The base annual commercial quota for sandbar sharks is 116.6 mt dw. However, from July 24,

2008 through December 31, 2012, to account for overharvests that occurred in 2007, the adjusted base quota is 87.9 mt dw. Both the base quota and the adjusted base quota may be further adjusted per paragraph (b)(1)(vii) of this section. This quota is available only to the owners of commercial shark vessels that have been issued a valid shark research permit and that have a NMFS-approved observer onboard.

(iv) *Non-sandbar LCS*. The total base quota for non-sandbar LCS is 677.8 mt dw. This base quota is split between the two regions and the shark research fishery as follows: Gulf of Mexico = 439.5 mt dw; Atlantic = 188.3 mt dw; and Shark Research Fishery = 50 mt dw. However, from July 24, 2008 through December 31, 2012, to account for overharvests that occurred in 2007, the total adjusted base quota is 615.8 mt dw. This adjusted base quota is split between the regions and the shark research fishery as follows: Gulf of Mexico = 390.5 mt dw; Atlantic = 187.8 mt dw; and Shark Research Fishery = 37.5 mt dw. Both the base quota and the adjusted base quota may be further adjusted per paragraph (b)(1)(vii) of this section.

(v) *Small coastal sharks*. The base annual commercial quota for small coastal sharks is 454 mt dw, unless adjusted pursuant to paragraph (b)(1)(vii) of this section.

(vi) *Pelagic sharks*. The base annual commercial quotas for pelagic sharks are 273 mt dw for blue sharks, 1.7 mt dw for porbeagle sharks, and 488 mt dw for pelagic sharks other than blue sharks or porbeagle sharks, unless adjusted pursuant to paragraph (b)(1)(vii) of this section.

(vii) *Annual adjustments*. NMFS will publish in the **Federal Register** any annual adjustments to the base annual commercial quotas or the 2008 through 2012 adjusted base quotas. The base annual quota and the adjusted base annual quota will not be available, and the fishery will not open, until such adjustments are published and effective in the **Federal Register**.

(A) *Overharvests*. If the available quota for sandbar sharks, small coastal, porbeagle shark, and pelagic sharks other than blue or porbeagle sharks is exceeded in any fishing season, NMFS will deduct an amount equivalent to the overharvest(s) from the following fishing season or, depending on the level of overharvest(s), NMFS may deduct an amount equivalent to the overharvest(s) spread over a number of subsequent fishing seasons to a maximum of five years. If the annual quota in a particular region or in the research fishery for non-sandbar LCS is

exceeded in any fishing season, NMFS will deduct an amount equivalent to the overharvest(s) from the following fishing season or, depending on the level of overharvest(s), NMFS may deduct an amount equivalent to the overharvest(s) spread over a number of subsequent fishing seasons to a maximum of five years, in the specific region or research fishery where the overharvest occurred. If the blue shark quota is exceeded, NMFS will reduce the annual commercial quota for pelagic sharks by the amount that the blue shark quota is exceeded prior to the start of the next fishing season or, depending on the level of overharvest(s), deduct an amount equivalent to the overharvest(s) spread over a number of subsequent fishing seasons to a maximum of five years.

(B) *Underharvests*. If an annual quota for sandbar sharks, SCS, blue sharks, porbeagle sharks, or pelagic sharks other than blue or porbeagle is not exceeded, NMFS may adjust the annual quota depending on the status of the stock or quota group. If the annual quota for non-sandbar LCS is not exceeded in either region or in the research fishery, NMFS may adjust the annual quota for that region or the research fishery depending on the status of the stock or quota group. If the stock (e.g., sandbar shark, porbeagle shark, pelagic shark, or blue shark) or specific species within a quota group (e.g., non-sandbar LCS or SCS) is declared to be overfished, to have overfishing occurring, or to have an unknown status, NMFS will not adjust the following fishing year's quota for any underharvest, and the following fishing year's quota will be equal to the base annual quota (or the adjusted base quota for sandbar and non-sandbar LCS until December 31, 2012). If the stock is not declared to be overfished, to have overfishing occurring, or to have an unknown status, NMFS may increase the following year's base annual quota (or the adjusted base quota for sandbar and non-sandbar LCS until December 31, 2012) by an equivalent amount of the underharvest up to 50 percent above the base annual quota. For the non-sandbar LCS fishery, underharvests are not transferable between regions and/or the research fishery.

(2) *Public display and non-specific research quota*. The base annual quota for persons who collect non-sandbar LCS, SCS, pelagic sharks, blue sharks, porbeagle sharks, or prohibited species under a display permit or EFP is 57.2 mt ww (41.2 mt dw). The base annual quota for persons who collect sandbar sharks under a display permit is 1.4 mt ww (1 mt dw) and under an EFP is 1.4 mt ww (1 mt dw). No persons may collect

dusky sharks under a display permit or EFP. All sharks collected under the authority of a display permit or EFP, subject to restrictions at § 635.32, will be counted against these quotas.

\* \* \* \* \*

■ 12. In § 635.28, paragraphs (b)(1) through (3) are revised to read as follows:

**§ 635.28 Closures.**

\* \* \* \* \*

(b) \* \* \*

(1) If quota is available as specified by a publication in the **Federal Register**, the commercial fisheries for sandbar shark, non-sandbar LCS, SCS, porbeagle sharks, blue sharks, and pelagic sharks other than blue or porbeagle sharks will remain open as specified at § 635.27(b)(1).

(2) When NMFS calculates that the fishing season landings for sandbar shark, non-sandbar LCS, SCS, blue sharks, porbeagle sharks, or pelagic sharks other than blue or porbeagle sharks has reached or is projected to reach 80 percent of the available quota as specified in § 635.27(b)(1), NMFS will file for publication with the Office of the Federal Register a notice of closure for that shark species group and/or region that will be effective no fewer than 5 days from date of filing. From the effective date and time of the closure until NMFS announces, via a notice in the **Federal Register**, that additional quota is available and the season is reopened, the fishery for the shark species group and, for non-sandbar LCS, region is closed, even across fishing years.

(3) When the fishery for a shark species group and/or region is closed, a fishing vessel, issued an Atlantic Shark LAP pursuant to § 635.4, may not possess or sell a shark of that species group and/or region, except under the conditions specified in § 635.22(a) and (c) or if the vessel possesses a valid shark research permit under § 635.32 and an NMFS-approved observer is onboard. A shark dealer, issued a permit pursuant to § 635.4, may not purchase or receive a shark of that species group and/or region from a vessel issued an Atlantic Shark LAP, except that a permitted shark dealer or processor may possess sharks that were harvested, off-loaded, and sold, traded, or bartered, prior to the effective date of the closure and were held in storage. Additionally, a permitted shark dealer or processor may possess non-sandbar sharks that were harvested by a vessel issued a valid shark research permit with a NMFS-approved observer onboard as long as the non-sandbar shark research

fishery is open. Under a closure for a shark species group, a shark dealer, issued a permit pursuant to § 635.4 may, in accordance with state regulations, purchase or receive a shark of that species group if the sharks were harvested, off-loaded, and sold, traded, or bartered from a vessel that fishes only in state waters and that has not been issued a Shark LAP, HMS Angling permit, or HMS Charter/Headboat permit pursuant to § 635.4.

Additionally, under a closure for a shark species group and/or regional closure, a shark dealer, issued a permit pursuant, to § 635.4 may purchase or receive a shark of that species group if the sharks were harvested, off-loaded, and sold, traded, or bartered from a vessel issued a valid shark research permit (per § 635.32) that had a NMFS-approved observer on board during the trip sharks were collected.

\* \* \* \* \*

■ 13. In § 635.30, paragraphs (c)(1) through (4) are revised to read as follows:

**§ 635.30 Possession at sea and landing.**

\* \* \* \* \*

(c) \* \* \*

(1) Notwithstanding the regulations issued at part 600, subpart N of this chapter, a person who owns or operates a vessel issued a Federal Atlantic commercial shark LAP must maintain all the shark fins including the tail on the shark carcass until the shark has been offloaded from the vessel. While sharks are on board and when sharks are being offloaded, persons issued a Federal Atlantic commercial shark LAP are subject to the regulations at part 600, subpart N, of this chapter.

(2) A person who owns or operates a vessel that has a valid Federal Atlantic commercial shark LAP must maintain the shark intact through offloading except that the shark may be dressed. All fins, including the tail, must remain naturally attached to the shark through offloading. While on the vessel, fins may be sliced so that the fin can be folded along the carcass for storage purposes as long as the fin remains naturally attached to the carcass via at least a small portion of uncut skin. The fins and tail may only be removed from the carcass once the shark has been landed and offloaded.

(3) A person who owns or operates a vessel that has been issued a Federal Atlantic commercial shark LAP and who lands sharks in an Atlantic coastal port must have all fins and carcasses weighed and recorded on the weighout slips specified in § 635.5(a)(2) and in accordance with regulations at part 600,

subpart N, of this chapter. Persons may not possess any shark fins not naturally attached to a shark carcass on board a fishing vessel at any time.

(4) Persons aboard a vessel that does not have a commercial permit for shark must maintain a shark in or from the EEZ intact through landing with the head, tail, and all fins attached. The shark may be bled.

\* \* \* \* \*

■ 14. In § 635.31, paragraphs (c)(1) and (c)(4) are revised to read as follows:

**§ 635.31 Restrictions on sale and purchase.**

\* \* \* \* \*

(c) \* \* \*

(1) Persons that own or operate a vessel that possesses a shark from the management unit may sell such shark only if the vessel has a valid commercial shark permit issued under this part. Persons may possess and sell a shark only when the fishery for that species group and/or region has not been closed, as specified in § 635.28(b).

\* \* \* \* \*

(4) Only dealers that have a valid shark dealer permit may purchase shark from the owner or operator of a fishing vessel. Dealers may purchase a shark only from an owner or operator of a vessel who has a valid commercial shark permit issued under this part, except that dealers may purchase a shark from an owner or operator of a vessel that does not have a commercial permit for shark if that vessel fishes exclusively in state waters. Dealers may purchase a sandbar shark only from an owner or operator of a vessel who has a valid shark research permit and who had a NMFS-approved observer onboard the vessel for the trip in which the sandbar shark was collected. Dealers may purchase a shark from an owner or operator of fishing vessel that has a permit issued under this part only when the fishery for that species group and/or region has not been closed, as specified in § 635.28(b).

\* \* \* \* \*

■ 15. In § 635.32, paragraphs (a)(2), (f), and (g) are revised and paragraph (h) is added to read as follows:

**§ 635.32 Specifically authorized activities.**

(a) \* \* \*

(2) Activities subject to the provisions of this section include, but are not limited to: scientific research resulting in, or likely to result in, the take, harvest, or incidental mortality of Atlantic HMS; exempted fishing and educational activities; programs under which regulated species retained in contravention to otherwise applicable

regulations may be donated through approved food bank networks; or chartering arrangements. Such activities must be authorized in writing and are subject to all conditions specified in any letter of acknowledgment, EFP, scientific research permit, display permit, chartering permit, or shark research permit issued in response to requests for authorization under this section.

\* \* \* \* \*

(f) *Shark research permits.* (1) For activities consistent with the purposes of this section and § 600.745(b)(1) of this chapter, NMFS may issue shark research permits.

(2) Notwithstanding the provisions of § 600.745 of this chapter and other provisions of this part, a valid shark research permit is required to fish for, take, retain, or possess Atlantic sharks, including sandbar sharks, in excess of the retention limits described in § 635.24(a). A valid shark research permit must be on board the harvesting vessel, must be available for inspection when the shark is landed, and must be presented for inspection upon request of an authorized officer. A shark research permit is only valid for the vessel and owner(s) combination specified and cannot be transferred to another vessel or owner(s). A shark research permit is only valid for the retention limits, time, area, gear specified, and other terms and conditions as listed on the permit and only when a NMFS-approved observer is onboard. Species landed under a shark research permit shall be counted against the appropriate quota specified in § 635.27 or as otherwise provided in the shark research permit.

(3) Regardless of the number of applicants, NMFS will issue only a limited number of shark research permits depending on available quotas as described in § 635.27, research needs for stock assessments and other scientific purposes, and the number of sharks expected to be harvested by vessels issued LAPs for sharks.

(4) In addition to the workshops required under § 635.8, persons issued a shark research permit, and/or operators of vessels specified on the shark research permit, may be required to attend other workshops (e.g., shark identification workshops, captain's meeting, etc.) as deemed necessary by NMFS to ensure the collection of high quality data.

(5) Issuance of a shark research permit does not guarantee the permit holder that a NMFS-approved observer will be deployed on any particular trip. Rather, permit issuance indicates that a vessel is eligible for a NMFS-approved

observer to be deployed on the vessel for a particular trip and that, on such observed trips, the vessel may be allowed to harvest Atlantic sharks, including sandbar sharks, in excess of the retention limits described in § 635.24(a).

(6) The shark research permit may be revoked, limited, or modified at any time, does not confer any right to engage in activities beyond those authorized by the permit, and does not confer any right of compensation to the holder.

(g) *Applications and renewals.* (1) Application procedures shall be as indicated under § 600.745(b)(2) of this chapter, except that NMFS may consolidate requests for the purpose of obtaining public comment. In such cases, NMFS may file with the Office of the Federal Register, on an annual or more frequent basis as necessary, notification of previously authorized exempted fishing, scientific research, public display, chartering, and shark research activities and to solicit public comment on anticipated EFP, scientific research permit, letter of acknowledgment, public display, chartering, or shark research permit activities. Applications for EFPs, scientific research permits, public display permits, chartering permits, or shark research permits are required to include all reports specified in the applicant's previous permit including, if applicable, the year-end report, all delinquent reports for permits issued in prior years, and all other specified information. In situations of delinquent reports, applications will be deemed incomplete and a permit will not be issued under this section.

(2) For the shark research permit, NMFS will publish annually, in a **Federal Register** notice(s), a description for the following fishing year of the expected research objectives. This description may include information such as the number of vessels needed, regions and seasons for which vessels are needed, the specific criteria for selection, and the application deadline. Complete applications, including all information requested in the applicable **Federal Register** notice(s) and on the application form and any previous reports required pursuant to this section and § 635.5, must be received by NMFS by the application deadline in order for the vessel to be considered. Requested information could include, but is not limited to, applicant name and address, permit information, vessel information, availability of the vessel, past involvement in the shark fishery, and compliance with HMS regulations including observer regulations. NMFS will only review complete applications

received by the published deadline to determine eligibility for participation in the shark research fishery. Qualified vessels will be chosen based on the information provided on the applications and their ability to meet the selection criteria as published in the **Federal Register** notice. A commercial shark permit holder whose vessel was selected to carry an observer in the previous two years for any HMS fishery but failed to comply with the observer regulations specified in § 635.7 will not be considered. A commercial shark permit holder that has been charged criminally or civilly (i.e., issued a Notice of Violation and Assessment (NOVA) or Notice of Permit Sanction) for any HMS related violation will not be considered for participation in the shark research fishery. Qualified vessels will be randomly selected to participate in the shark research fishery based on their availability and the temporal and spatial needs of the research objectives. If a vessel issued a shark research permit cannot conduct the shark research tasks, for whatever reason, that permit will be revoked and, depending on the status of the research and the fishing year, NMFS will randomly select another qualified vessel to be issued a shark research permit.

(h) *Terms and conditions.* (1) For EFPs, scientific research permits, and public display permits: Written reports on fishing activities, and disposition of all fish captured under a permit issued under this section must be submitted to NMFS within 5 days of return to port. NMFS will provide specific conditions and requirements as needed, consistent with the Consolidated HMS Fishery Management Plan, in the permit. If an individual issued a Federal permit under this section captures no HMS in any given month, either in or outside the EEZ, a "no-catch" report must be submitted to NMFS within 5 days of the last day of that month.

(2) For chartering permits, written reports of fishing activities must be submitted to NMFS by a date specified, and to an address designated, in the terms and conditions of each chartering permit.

(3) An annual written summary report of all fishing activities, and disposition of all fish captured, under the permit must be submitted to NMFS for all EFPs, scientific research permits, display permits, and chartering permits issued under this section within 30 days after the expiration date of the permit.

(4) For shark research permits, all owners and/or operators must comply with the recordkeeping and reporting requirements specified in § 635.5 per

the requirement of holding a LAP for sharks.

(5) As stated in § 635.4(a)(6), failure to comply with the recordkeeping and reporting requirements of this section could result in the EFP, scientific research permit, display permit, chartering permit, or shark research permit being revoked, suspended, or modified, and in the denial of any future applications.

■ 16. In § 635.69, paragraph (a) introductory text is revised to read as follows:

#### § 635.69 Vessel monitoring systems.

(a) *Applicability.* To facilitate enforcement of time/area and fishery closures, an owner or operator of a commercial vessel, permitted to fish for Atlantic HMS under § 635.4 and that fishes with a pelagic or bottom longline or gillnet gear, is required to install a NMFS-approved vessel monitoring system (VMS) unit on board the vessel and operate the VMS unit under the following circumstances:

\* \* \* \* \*

■ 17. In § 635.71, paragraphs (a)(2), (a)(4), (a)(6), (d)(3), (d)(4), (d)(6) through (8), and (d)(10) are revised and paragraphs (d)(15), (d)(16), and (d)(17) are added to read as follows:

#### § 635.71 Prohibitions.

\* \* \* \* \*

(a) \* \* \*

(2) Fish for, catch, possess, retain, or land Atlantic HMS without the appropriate valid vessel permit, LAP, EFP, scientific research permit, display permit, chartering permit, or shark research permit on board the vessel, as specified in §§ 635.4 and 635.32.

\* \* \* \* \*

(4) Sell or transfer or attempt to sell or transfer, for commercial purposes, an Atlantic tuna, shark, or swordfish other than to a dealer that has a valid dealer permit issued under § 635.4, except that this does not apply to a shark harvested by a vessel that has not been issued a permit under this part and that fishes exclusively within the waters under the jurisdiction of any state.

\* \* \* \* \*

(6) Falsify or fail to record, report, or maintain information required to be recorded, reported, or maintained, as specified in §§ 635.5 and 635.32 or in the terms and conditions of a permit issued under § 635.4 or an EFP, scientific research permit, display permit, chartering permit, or shark research permit issued under § 635.32.

\* \* \* \* \*

(d) \* \* \*

(3) Retain, possess, or land a shark of a species group when the fishery for that species group and/or region is closed, as specified in § 635.28(b).

(4) Sell or purchase a shark of a species group when the fishery for that species group and/or region is closed, as specified in § 635.28(b).

\* \* \* \* \*

(6) Fail to maintain a shark in its proper form, as specified in § 635.30(c). Fail to maintain naturally attached shark fins through offloading as specified in § 635.30(c).

(7) Sell or purchase shark fins that are disproportionate to the weight of shark carcasses, as specified in § 635.30(c) and § 600.1204(e) and (l) of this chapter.

(8) Fail to have shark fins and carcasses weighed and recorded, as specified in § 635.30(c).

\* \* \* \* \*

(10) Retain, possess, sell, or purchase a prohibited shark, including parts or pieces of prohibited sharks, as specified under §§ 635.22(c), 635.24(a), and 635.27(b), or fail to disengage any hooked or entangled prohibited shark with the least harm possible to the animal as specified at § 635.21(d).

\* \* \* \* \*

(15) Sell or transfer or attempt to sell or transfer a shark or sharks or part of a shark or sharks in excess of the retention limits specified in § 635.24(a).

(16) Purchase, receive, or transfer or attempt to purchase, receive, or transfer

a shark or sharks or part of a shark or sharks landed in excess of the retention limits specified in § 635.24(a).

(17) Replace sharks that are onboard the vessel for retention with sharks of higher quality or size that are caught later in a particular trip as specified in § 635.24(a).

\* \* \* \* \*

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