



**Billing Code: 3510-22-P**

**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**50 CFR Part 635**

**[Docket No. 100825390-5664-03]**

**RIN 0648- BA17**

**Atlantic Highly Migratory Species; Large Coastal and Small Coastal Atlantic Shark Management Measures**

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

**ACTION:** Final rule; fishery re-opening.

**SUMMARY:** This final rule implements Amendment 6 to the 2006 Consolidated Highly Migratory Species (HMS) Fishery Management Plan (FMP) (Amendment 6) to increase management flexibility to adapt to the changing needs of the Atlantic shark fisheries; prevent overfishing while achieving on a continuing basis optimum yield; and rebuild overfished shark stocks. Specifically, this final rule increases the large coastal shark (LCS) retention limit for directed shark permit holders to a maximum of 55 LCS per trip, with a default limit of 45 LCS per trip, and reduces the sandbar shark research fishery quota to account for dead discards of sandbar sharks during LCS trips; establishes a management boundary in the Atlantic region along 34° 00' N. latitude for the small coastal shark (SCS) fishery, north of which harvest and landings of blacknose sharks is prohibited and south of which the quota linkage between

blacknose sharks and non-blacknose SCS is maintained; implements a non-blacknose SCS total allowable catch (TAC) of 489.3 mt dw and a commercial quota of 264.1 mt dw in the Atlantic region; apportions the Gulf of Mexico (GOM) regional commercial quotas for aggregated LCS, blacktip, and hammerhead sharks into western and eastern sub-regional quotas along 88° 00' W. longitude; implements a non-blacknose SCS TAC of 999.0 mt dw, increases the commercial non-blacknose SCS quota to 112.6 mt dw, and prohibits retention of blacknose sharks in the GOM; and removes the current upgrading restrictions for shark directed limited access permit (LAP) holders.

**DATES:** Effective [*insert date of publication in the Federal Register*].

**ADDRESSES:** Copies of Amendment 6, including the Final Environmental Assessment (EA), and other relevant documents, are available from the HMS Management Division website at <http://www.nmfs.noaa.gov/sfa/hms/>. Copies of the 2013 Atlantic sharpnose and bonnethead shark stock assessment results are available on the Southeast Data Assessment and Review website at <http://sedarweb.org/sedar-34>.

**FOR FURTHER INFORMATION CONTACT:** LeAnn Hogan, Guý DuBeck, Delisse Ortiz, or Karyl Brewster-Geisz by phone: 301-427-8503, or by fax: 301-713-1917.

**SUPPLEMENTARY INFORMATION:** Atlantic sharks are managed under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), and the authority to issue regulations has been delegated from the Secretary to the Assistant Administrator (AA) for Fisheries, NOAA. On October 2, 2006, NMFS published in the **Federal Register** (71 FR 58058) final regulations, effective November 1, 2006, which detail management measures for Atlantic HMS fisheries, including for the Atlantic shark fisheries. The implementing regulations for the 2006 Consolidated HMS FMP and its amendments are at 50

CFR part 635. This final rule implements Amendment 6.

## **Background**

A brief summary of the background of this final rule is provided below. A more detailed history of the development of these regulations and the alternatives considered are described in the Final Environmental Assessment (EA) for Amendment 6, which can be found online on the HMS website (see **ADDRESSES**).

NMFS published a proposed rule on January 20, 2015 (80 FR 2648), which outlined the preferred alternatives analyzed in the Draft EA and solicited public comments on the measures, which were designed to address the objectives of increasing management flexibility to adapt to the changing needs of the Atlantic shark fisheries, prevent overfishing while achieving on a continuing basis optimum yield, and rebuild overfished shark stocks. Specifically, the action proposed to adjust the commercial LCS retention limit for shark directed LAP holders; create sub-regional quotas in the Atlantic and Gulf of Mexico regions for LCS and SCS; modify the LCS and SCS quota linkages; establish TACs and adjust the commercial quotas for non-blacknose SCS in the Atlantic and Gulf of Mexico regions based on the results of the 2013 stock assessments for Atlantic sharpnose and bonnethead sharks; and modify upgrading restrictions for shark permit holders. The full description of the management and conservation measures considered are included in the Final EA for Amendment 6 and the proposed rule and are not repeated here.

The comment period for the Draft EA and proposed rule for Amendment 6 ended on April 3, 2015. The comments received, and responses to those comments, are summarized below in the section labeled “Response to Comments.”

Management measures in Amendment 6 are designed to respond to the problems facing

Atlantic commercial shark fisheries, such as commercial landings that exceed the quotas, declining numbers of fishing permits since limited access was implemented, complex regulations, derby fishing conditions due to small quotas and short seasons, increasing numbers of regulatory discards, and declining market prices. This rule finalizes most of the management measures, and modifies others, that were contained in the Draft EA and proposed rule for Amendment 6. This section provides a summary of the final management measures being implemented by Amendment 6 and notes changes from the proposed rule to this final rule that may be of particular interest to the regulated community. Measures that are different from the proposed rule, or measures that were proposed but not implemented, are described in detail in the section titled, “Changes from the Proposed Rule.”

This final rule increases the LCS retention limit for shark directed LAP holders to a maximum of 55 LCS other than sandbar sharks per trip and sets the default LCS retention limit for shark directed LAP holders to 45 LCS other than sandbar sharks per trip. NMFS may adjust the commercial LCS retention limit before the start of or during a fishing season, based on the fishing rates from the current or previous years, among other factors. In order to increase the commercial LCS retention limit, NMFS is using a portion of the unharvested sandbar shark research fishery quota to account for any dead discards of sandbar sharks that might occur with a higher commercial LCS retention limit. As such, the sandbar shark research fishery quota has been reduced accordingly.

Regarding the SCS fishery in the Atlantic region, this final rule establishes a management boundary in the Atlantic region along 34° 00’ N. lat. for the SCS fishery and adjusts the SCS quotas. Specifically, retention of blacknose sharks will be prohibited north of 34° 00’ N. lat., necessitating the removal of the quota linkage between blacknose and non-blacknose SCS north

of 34° 00' N. lat. However, NMFS is maintaining the quota linkage between non-blacknose SCS and blacknose sharks south of 34° 00' N. lat. With these changes, fishermen operating north of 34° 00' N. lat. will be able to continue to fish for non-blacknose SCS once the blacknose quota is harvested, provided that non-blacknose SCS quota is available. Fishermen operating south of 34° 00' N. lat. will not be able to fish for non-blacknose SCS or blacknose sharks once either quota is harvested. Furthermore, in order to account for any blacknose shark discard mortality north of 34° 00' N. lat., NMFS is reducing the Atlantic blacknose shark quota from 18 mt dw (39,749 lb dw) to 17.2 mt dw (37,921 lb dw). This final rule also establishes a non-blacknose SCS TAC of 489.3 mt dw (1,078,711 lb dw) and increases the commercial quota to 264.1 mt dw (582,333 lb dw). Results of the 2013 stock assessments for Atlantic sharpnose and bonnethead sharks showed that both species would not become overfished or experience overfishing at these harvest levels. As described below, these measures in the final rule have been modified from the proposed rule based on additional data analyses and public comment on sub-regional quotas and the non-blacknose SCS TAC and commercial quota.

This final rule also modifies the LCS and SCS commercial quotas in the GOM region. Specifically, this final rule apportions the GOM regional commercial quotas for aggregated LCS, blacktip, and hammerhead sharks into western and eastern sub-regional quotas along 88° 00' W. long. West of 88° 00' W. long., the sub-regional quotas are as follows: 231.5 mt dw for blacktip shark, 72.0 mt dw for aggregated LCS, and 11.9 mt dw for hammerhead shark. East of 88° 00' W. long., the sub-regional quotas are as follows: 25.1 mt dw for blacktip shark, 85.5 mt dw for aggregated LCS, and 13.4 mt dw for hammerhead shark. This final rule also implements a non-blacknose SCS TAC of 999.0 mt dw (2,202,395 lb dw), increases the non-blacknose SCS commercial quota to 112.6 mt dw (248,215 lb dw), prohibits retention of blacknose sharks in the

GOM region, and removes the linkage between blacknose and non-blacknose SCS quotas. These non-blacknose SCS TAC and commercial quota levels would account for all blacknose shark mortality, including blacknose shark discards that were previously landed. As described below, the GOM management measures in the final rule have been modified from the proposed rule based on additional data analyses and public comment.

This final rule also removes the upgrading restrictions for shark directed LAP holders. Before this rule, an owner could upgrade a vessel with a shark directed LAP or transfer the shark directed LAP to another vessel only if the upgrade or transfer did not result in an increase in horsepower of more than 20 percent or an increase of more than 10 percent in length overall, gross registered tonnage, or net tonnage from the vessel baseline specifications. Removing these restrictions allows shark directed LAP holders to upgrade their vessel or transfer the shark directed LAP to another vessel without restrictions related to an increase in horsepower, length overall, or tonnage.

All management measures in Amendment 6 will be effective upon publication of the final rule in the Federal Register.

### **Response to Comments**

During the proposed rule stage, NMFS received approximately 30 written comments from fishermen, States, environmental groups, academia and scientists, and other interested parties. NMFS also received feedback from the HMS Advisory Panel, constituents who attended the four public hearings held from February to March 2015 in St. Petersburg, FL, Melbourne, FL, Belle Chasse, LA, and Manteo, NC, and constituents who attended the conference call/webinar held on March 25, 2015. Additionally, NMFS consulted with the five Atlantic Regional Fishery Management Councils, along with the Atlantic States and Gulf States Marine

Fisheries Commissions. A summary of the comments received on the proposed rule during the public comment period is provided below with NMFS' responses. All written comments submitted during the comment period can be found at [http:// www.regulations.gov](http://www.regulations.gov) by searching for NOAA–NMFS–2010–0188.

### *Permit Stacking*

*Comment 1:* NMFS received overall support for not implementing permit stacking under Alternative A1, including from the North Carolina Division of Marine Fisheries (NCDMF), South Carolina Department of Natural Resources (SCDNR), Virginia Marine Resources Commission (VAMRC), the Mid-Atlantic Fishery Management Council (MAFMC), and the Florida Fish and Wildlife Conservation Commission (FWC).

*Response:* NMFS preferred the No Action alternative in the proposed rule for Amendment 6, which would not implement permit stacking and continue to allow only one directed limited access permit per vessel and thus one retention limit. All the comments received supported the No Action alternative and agreed with NMFS' rationale that while permit stacking may have beneficial socioeconomic impacts for those fishermen that already have multiple directed shark permits or that can afford to buy additional permits, it would disadvantage those fishermen unable to buy additional permits. Permit stacking would create inequitable fishing opportunities among directed permit holders if those fishermen that currently have multiple directed permits or that could afford to buy additional directed permits gain an economic advantage from the higher retention limit resultant from permit stacking. Therefore, based on these comments, NMFS is maintaining the status quo in this action and is not implementing permit stacking.

### *Commercial Shark Retention Limit*

*Comment 2:* Commenters, including the NCDMF, SCDNR, and VAMRC, supported NMFS' proposal to increase the commercial retention limit to 55 LCS per trip, while other commenters preferred a lower retention limit of 45 LCS per trip. Those commenters were concerned that the higher retention limit would increase participation in the fishery and cause the quotas to be harvested faster, especially since the quotas were not increasing. NMFS also received comments that the increased retention limit would only help state-water fishermen and not federally-permitted fishermen, because the state-water fishermen have shorter travel times to fishing grounds and fewer fishing restrictions than the federally-permitted shark fishermen.

*Response:* NMFS agrees with the comments that an increased LCS retention limit could cause the quotas to be harvested faster and could result in permit holders who have not participated in recent years re-entering the commercial shark fishery or selling their permits to fishermen who want to enter the commercial shark fishery. Because new or returning fishermen do not have the same experience as current fishermen in avoiding sandbar sharks while also avoiding other prohibited species such as dusky sharks, NMFS believes that increasing the retention limit too much could potentially have negative impacts such as increased sandbar shark discards. NMFS' goal with the preferred LCS retention limit of 55 LCS per trip is to increase the profitability of shark trips within current LCS quotas. Thus, as described in Chapters 2 and 4 in the Final EA, NMFS continues to prefer to increase the commercial retention limit to a maximum of 55 LCS other than sandbar sharks per trip. However, based on public comment and due to concerns that new or returning shark fishermen may not have the experience needed to avoid certain shark species, NMFS is establishing a default commercial retention limit of 45 LCS other than sandbar sharks per trip. If the quotas are being harvested too slowly or too quickly, NMFS may use current regulations to adjust the trip limit inseason to account for spatial and

temporal differences in the shark fishery. Adjusting the commercial LCS retention limit on an inseason basis will allow NMFS the ability to ensure equitable fishing opportunities throughout a region or sub-region. With regard to state-water shark fishermen, many states do not have species-specific commercial fishing permits, and instead rely on a general commercial fishing permit. In other words, a state commercial fishing permit allows fishermen to fish commercially for any species of fish, not just sharks. Fishermen who fish in state waters must comply with the state fishing regulations. Fishermen that have a directed or incidental federal shark commercial permit must abide by federal regulations, including retention limits, and must sell to a federally permitted dealer when fishing in federal or state waters. Overall, NMFS believes that establishing a default commercial retention limit of 45 LCS other than sandbar sharks per trip would benefit federally-permitted fishermen by providing increased profitability of shark trips within current LCS quotas, and increasing management flexibility to adapt to the changing needs of the Atlantic shark fisheries.

*Comment 3:* Some commenters were concerned that the ratios of LCS to sandbar shark used for calculating the commercial retention limits and the adjusted sandbar shark research fishery quota were incorrect. In addition, some commenters expressed concern that NMFS does not know the catch composition of state-water fishermen and therefore could not accurately estimate what impact an increased retention limit would have on the sandbar shark research fishery quota.

*Response:* NMFS used observer data from 2008 through 2013 to calculate the ratio of LCS to sandbar shark to analyze the impacts of modifying the commercial retention limit and adjusting the shark research fishery sandbar shark quota. While most of these data are from federal waters and not state waters, these data are the best data available to determine the catch

composition ratio of LCS to sandbar sharks in the fishery. As described in this final rule, based on public comment and discussions with the SEFSC, NMFS revised the calculations slightly, resulting in adjustments to the sandbar shark research fishery quota. Specifically, in the Draft EA, NMFS calculated the number of directed trips where directed shark permit holders reported landing at least one LCS in their vessel logbook report from 2008 through 2012. Using this definition of a directed trip overestimated the number of directed shark trips taken every year. In the Final EA, NMFS calculated the number of directed trips when LCS accounted for at least two-thirds of the landings in vessel logbook reports from 2008 through 2013; this is the same approach the observer program uses to determine which vessels should be observed in the LCS fishery. Based on the variability in the directed shark trips by region and year, and the fact that the increased retention limit might result in fewer trips, NMFS decided to use the average number of directed shark trips in the calculations for the adjusted sandbar shark research fishery quota. Using the revised directed shark trips calculations, NMFS is adjusting the sandbar shark fishery quota in Alternative B2 from 75.7 mt dw in the proposed rule to 90.7 mt dw in the final rule. The increased sandbar shark fishery quota should not impact the research fishery at current funding levels, since the sandbar shark fishery quota under Amendment 6 would still be less than the current quota of 116.6 mt dw, and should ensure that a sufficient amount of sandbar quota is available for the sandbar shark research fishery while accounting for sandbar shark interactions in the LCS fishery under a higher retention limit.

*Comment 4:* NMFS received a comment to change the commercial shark retention limit back to a weight limit. The commenter would prefer a 2,000 lb trip limit rather than a number trip limit. The commenter believes that it would be easier to enforce trip tickets and dealer

landings if it was a weight limit since the weight of 36 LCS per trip can vary and it is easier for fishermen to land more than the current trip limit.

*Response:* Currently, the commercial retention limit is 36 LCS other than sandbar sharks per trip, which was implemented in 2008 under Amendment 2 to the 2006 Consolidated HMS FMP (Amendment 2). Before 2008, the commercial retention limit was 4,000 lb dw LCS per trip. NMFS changed the commercial retention limit from a weight based trip limit to a number of sharks per trip because the 4,000 lb dw LCS trip limit would have caused the sandbar shark TAC and blacktip shark quotas that were implemented in Amendment 2 to be exceeded. NMFS believes that a retention limit that is based on number of sharks per trip is easier to monitor and makes compliance with these regulations easier for fishermen. In addition, a retention limit based on number of sharks per trip eases at-sea and at-port enforcement of retention limit regulations. Thus, for these reasons, NMFS did not consider changing the retention limit from a number of sharks back to weight based retention limits in this rulemaking.

*Comment 5:* NMFS received comments to establish the commercial shark retention limit by gear type. Specifically, the commenters suggested a limit of 55 LCS per trip for fishermen using bottom longline gear and a limit of 105 LCS per trip for fishermen using gillnet gear. The commenters stated that with one retention limit for all gear types, bottom longline fishermen would always have a greater profit per trip than gillnet fishermen because bottom longline fishermen catch larger sharks than gillnet fishermen.

*Response:* As described in the Draft EA for Amendment 6 under Alternative G, NMFS considered separate retention limits by gear type, but did not further analyze this alternative. Observer data from 2008-2013 confirms that gillnet fishermen are catching smaller LCS than fishermen using bottom longline gear. These smaller LCS are likely juvenile sharks. If NMFS

were to separate the retention limits for LCS by gear type and increase the limit for gillnet fishermen, gillnet fishermen would be landing a higher number of juvenile LCS. Given the susceptibility of many shark species to overfishing and the number of LCS that have either an unknown or overfished status, NMFS does not want to increase mortality on one particular life stage of any shark species without stock assessment analyses indicating that the species and/or stock can withstand that level of fishing pressure. In addition, setting different retention limits for bottom longline and gillnet gears could complicate enforcement of the regulations. It is for these reasons that NMFS did not further analyze the impacts of setting retention limits based on gear types in the proposed or final rule for Amendment 6.

#### *Atlantic and Gulf of Mexico Regional and Sub-Regional Quotas*

##### *Overall*

*Comment 6:* Some commenters, including NCDMF, noted that the fishing season opening dates have a direct impact on fishing effort and participation from any particular region and expressed concern regarding the years chosen to calculate the sub-regional quotas based on landing history. Specifically, commenters were concerned that some of the years chosen may have disadvantaged their area.

*Response:* In this rulemaking, because of similar concerns expressed at the Predraft stage, NMFS took into consideration how the seasonal opening dates have impacted fishing effort and participation. For example, in the alternatives where NMFS considered apportioning the Atlantic blacknose and non-blacknose SCS quotas into sub-regions, NMFS used data from 2011 through 2012 since these were the only years that the blacknose shark quota linkage did not affect fishing effort for non-blacknose SCS. In the Gulf of Mexico region, NMFS used the range of data from 2008 through 2013 in the sub-regional data calculations for the blacktip and aggregated LCS

quotas since the seasonal opening dates did not impact the fishing effort and participation in those years. However, as explained in response to comment 8 below, based on public comments opposed to implementing sub-regional quotas in the Atlantic region, NMFS changed the preferred alternative in this final rule and is not implementing sub-regional LCS and SCS quotas in the Atlantic region. This change is aligned with one of the objectives of Amendment 6, which is intended to respond to the changing needs of the Atlantic shark fisheries.

*Comment 7:* Some commenters expressed concern regarding how NMFS plans to count the landings for each sub-regional quota. Commenters are concerned that fishermen near the boundary lines will change where they fish or just state that they were fishing in the other sub-region when quota in their sub-region is close to 80 percent. In addition, commenters have expressed concern that NMFS will not be able to enforce where the sharks are caught and which sub-regional quota the landings are counted towards. Instead, commenters preferred that NMFS count the landings where the shark is landed instead of where it is caught.

*Response:* When NMFS started managing shark quotas regionally, NMFS also began monitoring shark quotas based on where the shark was landed. NMFS found this approach did not work for the shark fishery for a variety of reasons. NMFS found there are a number of shark fishermen who land their sharks at private docks or at docks that are not owned by the dealer purchasing the sharks. Once landed, the fisherman transports the sharks to the dealer via truck or other methods. At that time, the “landings” were counted against where the dealer was located and not where the fish were actually landed. When the dealer is located in a different region from the fisherman, it causes problems—particularly if the management of the shark species was split into regions based on the results of stock assessments. Additionally, fishermen do not always fish for sharks and land those sharks in the same region. With the implementation of the

HMS electronic reporting system (eDealer) in 2013, NMFS began monitoring shark quotas based on where the sharks were reported to be caught. NMFS has found few problems with this approach since the implementation of eDealer and has not experienced any problems with managing landings reported on either side of an established management boundary (e.g. the Miami-Dade line which separates the Atlantic and Gulf of Mexico regions). NMFS will continue to monitor landings via eDealer and count shark landings based on where they are caught instead of where they are landed. This approach should allow NMFS to count shark landings more accurately against the appropriate regional and sub-regional shark quotas. eDealer will incorporate the new sub-regional quota areas in the GOM to ensure that shark landings in the Gulf are counted against the appropriate GOM sub-regional quota. However, if in the future NMFS notices discrepancies regarding where sharks are caught versus landed (e.g., in a comparison between observer data and dealer data), NMFS may reconsider this issue.

*Comment 8:* NMFS received multiple comments to revise or remove all quota linkages between the SCS and LCS management groups in both the Atlantic and Gulf of Mexico regions. In the Atlantic region, commenters requested that all quota linkages be removed. In the Gulf of Mexico region, commenters requested that the non-blacknose SCS and blacknose linkage be removed, and that the blacktip shark management group be linked to the aggregated LCS and hammerhead shark management groups in each sub-region.

*Response:* The current LCS and SCS quota linkages were created for shark species that are in separate management groups, but that have the potential to be caught together on the same shark fishing trip (e.g. non-blacknose SCS and blacknose sharks). If the quota for one management group has been filled and the management group is closed, that species could still be caught as bycatch by fishermen targeting other shark species, possibly resulting in excess

mortality and negating some of the conservation benefit of management group closures. In addition, shark quota linkages were put into place as part of the rebuilding plans for shark species that are overfished in order to reduce excess mortality of the overfished species during commercial fishing for other shark species. Thus, NMFS closes the linked shark management groups together. However, based on public comment and additional analyses, NMFS is adjusting the quota linkage changes that were proposed in Draft Amendment 6. Specifically, in the Atlantic region, NMFS is establishing a management boundary at 34° 00' N. latitude for the SCS fishery. NMFS is prohibiting landings of blacknose sharks and removing the quota linkage between the non-blacknose SCS and blacknose sharks north of 34° 00' N. latitude. NMFS is keeping the quota linkage between non-blacknose SCS and blacknose sharks south of 34° 00' N. latitude, since fishermen would still be allowed to land blacknose sharks in this area and most of the blacknose sharks are landed there. NMFS is also maintaining the current quota linkages between the aggregated LCS and hammerhead shark management groups in the Atlantic region. In the Gulf of Mexico, based on public comment and additional analyses, NMFS is removing the quota linkage between the non-blacknose SCS and blacknose sharks in the Gulf of Mexico region and prohibiting the retention and landings of blacknose sharks. In order to account for regulatory discards from the prohibition of blacknose sharks, NMFS is adjusting the Gulf of Mexico non-blacknose SCS commercial quota, taking into account the Gulf of Mexico blacknose shark TAC. As for the blacktip, aggregated LCS, and hammerhead shark management groups, NMFS is maintaining the current quota linkages for these management groups in the Gulf of Mexico because of the unknown status of aggregated LCS and the overfished and overfishing status of the hammerhead shark complex.

*Comment 9:* NMFS received a comment suggesting consideration of the International Commission for the Conservation of Atlantic Tunas (ICCAT) rule that prohibited landings of hammerhead sharks with pelagic longline gear in the sub-regional quota calculations. The commenter believes that landing percentages by sub-region would be different pre- and post-rulemaking, and should not include the range of years since the fishery has changed due to the rulemaking.

*Response:* To comply with ICCAT Recommendations 10-07 and 10-08, NMFS implemented a final rule (76 FR 53652; August 29, 2011) prohibiting the retention, transshipping, landing, storing, or selling of hammerhead sharks (except bonnethead sharks) and oceanic whitetip sharks caught in association with ICCAT fisheries. This rule affected the commercial HMS pelagic longline fishery and recreational fisheries for tunas, swordfish, and billfish in the Atlantic Ocean, including the Caribbean Sea and Gulf of Mexico. In the proposed rule for Amendment 6, NMFS did not modify the landings from pelagic longline fishermen to account for that rule change, as few hammerhead sharks were landed by pelagic longline fishermen between 2008 and 2011. Thus, including these calculations would not have impacted the sub-regional quota calculations or NMFS' decision regarding measures adopted in this final rule. In the Atlantic region, NMFS is not implementing sub-regional quotas for the hammerhead shark management group at this time. Instead, NMFS is maintaining the overall hammerhead quota in the Atlantic region. In the Gulf of Mexico region, NMFS is establishing sub-regional quotas for the hammerhead shark management group, but NMFS revised the data used for the sub-regional quota calculation using 2014 eDealer landings data to determine the sub-regional quotas. Since this data is well after the implementation of the ICCAT rule in 2011, the sub-regional quota calculations are based on landings after the rule was in place.

### *Atlantic Regional and Sub-Regional Quotas*

*Comment 10:* NMFS received some support for sub-regional quotas in the Atlantic region, including from the NCDMF, SCDNR, VAMRC, and MAFMC. Both the SCDNR and VAMRC supported the preferred Alternative C4 for the LCS and SCS fishery management groups, but expressed concern for equitable fishing opportunities when the opening date for the LCS management groups is chosen. The NCDMF, MAFMC, and other constituents supported the preferred Alternative C4, but for only the SCS management group. They did not support implementation of sub-regional quotas for the aggregated LCS and hammerhead shark management groups, requesting that NMFS examine other options for these groups. The NCDMF and MAFMC requested that NMFS implement seasons for the aggregated LCS fishery with 50 percent of the quota being available on January 1 and 50 percent of the quota being available on July 1 or July 15. Other commenters requested that NMFS use inseason trip limit adjustments for the LCS fishery instead of sub-regional quotas. The FWC did not support any of the sub-regional quota alternatives as proposed, but the FWC consulted with Florida fishery participants and FWC supports dividing the Atlantic at 34° 00' N latitude if NMFS establishes sub-regions for either the SCS or LCS fisheries.

*Response:* Based on public comment and additional analyses, NMFS developed a new preferred alternative, Alternative C8, which maintains the status quo for the LCS and SCS regional commercial quotas and does not apportion these quotas into sub-regions. NMFS will continue to determine season opening dates and adjust the LCS retention limits inseason in order to provide equitable fishing opportunities to fishermen throughout the Atlantic region.

In addition, NMFS is establishing a management boundary line in the Atlantic region along 34° 00' N. latitude for the SCS fishery. South of 34° 00' N. latitude, NMFS is maintaining

the quota linkage between non-blacknose SCS and blacknose sharks. North of 34° 00' N. latitude, NMFS is prohibiting the commercial retention of blacknose sharks and removing the quota linkage between non-blacknose SCS and blacknose sharks. Additionally, in order to account for blacknose shark discard mortality north of 34° 00' N. latitude, NMFS is reducing the Atlantic blacknose shark quota from 18 mt to 17.2 mt dw, based on historical landings of blacknose sharks in that area. In establishing this management boundary, as long as quota is available, fishermen south of 34° 00' N. latitude could fish for, land, and sell both blacknose and non-blacknose SCS. However, as soon as either quota is harvested, the entire commercial SCS fishery south of 34° 00' N. latitude will close. For fishermen south of 34° 00' N. latitude, this is status quo. However, in a change from status quo, fishermen north of 34° 00' N. latitude could fish for, land, and sell non-blacknose SCS as long as quota is available, but would not be allowed to land or possess blacknose sharks. Overall, establishing this management boundary could result in commercial fishermen north of 34° 00' N. latitude possessing and landing non-blacknose SCS if non-blacknose SCS quota is available at the same time as commercial fishermen south of 34° 00' N. latitude cannot possess or land any SCS because of the quota linkage between blacknose and non-blacknose SCS. Prohibiting blacknose sharks and removing quota linkages north of 34° 00' N. latitude could have beneficial social and economic impacts for those fishermen, as fishermen in the area above 34° 00' N. latitude would be able to continue fishing for non-blacknose SCS without being constrained by the fishing activities south of 34° 00' N. latitude, where the majority of blacknose sharks are landed. Additionally, these management measures will not hinder blacknose shark rebuilding or have negative impacts on any other SCS because fishermen above and below the management boundary will still be fishing under quotas that are consistent with the most recent stock assessments. However,

fishermen south of 34° 00' N. latitude will likely not see any short- and long-term social or economic benefits and will need to continue to avoid blacknose sharks, consistent with the rebuilding plan, in order to land non-blacknose SCS.

*Comment 11:* The SCDNR did not support Alternative C3, which would create sub-regional quotas at 33°00' N Latitude, since the sub-regional quota line would split the State of South Carolina and cause confusion with the fishermen and dealers in the area.

*Response:* As discussed above, NMFS is not implementing sub-regional quotas in the Atlantic based on comments received and additional analyses. NMFS created a new preferred alternative, Alternative C8, which maintains the status quo for the LCS and SCS regional commercial quotas and creates a new management boundary at 34° 00' N. lat. for the blacknose and non-blacknose SCS management groups in the Atlantic region.

*Comment 12:* NMFS received overall comments on the opening and closing of the LCS and SCS management groups in the Atlantic region. The comments ranged from opening the LCS management group on January 1 or March 1 to maintaining a consistent season opening date every year for the LCS management groups to opening and closing the LCS and SCS management groups together.

*Response:* NMFS will evaluate several “Opening Commercial Fishing Season” criteria (§ 635.27(b)(3)) as well as the new management measures in this final action when determining the opening dates for the Atlantic shark fisheries. The “Opening Fishing Season” criteria consider factors such as the available annual quotas for the current fishing season, estimated season length and average weekly catch rates from previous years, length of the season and fishermen participation in past years, impacts to accomplishing objectives of the 2006 Consolidated HMS FMP and its amendments, temporal variation in behavior or biology of target species (e.g.

seasonal distribution or abundance), impact of catch rates in one region on another, and effects of delayed season openings. NMFS will publish the season opening dates of the Atlantic shark fishery and the shark fishery quotas in the 2016 Atlantic shark season specifications proposed and final rules.

*Comment 13:* NMFS received a number of requests, including from the NCDMF, SCDNR, VAMRC, and MAFMC, to change the Atlantic non-blacknose SCS TAC and quota from Alternative C6 to Alternative C7, to increase the non-blacknose SCS TAC and quota to the highest amount analyzed, because the fishery should not be limited by the bonnethead shark stock assessment, since bonnethead sharks do not comprise a large portion of landings.

*Response:* After consulting with the HMS Advisory Panel and other constituents and re-reviewing the data from the stock assessments, NMFS is preferring Alternative C7 and implementing a non-blacknose SCS TAC of 489.3 mt dw and a commercial quota of 264.1 mt dw (which is the current adjusted quota). This represents a higher non-blacknose SCS TAC and commercial quota than those preferred in the proposed rule under Alternative C6, likely resulting in shark fishermen taking more trips, in order to land the larger number of non-blacknose SCS allowed. NMFS does not believe that a higher non-blacknose SCS TAC and commercial quota would have a negative impact on the non-blacknose SCS management group, given the results of the SEDAR 34. The projections that were run for Atlantic sharpnose and bonnethead sharks in SEDAR 34 indicated that there was a 70 percent chance that both species would not become overfished or experience overfishing at current harvest levels and could withstand harvest above current levels. NMFS preferred Alternative C6 in the proposed rule to be cautious regarding the “unknown” status of bonnethead sharks. However, based on public comments and after reviewing the combined Gulf of Mexico and Atlantic non-blacknose SCS landings in 2014,

NMFS found that bonnethead sharks represented only 6 percent of landings, and therefore, limiting the quota based on bonnethead sharks would be overly conservative. Thus, the higher non-blacknose SCS commercial quota under Alternative C7 would continue to allow fishermen to land these species at current levels, while maintaining the Atlantic sharpnose and bonnethead stocks at sustainable levels, without unnecessarily limiting the quota, and thus limiting economic gains, due to bonnethead sharks. Regarding finetooth sharks, while results from the SEDAR 13 stock assessment for finetooth sharks should be viewed cautiously, NMFS does not anticipate that this quota would negatively impact the finetooth shark stock. The quota under Alternative C7 is significantly lower than the maximum non-blacknose SCS quota put in place (332.4 mt dw), which still provided for sustainable harvest of non-blacknose SCS. This combined with the fact that finetooth sharks represented only 21 percent of combined Gulf of Mexico and Atlantic non-blacknose SCS landings in 2014, compared to Atlantic sharpnose representing 73 percent, further supports that this quota would have minimal impacts on the finetooth shark stock. The higher non-blacknose SCS commercial quota under the new preferred Alternative C7 will continue to allow fishermen to land these species at current levels, while maintaining the Atlantic sharpnose, bonnethead, and finetooth shark stocks at sustainable levels.

*Comment 14:* NMFS received a comment stating that NMFS should implement a commercial retention limit for blacknose sharks that ranged from 100-200 lb dw per trip or establish an incidental SCS retention limit of 16 blacknose sharks per trip to directed and incidental shark limited access permit holders in the Atlantic Region.

*Response:* In the Final EIS for Amendment 5a to the 2006 Consolidated HMS FMP, NMFS included the consideration of a commercial retention limit for blacknose sharks in Section 2.3 Alternatives Considered But Not Further Analyzed. Blacknose sharks are known to form

large schools, and even skilled fishermen with a high success rate of avoiding blacknose sharks may still encounter schools. Applying a blacknose shark retention limit of 16 sharks per trip could result in sets with high regulatory dead discards because the trip limit would be too low to cover the rare events where large numbers of blacknose sharks are incidentally encountered. NMFS also examined the blacknose shark landings from the HMS electronic dealer data in 2013 and 2014 on a per trip basis. In 2013, 285 trips landed blacknose sharks and, in 2014, there were 178 trips that landed blacknose sharks. The majority of these trips landed less than 200 lbs of blacknose sharks per trip. While a blacknose shark commercial retention limit could reduce the incentive for fishermen to avoid catching blacknose sharks, the creation of a commercial retention limit for blacknose sharks could also increase the incentive to maximize landings of blacknose sharks on each trip, thus causing the blacknose quota to be harvested faster and leading to a closure of both the blacknose and non-blacknose SCS quotas. Therefore, NMFS prefers to address blacknose shark landings and discards by linking the blacknose shark and non-blacknose SCS quotas, which should provide greater and more effective incentive for reducing landings of blacknose sharks than a retention limit, thus more effectively managing the blacknose fishery in a manner that maximizes resource sustainability, while minimizing, to the greatest extent possible, socioeconomic impacts.

#### *Gulf of Mexico Regional and Sub-Regional Quotas*

*Comment 15:* NMFS received general support for the idea of sub-regional quotas in the Gulf of Mexico and requests for specific changes to the preferred alternative. The FWC, after consulting with Florida fishery participants, supported dividing the Gulf of Mexico at 88° 00' W. longitude. Other commenters also supported changing the sub-regional quota line to 88° 00' or 88° 30' W. longitude. In general, commenters suggested moving away from the proposed 89°

00' W. longitude as they felt this boundary would not create enough geographic separation between the fishing activities of fishermen from the western Gulf of Mexico and those in the eastern Gulf of Mexico. These commenters felt that fishermen from the western Gulf of Mexico were close enough to the boundary that they would easily fish on both sides of the boundary, ultimately compromising the fishing opportunities of fishermen from the eastern Gulf of Mexico (who were further from the boundary between the sub-regions). Commenters also indicated that hammerhead sharks are landed in the western Gulf of Mexico and requested some hammerhead shark quota to the western Gulf of Mexico sub-region so hammerhead sharks can be landed and not discarded.

*Response:* NMFS proposed to apportion the GOM regional commercial quotas for LCS into western and eastern sub-regions along 89° 00' W. longitude, maintain the hammerhead and aggregated LCS linkages in the eastern sub-region, and remove this linkage and prohibit hammerhead sharks in the western sub-region. In the proposed rule, NMFS also evaluated alternatives which apportion the GOM regional commercial quotas for LCS into western and eastern sub-regions along 89° 00' W. and 88° 00' W. longitude with maintaining the hammerhead and aggregated LCS linkages in the eastern and western sub-regions. In those alternatives, for the western sub-region of the Gulf of Mexico, the aggregated LCS quota would be linked to a very small hammerhead shark quota (0.1 mt dw; 334 lb dw). Due to the management difficulty of managing such a small quota and to avoid having the aggregated LCS fishery close early, NMFS preferred to prohibit hammerhead sharks in the western sub-region. Based on public comments and additional analyses, and after consulting with the HMS AP, NMFS is apportioning the GOM regional commercial quotas for aggregated LCS, hammerhead, and blacktip shark management groups into eastern and western sub-regional quotas along 88°

00' W. long. As the range of Louisiana fishermen extends east beyond 89° 00' W. longitude, placing the boundary at this location would have allowed active shark fishermen in the western sub-region to utilize both sub-regional quotas while active shark fishermen in the eastern sub-region would be limited to just the eastern sub-region quota. As such, this sub-regional boundary would have resulted in less equitable economic benefits to fishermen in both sub-regions. NMFS agrees that this is a more appropriate boundary between the sub-regions, as it would provide better geographic separation between the major stakeholders in the GOM, in order to prevent active shark fishermen in the western sub-region from utilizing both sub-regional quotas to the detriment of shark fishermen who fish entirely in the eastern sub-region. This change in the sub-regional split should provide more equitable economic benefits to fishermen in both sub-regions, by allowing them increased likelihood of fully harvesting their sub-regional quota, and maximizing the potential annual revenue they could gain upon implementation of sub-regional quotas in the GOM.

Additionally, NMFS is no longer prohibiting retention of hammerhead sharks in the western sub-region of the GOM. Under the preferred alternative in the proposed rule for Amendment 6, 99.4 percent of the hammerhead shark base annual quota would have been apportioned to the eastern sub-region, while only 0.6 percent would have gone to the western sub-region. Based on these percentages, NMFS felt it was appropriate to maintain the linkage between aggregated LCS and hammerhead sharks in the eastern GOM sub-region because of the overlap of ranges of these management groups. In addition, in the proposed rule, the preferred alternative would have eliminated the linkage between aggregated LCS and hammerhead sharks in the western Gulf of Mexico sub-region and prohibited the harvest and landings of hammerhead sharks in the western Gulf of Mexico sub-region, due to predicted challenges

associated with monitoring a small quota of 0.1 mt dw. However, based on public comment, NMFS took another look at the GULFIN landings data originally used for the calculation of the hammerhead shark sub-regional quotas. NMFS became aware that there were errors in how hammerhead sharks were reported in GULFIN, and also that the new hammerhead shark management group (implemented mid-season in 2013 under Amendment 5a to the 2006 Consolidated HMS FMP) impacted the landings data in GULFIN. Due to these issues, landings of hammerhead sharks reported in GULFIN likely underestimate the magnitude and regional distribution of landings in the GOM. To corroborate public comments that indicated there were increased landings of hammerhead sharks in the western sub-region, NMFS reviewed eDealer data from 2014, and decided in this final rule to apportion the hammerhead shark quota between the two sub-regions. This change is consistent with and furthers the fundamental purpose and intent of the rule, as expressed in the proposed rule, to set quotas for the sub-regions that accurately reflect landings in each sub-region. Using the eDealer data better satisfies that intent because it better reflects the current hammerhead shark landings in the Gulf of Mexico. The resultant sub-regional quotas will prevent large numbers of hammerhead sharks from being unnecessarily discarded in the western sub-region.

*Comment 16:* NMFS received support for Alternative D7 in the GOM region, which would increase the non-blacknose SCS TAC and quotas to the highest amounts analyzed. Commenters felt this alternative would not limit SCS fisheries based on the results of the bonnethead shark stock assessment. Commenters also requested that NMFS remove the quota linkage between the non-blacknose SCS and blacknose shark management groups and prohibit the retention of blacknose sharks in the GOM because the small blacknose shark quota has the

potential to close the non-blacknose SCS fishery before the entire non-blacknose SCS quota can be harvested.

*Response:* In the proposed rule, NMFS proposed to establish a GOM non-blacknose SCS TAC of 954.7 mt dw and a commercial quota of 68.3 mt dw (current adjusted quota) based on the SEDAR 34 stock assessment, which accounted for uncertainty in the bonnethead assessment. However, NMFS has developed a new preferred alternative in this final rule (Alternative D8) based on these comments and additional analyses, establishing a non-blacknose SCS TAC of 999.0 mt dw and increasing the commercial quota to 112.6 mt dw (248,215 lb dw). This new preferred alternative retains the non-blacknose SCS quota originally considered under Alternative D7, but also prohibits blacknose sharks in the GOM and adjusts the commercial quota to account for blacknose shark discards, so that the level of discards would not exceed the 2015 base annual blacknose shark quota of 2.0 mt dw. Because projections from the GOM bonnethead and Atlantic sharpnose shark stock assessments indicated that there was a 70-percent chance that both stocks could withstand harvest levels almost double current levels, NMFS believes there is a relatively low likelihood that the higher non-blacknose SCS TAC and commercial quota would negatively impact the Atlantic sharpnose, bonnethead, or finetooth shark stocks. Based on public comments and a review of landings data, NMFS found that bonnethead sharks represented only 6 percent of the combined Gulf of Mexico and Atlantic non-blacknose SCS landings in 2014, and therefore, limiting the quota based on bonnethead sharks is overly conservative. Finetooth sharks represented only 21 percent of combined Gulf of Mexico and Atlantic non-blacknose SCS landings in 2014, compared to Atlantic sharpnose representing 73 percent, indicating that the increased quota would have minimal impacts on finetooth sharks. Additionally, the higher non-blacknose SCS commercial quota under Alternative D8 would

continue to allow fishermen to land these species at current levels, while maintaining the Atlantic sharpnose and bonnethead stocks at sustainable levels, without unnecessarily limiting the quota due to bonnethead sharks and limiting economic gains.

Additionally, while the commercial non-blacknose SCS quota in Alternative D8 would be lower than the quota considered under Alternative D7, removal of the quota linkage between blacknose and non-blacknose SCS (due to the prohibition of blacknose sharks) would increase the likelihood that fishermen in the GOM could harvest the entire non-blacknose SCS quota. In the Draft EA for Amendment 6, NMFS had stated that prohibiting all landings of blacknose sharks could possibly result in a loss of revenue for fishermen who land small amounts of blacknose sharks (as all interactions would be turned into discards). The socioeconomic benefits gained by access to a larger non-blacknose SCS quota, which would no longer be linked to the blacknose shark quota, would outweigh the potential revenue gained from being able to retain and land blacknose sharks. Fishermen in the GOM have also been requesting a prohibition on landing and retention of blacknose sharks since Amendment 3 to the 2006 Consolidated HMS FMP, when blacknose sharks were separated from the SCS management group and linked to the newly created non-blacknose SCS management group. The small blacknose shark quota has resulted in early closure before the non-blacknose SCS quota could be harvested. However, in recent years, blacknose sharks have not been the limiting factor in initiating closure of the linked SCS management groups in the Gulf of Mexico; instead, it has been landings of non-blacknose SCS either exceeding or being projected to exceed 80 percent of the quota. This combined with the fact that fishermen have demonstrated an ability to largely avoid blacknose sharks with the use of gillnet gear, suggest that mortality of blacknose sharks under Alternative D8 could be lower than that under the current quota.

### *Modifying Commercial Vessel Upgrading Restrictions*

*Comment 17:* Constituents, including the NCDMF, SCDNR, MAFMC, and FWC, supported NMFS's proposal to remove the commercial vessel upgrading restriction under Alternative E2.

*Response:* In the proposed rule for Amendment 6, NMFS preferred to remove the current upgrading restrictions for shark limited access permit holders. All the comments received supported this measure. Therefore, in part based on these comments, NMFS is removing the upgrading restrictions for shark limited access permit holders in the final rule.

*Comment 18:* NMFS received comments to further investigate the need for upgrading restrictions in other HMS permits.

*Response:* NMFS appreciates the comments and recognizes the need to potentially investigate whether it is appropriate to remove upgrading restrictions for the other commercial HMS permits. However, this request is outside of the scope of this current shark fishery rulemaking. NMFS may consider the need for upgrading restrictions in other HMS permits in a future rulemaking.

### *General Comments*

*Comment 19:* NMFS received suggestions to stop all shark fishing.

*Response:* National Standard 1 requires NMFS to prevent overfishing while achieving, on a continuing basis, optimum yield from each fishery for the U.S. fishing industry. NMFS continually monitors the federal shark fisheries, and based on the best available scientific information, takes action needed to conserve and manage the fisheries. The primary goal of Amendment 6 is to implement management measures for the Atlantic shark fisheries that will achieve the objectives of increasing management flexibility to adapt to the changing needs of the

shark fisheries, prevent overfishing while and achieving on a continuing basis optimum yield, and rebuilding overfished shark stocks.

*Comment 20:* NMFS received multiple comments referring to the SEDAR shark stock assessment for Atlantic sharpnose and bonnethead sharks. One commenter believes the SEDAR process is flawed and gravely over-estimates the shark population in the world. Other commenters focused on the list of future SEDAR stock assessments and the timeline of those stock assessments. The NCDMF and other commenters requested that NMFS perform a SEDAR stock assessment on sandbar and dusky sharks as soon as possible. Another commenter would like NMFS to do another SEDAR stock assessment on the Gulf of Mexico blacktip shark and blacknose shark stocks.

*Response:* Most of the domestic shark stock assessments follow the SEDAR process. This process is also used by the South Atlantic, Gulf of Mexico, and Caribbean Fishery Management Councils and is designed to provide transparency throughout the stock assessment. Generally, SEDAR stock assessments are focused on available data, assessment models, and peer review. Sometimes these stages include face to face meetings; other times, the stages are conducted solely by webinar or conference calls. All meetings, webinars, and conference calls are open to the public. All reports from all stages of the process are available online at <http://sedarweb.org/>.

With regard to the timing of upcoming LCS and SCS SEDAR assessments, NMFS aims to conduct a number of shark stock assessments every year and to regularly reassess these stocks. The number of species that can be assessed each year depends on whether assessments are establishing baselines or are only updates to previous assessments. Assessments also depend on ensuring there are data available for a particular species. Tentatively, in addition to the shark

assessments being conducted by ICCAT, NMFS is considering a dusky shark update assessment in 2016 and an update assessment for GOM blacktip sharks in 2017. NMFS has not yet decided on which species to assess in 2018.

*Comment 21:* NMFS received multiple comments on the status of the sandbar shark population. Commenters expressed concern that the impact of the increased sandbar shark population is now impacting other fisheries (e.g., amberjack, red snapper, grouper, tilefish). In addition, commenters believe that NMFS should implement a small retention limit (1-5 per trip) of sandbar sharks in the commercial fishery.

*Response:* Before the most recent assessment, sandbar sharks were determined to be overfished and experiencing overfishing in a 2005/2006 stock assessment. NMFS established a rebuilding plan for this species in Amendment 2 in July 2008 (NMFS 2008a). Under that rebuilding plan, NMFS determined that sandbar sharks would rebuild by the year 2070 with a total allowable catch of 220 mt ww (158.3 mt dw). Also, as part of that rebuilding plan, NMFS maintained the bottom longline mid-Atlantic shark closed area, prohibited the landing of sandbar sharks in the recreational fishery, and established a shark research fishery in the commercial fishery. Only fishermen participating in the limited shark research fishery can land sandbar sharks.

The SEDAR 21 sandbar shark stock assessment (2011) evaluated the status of the stock based on new landings and biological data, and projected future abundance under a variety of catch levels in the U.S. Atlantic Ocean, Gulf of Mexico, and Caribbean Sea. The base model used in the SEDAR 21 sandbar shark assessment, an age-structured production model, indicated that the stock is overfished (spawning stock fecundity (SSF) 2009/SSFMSY=0.66), but no longer experiencing overfishing (F2009/FMSY=0.62). According to the SEDAR 21, the sandbar shark

stock status is improving, and the current rebuilding timeframe, with the 2008 TAC of 220 mt ww, provides a greater than 70-percent probability of rebuilding by 2070. Having a 70-percent probability of rebuilding is the level of success for rebuilding of sharks that was established in the 1999 FMP for Atlantic Tunas, Swordfish, and Sharks and carried over in the 2006 Consolidated HMS FMP. This stock assessment also indicates that reducing the TAC from the current 220 mt ww to 178 mt ww would provide a 70-percent chance of rebuilding the stock by the year 2066, a reduction of 4 years from the current rebuilding timeframe. Because the current TAC already provides a greater than 70-percent probability of rebuilding, and because overfishing is not occurring and the stock status is improving, in Amendment 5a to the 2006 Consolidated HMS FMP, NMFS maintained the current TAC and rebuilding plan, consistent with the Magnuson-Stevens Act requirements and the National Standard Guidelines.

In the Final EA for Amendment 6, NMFS considered the implementation of a sandbar shark commercial quota (Section 2.6, Alternative F) that would allow commercial fishermen to incidentally land a limited number of sandbar sharks outside the Atlantic shark research fishery. NMFS explored several different options of distributing the unused sandbar shark research quota. While some commenters requested a limited number of sandbar sharks (between 1 to 5 per trip), the available sandbar shark quota would only provide between 1 and 7 sandbar sharks per vessel per year, not per trip. Under all options considered, NMFS is concerned about monitoring and enforcing such small individual annual retention limits without the monitoring mechanisms that are possible under a catch share scenario. NMFS is also concerned that changes to the shark research fishery could have negative effects on the status of the sandbar shark stock, which has improved and stabilized since the inception of the research fishery in 2008. In addition, NMFS is concerned about potential identification issues and impacts to dusky

sharks if fishermen were allowed to incidentally land sandbar sharks outside the shark research fishery. Thus, due to these concerns and the benefits to the sandbar and dusky sharks of current management measures, NMFS prefers to continue to only allow commercial sandbar shark landings as part of the shark research fishery. NMFS may reexamine the commercial sandbar shark quotas once a new stock assessment has been completed.

*Comment 22:* The NCDMF and FWC request that NMFS consider increasing the federal fishery closure trigger for the shark management groups from 80 percent to greater than 90 percent, because the implementation of weekly reporting requirements for dealers and electronic reporting requirements has improved quota monitoring abilities, and increased the timeliness and accuracy of dealer reporting.

*Response:* NMFS' goal is to allow shark fishermen to harvest the full quota without exceeding it in order to maximize economic benefits to stakeholders while achieving conservation goals, including preventing overfishing. Based on past experiences with monitoring quotas for HMS species, NMFS believes that the 80-percent threshold works well, allowing for all or almost all of the quota to be harvested without exceeding the quota. As such, NMFS expects that, in general, the quotas would be harvested between the time that the 80-percent threshold is reached and the time that the season actually closes. In addition, NMFS must also account for late reporting by shark dealers even with the improved electronic dealer system and provide a buffer to include landings received after the reporting deadline in an attempt to avoid overharvests. At the spring 2015 HMS Advisory Panel meeting, NMFS discussed some of the difficulties in monitoring the shark fishery quotas. Some of the difficulties in monitoring shark fishery quotas include late dealer reporting, state exemptions allowing shark landings following Federal closures of some shark management groups, and late receipt of paper-

based trip ticket state dealer data. The reasons listed above have contributed in some cases to the overharvest of some of the shark management groups. As such, NMFS believes that closing the fishery at 90 percent of the harvested quota would not provide a sufficient buffer and could lead to overharvests. These overharvests could result in reduced quotas in the future since all overharvests would be accounted for when establishing subsequent shark fishing seasons and quotas.

### **Changes from the Proposed Rule (80 FR 2648, January 20, 2015)**

NMFS made numerous changes from the proposed rule, as described below.

1. Commercial Retention Limits (§ 635.24(a)(2)) and sandbar shark research fishery quota (§ 635.27(b)(1)(iii)(A)). In response to public comments received and based on discussions with the NMFS Southeast Fisheries Science Center (SEFSC), NMFS revised the calculations used to evaluate the commercial LCS retention limit for shark directed LAP holders. This final rule increases the commercial LCS retention limit to a maximum of 55 LCS other than sandbar sharks per trip and establishes a default LCS retention limit of 45 LCS other than sandbar sharks per trip. If the LCS quotas are being harvested too slowly or too quickly, the existing regulations allow NMFS to adjust the commercial LCS trip limit inseason to account for spatial and temporal differences in the shark fishery. This final rule also reduces the sandbar shark research fishery quota from the current 116.6 mt dw to 90.7 mt dw, which is an increase from the quota in the proposed rule. These revised measures better correspond with NMFS' intent to increase management flexibility to adapt to the changing needs of the Atlantic shark fisheries, while still providing opportunities to collect scientific data in the sandbar shark research fishery.

2. Atlantic Regional and Sub-Regional Quotas (§ 635.27(b)(1)(i), § 635.27(b)(1)(i)(A) – (D), § 635.28(b)(4)(i) and (iv)). In response to public comment and additional analyses, NMFS has modified a number of the proposed management measures in the Atlantic region related to quotas and quota linkages. First, NMFS is not apportioning the Atlantic regional commercial LCS and SCS quotas along 34° 00' N. lat. into northern and southern sub-regional quotas. For LCS, NMFS is instead maintaining the existing regulations that provide for the LCS retention limit to be adjusted during the fishing season to ensure fishermen throughout the region have opportunities to fish for LCS.

Second, for SCS, NMFS is establishing a management boundary in the Atlantic region along 34° 00' N. lat. Retention of blacknose sharks is prohibited north of 34° 00' N. lat., and fishermen fishing north of 34° 00' N. lat. can fish for non-blacknose SCS as long as quota is available. South of 34° 00' N. lat., the quota linkage between blacknose and non-blacknose SCS is maintained, and fishermen in this area may only fish for SCS when quota of both blacknose and non-blacknose SCS is available.

Third, this final rule includes a non-blacknose SCS TAC of 489.3 mt dw (1,078,711 lb dw) and a commercial quota of 264.1 mt dw (582,333 lb dw (i.e., the current adjusted quota)), which is an increase from 401.3 mt dw (884,706 lb dw) TAC and 176.1 mt dw (388,222 lb dw (i.e., current base) commercial quota in the proposed rule. The final TAC and commercial quota are consistent with results of the 2013 stock assessments, which showed that both species would not become overfished or experience overfishing at these harvest levels, and consistent with NMFS' objectives of preventing overfishing while achieving on a continuing basis optimum yield and rebuilding overfished shark stocks.

The removal of quota linkages north of 34° 00' N. lat., and the increased non-blacknose SCS commercial quota would allow fishermen to maximize fishing opportunities and additional revenues from harvesting more non-blacknose SCS without being constrained by fishing activities south of 34° 00' N. lat., where the majority of blacknose sharks are landed. This new management boundary along 34° 00' N. lat. will not impact LCS, as NMFS will maintain the existing quota linkages for the LCS management groups across the Atlantic region.

3. Gulf of Mexico Regional and Sub-Regional Quotas (§635.27(b)(1)(ii), § 635.27(b)(1)(ii)(A) –(E), § 635.28(b)(4)(ii) and (iii)). Similar to the Atlantic region, NMFS has modified a number of the proposed management measures for the GOM region in response to public comment and additional analyses. While NMFS is still apportioning the GOM regional commercial quotas for aggregated LCS, hammerhead, and blacktip shark management groups into eastern and western sub-regional quotas, the boundary line has changed from 89° 00' W. long. to 88° 00' W. long. Additionally, this final rule will not prohibit retention of hammerhead sharks in the western sub-region of the GOM, but instead, apportions the hammerhead shark quota between the two sub-regions.

Changes were also made to management measures impacting the SCS fishery in the GOM region. NMFS proposed to establish a non-blacknose SCS TAC of 954.7 mt dw and a commercial quota of 68.3 mt dw (150,476 lb dw (i.e., the current adjusted quota)). Based on public comments and additional analyses revealing the interaction ratio between non-blacknose SCS and blacknose sharks in the GOM, in the final rule, NMFS is implementing a non-blacknose SCS TAC of 999.0 mt dw (2,202,395 lb dw), increasing the commercial quota to 112.6 mt dw (248,215 lb dw), and prohibiting the retention of blacknose sharks in the entire GOM region. These non-blacknose SCS TAC and commercial quota levels would account for all blacknose

shark mortality, including blacknose shark discards that were previously landed. This change is consistent with NMFS' efforts to reduce regulatory discards, as the level of discards would not exceed the 2015 base annual blacknose shark quota of 2.0 mt dw, and fishermen have demonstrated an ability to largely avoid blacknose sharks with the use of gillnet gear since Amendment 3. It also simultaneously allows fishermen to maximize revenue from the non-blacknose SCS landings, without concerns of early closure due to the linkage of the non-blacknose SCS and blacknose shark management groups.

4. Blacktip shark fishery closure (§ 635.28(b)(5)). NMFS is making a minor, non-substantive change to language in the regulations regarding the fishery closure procedure for blacktip sharks in the GOM. This change is merely a language clarification, and it does not change the substance of the paragraph or agency practice. In 2008, NMFS finalized regulations as part of Amendment 2 to the 2006 Consolidated HMS FMP (73 FR 40658; July 15, 2008) that requires NMFS to close shark management groups or regional areas once the landings of that shark management group or regional area have reached or are projected to reach 80 percent of the available quota. NMFS currently uses this regulation to close shark species groups and regional areas and is not changing that regulation in this final rule; all shark management groups will continue to close when landings reach, or are projected to reach, 80 percent of the relevant quota. In the final rule for Amendment 5a to the 2006 Consolidated HMS FMP (78 FR 40318; July 3, 2013), NMFS established a separate Gulf of Mexico blacktip shark management group, established that NMFS could close the Gulf of Mexico blacktip shark management group if Gulf of Mexico blacktip shark landings are less than 80 percent of the relevant quota, and implemented criteria for NMFS to consider before closing the Gulf of Mexico blacktip shark management group at less than 80 percent of the relevant quota. As described in that final rule

and Amendment 5a (78 FR 40318; July 3, 2013), NMFS' intent was to "maintain flexibility to close the Gulf of Mexico blacktip shark management group depending on several criteria to ensure that the bycatch of hammerhead sharks and aggregated LCS would not result in mortality that would exceed the TAC of either management group." As explained in that 2013 final rule, NMFS' intent was that NMFS could close the Gulf of Mexico blacktip management group, based on consideration of the criteria listed in paragraph § 635.28(b)(5), after, or at the same time as, the hammerhead and aggregated LCS management groups close, to ensure that bycatch of hammerhead sharks and aggregated LCS does not result in mortality that would exceed the TAC of either management group. Since publication of that 2013 final rule, NMFS has found that the language was confusing regarding what actions require consideration of the criteria in § 635.28(b)(5). As a result, in this final rule, NMFS has revised § 635.28 (b)(5) to clarify that, consistent with the language and intent of the final rule implementing Amendment 5a, NMFS would consider those criteria only when NMFS is considering closing the unlinked blacktip shark management group in the Gulf of Mexico before landings reach, or are expected to reach, 80 percent of the quota.

5. Atlantic Tuna Longline category (§ 635.4(1)(2)(iv) and (v)). NMFS is making a minor, non-substantive change to language in the regulations clarifying that the name of the "tuna limited access permit" previously referenced in two places in the regulations is the "Atlantic Tuna Longline category limited access permit." Paragraphs (1)(2)(iv) and (v) of § 635.4 have been revised to clarify the language referring to the limited access permit by its name. This is the only tuna limited access permit that NMFS currently has, and therefore, it is more appropriate to reference the permit by name. This change also makes these references consistent with the language throughout 50 CFR part 635, which refers to the "Atlantic Tuna Longline

category limited access permit.” This change is merely a language clarification, and it does not change the substance of the paragraph or agency practice.

### Commercial Fishing Season Notification

Pursuant to the measures being implemented in this final rule, the commercial LCS retention limit will be 45 LCS other than sandbar sharks per trip, unless further modified by NMFS. The current 2015 adjusted base quotas, preliminary 2015 landings, annual base quotas under Amendment 6, and information on whether the fisheries for those quotas will remain open or will re-open as a result of this final rule are located in Tables 1 and 2.

**Table 1. 2015 large and small coastal shark quotas and landings before Amendment 6. Note: 1 metric ton = 2,204.6 lb.**

Region	Management Group	2015 Base Quota (A)	2015 Adjusted Annual Quota <sup>1</sup> (B)	Preliminary 2015 Landings <sup>2</sup> (C)	Remaining 2015 Quota (B-C = D)
No regional quota	Sandbar shark research fishery	116.6 mt dw (257,056 lb dw)	116.6 mt dw (257,056 lb dw)	60.6 mt dw (133,496 lb dw)	56.0 mt dw (123,560 lb dw)
Atlantic	Aggregated Large Coastal Sharks	168.9 mt dw (372,552 lb dw)	168.9 mt dw (372,552 lb dw)	12.3 mt dw (27,100 lb dw)	156.6 mt dw (345,452 lb dw)
	Hammerhead Sharks	27.1 mt dw (59,736 lb dw)	27.1 mt dw (59,736 lb dw)	0.7 mt dw (1,476 lb dw)	26.4 mt dw (58,260 lb dw)
	Non-Blacknose Small Coastal Sharks	176.1 mt dw (388,222 lb dw)	176.1 mt dw (388,222 lb dw)	98.6 mt dw (217,360 lb dw)	77.5 mt dw (170,862 lb dw)
	Blacknose Sharks	18.0 mt dw (39,749 lb dw)	17.5 mt dw (38,638 lb dw)	20.4 mt dw (44,966 lb dw)	-2.9 mt dw (-6,328 lb dw)
Gulf of Mexico	Blacktip Sharks	256.6 mt dw (565,700 lb dw)	328.6 mt dw (724,302 lb dw)	291.1 mt dw (641,771 lb dw)	37.5 mt dw (82,531 lb dw)
	Aggregated Large Coastal Sharks	157.5 mt dw (347,317 lb dw)	156.5 mt dw (344,980 lb dw)	150.4 mt dw (331,479 lb dw)	6.1 mt dw (13,501 lb dw)
	Hammerhead Sharks	25.3 mt dw (55,722 lb dw)	25.3 mt dw (55,722 lb dw)	13.8 mt dw (30,326 lb dw)	11.5 mt dw (25,396 lb dw)
	Non-Blacknose Small Coastal Sharks	45.5mt dw (100,317 lb dw)	45.5mt dw (100,317 lb dw)	46.2 mt dw (101,948 lb dw)	-0.7 mt dw (-1,631 lb dw)
	Blacknose Sharks	2.0 mt dw (4,513 lb dw)	1.8 mt dw (4,076 lb dw)	1.0 mt dw (2,096 lb dw)	0.8 mt dw (1,980 lb dw)

<sup>1</sup> On December 2, 2014, NMFS published a final rule (79 FR 71331) to implement the 2015 shark fishing season quotas.

<sup>2</sup> Landings are from January 1, 2015, through July 17, 2015.

**Table 2. Large and small coastal shark quotas and fishery re-openings as a result of this final action. Note: This action increases base quotas for non-blacknose SCS management groups and decreases the base quotas for the sandbar shark research fishery and the blacknose shark management groups. For all other management groups, the base quotas under this action are the same as the previous base quotas. This table refers back to the 2015 base quota (Column A), preliminary 2015 landings (Column C), and remaining 2015 quota (Column D) in Table 1. 1 metric ton = 2,204.6 lb.**

Region	Management Group	Sub-Region	Annual Base Quotas Under Amendment 6 (E)	Remaining Quota (If base quota remained the same, this is equal to column D in Table 1. If base quota changed, then E - C from Table 1 = F)	Percent of Amendment 6 Quota Landed to date ((E-F)/E x 100)	Will fishery remain open or re-open with implementation of Amendment 6?
No regional quota	Sandbar shark research fishery	N/A	90.7 mt dw (199,943 lb dw)	30.1 mt dw (66,447 lb dw)	67%	Yes
Atlantic	Aggregated Large Coastal Sharks	N/A	Same as Column A 168.9 mt dw (372,552 lb dw)	Same as Column D 156.6 mt dw (345,452 lb dw)	7%	Yes
	Hammerhead Sharks		Same as Column A 27.1 mt dw (59,736 lb dw)	Same as Column D 26.4 mt dw (58,260 lb dw)	2%	Yes
	Non-Blacknose Small Coastal Sharks		264.1 mt dw (582,333 lb dw)	165.5 mt dw (364,973 lb dw)	37%	Yes, North of 34° N. latitude only
	Blacknose Sharks		17.2 mt dw (37,921 lb dw)	-3.2 mt dw (-7,045 lb dw)	119%	No
Gulf of Mexico	Blacktip Sharks	Eastern	9.8% of Column A 25.1 mt dw (55,439 lb dw)	9.8% of Column D 3.7 mt dw (8,088 lb dw)	85%	No
		Western	90.2% of Column A 231.5 mt dw (510,261 lb dw)	90.2% of Column D 33.8 mt dw (74,443 lb dw)	85%	No
	Aggregated Large Coastal Sharks	Eastern	54.3% of Column A 85.5 mt dw (188,593 lb dw)	54.3% of Column D 3.3 mt dw (7,331 lb dw)	96%	No
		Western	45.7% of Column A 72.0 mt dw (158,724 lb dw)	45.7% of Column D 2.8 mt dw (6,170 lb dw)	96%	No
	Hammerhead Sharks	Eastern	52.8% of Column A 13.4 mt dw (29,421 lb dw)	52.8% of Column D 6.1 mt dw (13,409 lb dw)	54%	No
		Western	47.2% of Column A 11.9 mt dw (26,301 lb dw)	47.2% of Column D 5.4 mt dw (11,987 lb dw)	54%	No
	Non-Blacknose Small Coastal Sharks	N/A	112.6 mt dw (248,215 lb dw)	66.4 mt dw (146,267 lb dw)	41%	Yes

	Blacknose Sharks	N/A	0.0 mt dw (0 lb dw)	0.0 mt dw (0 lb dw)	-	No
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As described in the 2015 shark fishing season rule (79 FR 71331, December 2, 2014) that established the opening dates and adjusted the 2015 quotas based on over- and underharvests from previous years, the commercial quotas for the GOM aggregated LCS, GOM blacknose shark, and Atlantic blacknose shark management groups were exceeded in 2014 and previous fishing seasons. As such, if NMFS were to re-open these fisheries, the new base annual quotas established in this final rule would have to be adjusted for overharvests. However, on May 3, 2015 (80 FR 24836, May 1, 2015), the GOM blacktip, GOM aggregated LCS, and GOM hammerhead shark management groups were closed since the harvest of the blacktip and aggregated LCS management groups exceeded 80 percent of available commercial quotas. The 2015 landings of these GOM LCS management groups also exceed the new sub-regional LCS quotas in this final rule. Because the LCS quotas are not increasing, NMFS is not re-opening the GOM LCS management group quota upon publication of the final rule.

Regarding blacknose sharks, since this final rule prohibits the retention of blacknose sharks in the GOM region, NMFS does not need to adjust the commercial blacknose shark quota based on previous overharvests, as the new blacknose shark quota would be 0 mt dw. As for GOM non-blacknose SCS, this final rule will re-open the GOM non-blacknose SCS fishery with a quota of 112.6 mt dw. Landings of non-blacknose SCS in the GOM are currently at 41% of this new quota.

Additionally, in this final rule, NMFS adjusts the Atlantic blacknose shark management group based on overharvest from previous years. On June 7, 2015, the Atlantic blacknose shark and non-blacknose SCS management groups were closed since the harvest of the blacknose shark management group exceeded 80 percent of the available quota. Since the increased

Atlantic non-blacknose SCS quota under this final rule has not been exceeded, NMFS will re-open the Atlantic non-blacknose SCS fishery, for fishermen in the area north of the management boundary at 34° 00' N. lat. only, based on the new management measures in this final rule. The fishery would have a quota of 264.1 mt dw, and current landings of non-blacknose SCS in the Atlantic are currently at 37% of this new quota.

### **Classification**

The NMFS Assistant Administrator for Fisheries (“AA”) has determined that this final rule is consistent with the 2006 Consolidated Atlantic HMS FMP and its amendments, the Magnuson-Stevens Act, and other applicable law.

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

The AA finds that there is good cause under 5 U.S.C. 553(b)(B) to waive notice and comment for the revised Gulf of Mexico blacktip shark fishery closure language in § 635.28(b)(5) and the “Atlantic Tuna Longline category limited access permit” language in § 635.4(1)(2)(iv) and (v). NMFS did not propose these specific changes in the proposed rule for Amendment 6. However, notice and comment on these language changes is unnecessary, because the changes are only minor, non-substantive changes, they do not change agency practice, and they will have no impact on the public. The revision regarding the Gulf of Mexico blacktip shark fishery closure language does not change the timing or procedures for closure of the Gulf of Mexico blacktip shark management group, it merely clarifies, consistent with the language and intent of the final rule implementing Amendment 5a to the 2006 Consolidated HMS FMP (78 FR 40318; July 3, 2013), that NMFS would consider the criteria in § 635.28(b)(5) only when NMFS closes the unlinked blacktip shark management group in the Gulf

of Mexico before landings reach, or are expected to reach, 80 percent of the quota. The revision regarding the Atlantic Tuna Longline category limited access permit language is a technical change. It does not change the name of the permit or change what permit is being referenced, it merely clarifies the language by referring to the permit by its name. These changes do not change the meaning of the paragraphs or NMFS practice. Because these are minor, non-substantive language changes, there would be no public interest in them, and therefore, notice and comment are unnecessary.

The AA finds that there is good cause under 5 U.S.C. 553(d)(3) to waive the 30-day delay in effective date for the language changes regarding the Gulf of Mexico blacktip shark fishery closure process and the “Atlantic Tuna Longline category limited access permit” references. Delaying the effectiveness of the revised language is unnecessary, because these changes are minor, non-substantive, technical changes, they do not change agency practice, and they will have no impact on the public. These revisions simply clarify the language describing the existing process for how NMFS may close the unlinked blacktip shark management group in the Gulf of Mexico and clarify the tuna permit references by referring to the limited access permit by its name.

The AA finds that certain measures in this final rule are exempt from the 30-day delay in effective date because they relieve a restriction, 5 U.S.C. 553(d)(1). First, in the Atlantic region, the non-blacknose SCS fishery is currently closed. However, upon implementation of this final rule, the non-blacknose SCS fishery could reopen for fishermen in the area north of the management boundary at 34° 00’ N. lat. As explained above, establishing a management boundary in the Atlantic region along 34° 00’ N. lat. for the SCS fishery and removing the quota linkage between blacknose and non-blacknose SCS north of 34° 00’ N. lat. (due to the

prohibition of blacknose sharks) would relieve a restriction on fishermen north of 34° 00' N. lat. due to a species (blacknose sharks) that is not prevalent in that area. There is good cause to waive the delay in effectiveness of the management boundary and quota linkage, because this would allow positive economic and ecological impacts as fishermen would be able to land non-blacknose SCS north of 34° 00' N. lat. instead of discarding them. Second, in the Gulf of Mexico, this final rule increases the non-blacknose SCS quota, increases opportunities to harvest that quota, and reopens the fishery. As described above, prohibiting the retention of blacknose sharks in the GOM would relieve the quota linkage restriction with the non-blacknose SCS. There is good cause to waive the delay in effectiveness of the blacknose shark prohibition in the GOM, because this would allow positive economic impacts as fishermen and provide for optimum yield from the fishery. Finally, this final rule removes upgrading restrictions on vessels.

In addition, for other measures in this final rule, the AA finds that there is good cause under 5 U.S.C. 553(d)(3) to waive the delay in effective date. The 30-day delay provides a reasonable opportunity for the regulated community to come into compliance with, or take other action with respect to, a final rule. As described further here, NMFS believes that there is no need to delay the effective date of the remaining measures in this rule, as they do not require specific action from the public and the public does not need time to come into compliance with the measures. Further, implementing this final rule quickly is in the public interest: measures in this rule increase management flexibility and economic benefits and provide for optimum yield from the fishery, consistent with Magnuson-Stevens Act conservation and management requirements.

As reflected in Table 2, several fisheries (i.e. Atlantic blacknose sharks, eastern and

western Gulf of Mexico blacktip sharks, eastern and western Gulf of Mexico aggregated LCS, and eastern and western Gulf of Mexico hammerhead sharks) are currently closed, and this rule will not result in them being reopened. As a result, there is no further action that the public needs to take. Under the current regulations, fishermen targeting LCS in the Atlantic region are subject to the 36 LCS other than sandbar shark commercial retention limit. This rule will increase that limit to a maximum of 55 LCS other than sandbar sharks with a default limit of 45 LCS per trip. There is good cause to waive the 30-day delay for the increased retention limit, because this change would allow for immediate positive economic and ecological impacts, as fishermen would be able to have more profitable trips and discard fewer sharks with the higher commercial retention limit, and no further action is required from the public to attain these positive impacts. Related to that, this final rule reduces the sandbar research fishery quota. There is good cause to waive the delay in effectiveness of the revised sandbar shark quota, because that lower quota is needed in order to account for additional dead discards of sandbar sharks that will occur under the increased commercial retention limit, and thus to ensure that sandbar sharks continue on the current rebuilding plan for the stock. Regarding the apportioning of the GOM regional commercial quotas for aggregated LCS, blacktip, and hammerhead sharks into western and eastern sub-regional quotas along 88° 00' W. long., NMFS believes that there is no need to delay the effective date of this measures in this rule, as these measures do not require specific action from the public and the public does not need time to come into compliance with the measures. In addition, all of these management measures are so closely tied together and directly impact shark fishermen that it is in the public's best interest to have the management measures all go into effect at the same time.

A final regulatory flexibility analysis (FRFA) was prepared for this rule. The FRFA

incorporates the Initial Regulatory Flexibility Analysis (IRFA), and a summary of the analyses completed to support the action. The full FRFA and analysis of economic and ecological impacts are available from NMFS (see ADDRESSES). A summary of the FRFA follows.

Section 604(a)(1) of the Regulatory Flexibility Act (RFA) requires a succinct statement of the need for and objectives of the rule. Chapter 1 of the Final EA and the final rule fully describes the need for and objectives of this final rule. The purpose of this final rulemaking, consistent with the Magnuson-Stevens Act, and the 2006 Consolidated HMS FMP and its amendments, is to enact management measures that increase management flexibility to adapt to the changing needs of the Atlantic shark fisheries, prevent overfishing while achieving on a continuing basis optimum yield, and rebuilding overfished shark stocks. Management measures in Amendment 6 are designed to respond to the problems facing Atlantic commercial shark fisheries, such as commercial landings that exceed the quotas, declining numbers of fishing permits since limited access was implemented, complex regulations, derby fishing conditions due to small quotas and short seasons, increasing numbers of regulatory discards, and declining market prices.

Section 604(a)(2) of the RFA requires a summary of the significant issues raised by the public comments in response to the IRFA, a summary of the assessment of the Agency of such issues, and a statement of any changes made in the rule as a result of such comments. NMFS received many comments on the proposed rule and the Draft EA during the public comment period. A summary of these comments and the Agency's responses, including changes as a result of public comment, are included above. NMFS did not receive comments specifically on the IRFA, though NMFS did receive comments on the potential economic impacts of this rule

generally, and those comments and NMFS' responses are discussed under comments 2, 3, 5, 6, 7, 8, 10, 13, 15, 16, 21, and 22 above.

Section 604(a)(3) of the RFA requires the Agency to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA) in response to the proposed rule, and a detailed statement of any change made in the rule as a result of such comments. NMFS did not receive any comments from the Chief Counsel for Advocacy of the SBA in response to the proposed rule.

Section 604(a)(4) of the RFA requires Agencies to provide an estimate of the number of small entities to which the rule would apply. The Small Business Administration (SBA) has established size criteria for all major industry sectors in the United States, including fish harvesters. The SBA size standards are \$20.5 million for finfish fishing, \$5.5 million for shellfish fishing, and \$7.5 million for other marine fishing, for-hire businesses, and marinas (79 FR 33467; June 12, 2014). NMFS considers all HMS permit holders to be small entities because they had average annual receipts of less than \$20.5 million for finfish-harvesting. The commercial shark fisheries are comprised of fishermen who hold shark directed or incidental limited access permits and the related shark dealers, all of which NMFS considers to be small entities according to the size standards set by the SBA. The final rule would apply to the approximately 208 directed commercial shark permit holders, 255 incidental commercial shark permit holders, and 100 commercial shark dealers as of July 2015. .

The final rule would apply to the 464 commercial shark permit holders in the Atlantic shark fishery, based on an analysis of permit holders as of October 2014. Of these permit holders, 206 have directed shark permits and 258 hold incidental shark permits. Not all permit holders are active in the fishery in any given year. Active directed permit holders are defined as

those with valid permits that landed one shark based on HMS electronic dealer reports. Based on 2014 HMS electronic dealer data, 24 shark directed permit holders were active in the Atlantic and 20 shark directed permit holders were active in the Gulf of Mexico. NMFS has determined that the final rule would not likely affect any small governmental jurisdictions.

Section 604(a)(5) of the RFA requires Agencies to describe any new reporting, record-keeping and other compliance requirements. The action does not contain any new collection of information, reporting, record-keeping, or other compliance requirements.

The RFA requires a description of the steps the Agency 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 the Agency that affect small entities was rejected. These impacts are discussed below and in the Final EA/RIR/FRFA for Amendment 6. Additionally, the RFA (5 U.S.C. 603(c)(1)-(4)) lists four general categories of “significant” alternatives that could assist an agency in the development of significant alternatives. These categories of alternatives are: establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; use of performance rather than design standards; and, exemptions from coverage of the rule for small entities.

In order to meet the objectives of this rule, consistent with the Magnuson-Stevens Act and other applicable law, such as the Endangered Species Act, we cannot exempt small entities or change the reporting requirements only for small entities because all the entities affected are

considered small entities. Thus, 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 several different alternatives in this rulemaking and provided a rationale for identifying the preferred alternative to achieve the desired objective.

The alternatives considered and analyzed are described below. The FRFA assumes that each vessel will have similar catch and gross revenues to show the relative impact of the proposed action on vessels.

#### *Permit Stacking*

Under Alternative A1, the preferred alternative, NMFS would not implement permit stacking for the shark directed limited access permit holders. NMFS would continue to allow only one directed limited access permit per vessel and thus one retention limit. The current retention limit of 36 LCS per trip would result in potential trip revenues of \$1,184 (1,224 lb of meat, 61 lb of fins) per vessel, assuming an ex-vessel price of \$0.58 for meat and \$7.68 for fins. It is likely that this alternative could possibly have minor adverse economic impacts in the long term, because if fishermen are unable to retain an increased number of LCS per trip by stacking permits, the profitability of each trip could decline over time, due to declining prices for shark products and increasing prices for gas, bait, and other associated costs. The No Action alternative could also have neutral indirect impacts to those supporting the commercial shark fisheries, since the retention limits, and thus current fishing efforts, would not change under this alternative.

Under Alternative A2, NMFS would allow fishermen to concurrently use a maximum of two shark directed permits on one vessel, which would result in aggregated, and thus higher, trip limits. Under the current LCS retention limit of 36 LCS, this would allow a vessel with two stacked permits to have a LCS retention limit of 72 LCS per trip. This new retention limit would result in potential trip revenues of \$2,368 (2,448 lb of meat, 122 lb of fins) per vessel, assuming an ex-vessel price of \$0.58 for meat and \$7.68 for fins, which is an increase of \$1,184 per trip compared to the status quo alternative. For fishermen that currently have two directed limited access permits, this alternative would have short-term minor beneficial economic impacts because these fishermen would be able to stack their permits and avail themselves of the retention limit of 72 LCS per trip. The higher retention limit is likely to make each trip more profitable for fishermen, as well as more efficient, if they decide to take fewer trips and in turn save money on gas, bait, and other associated costs. However, the current number of directed permits in the Atlantic region is 136, and 130 of those permits have different owners. In the Gulf of Mexico, of the 83 directed shark permits, 73 have different owners. Therefore, it is unlikely that many of the current directed shark permit holders would be able to benefit from this alternative in the short-term. In addition, the cost of one directed shark permit can run anywhere between \$2,000 and \$5,000, which could be difficult for many shark fishermen to afford. For fishermen that do not currently have more than one directed shark permit, this alternative could have long-term minor beneficial impacts if these fishermen are able to acquire an additional permit and offset the cost of the additional permit by taking advantage of the potential economic benefits of the higher retention limits. Nevertheless, this alternative is unlikely to have beneficial economic impacts for the shark fishery as whole because only shark fishermen that could afford to buy multiple shark permits would benefit from the higher retention limit and higher revenues

whereas those shark fishermen that cannot afford to buy a second directed shark permit would be at a disadvantage, unable to economically benefit from the higher retention limits. Given the current make-up of the shark fishery, which primarily consists of small business fishermen with only one permit, and the cost of the additional permit, this could potentially lead to negative economic impacts among the directed shark permit holders if those fishermen that currently have multiple directed permits or that could afford to buy an additional directed permit gain an economic advantage.

Under Alternative A3, NMFS would allow fishermen to concurrently use a maximum of three shark directed permits on one vessel, which would result in aggregated, and thus higher, trip limits. Under the current LCS retention limit of 36 LCS, this would mean that a vessel with three stacked permits would have a LCS retention limit of 108 LCS per trip. This alternative would allow shark directed permit holders to retain three times as many LCS per trip than the current retention limit. This new retention limit would result in potential trip revenues of \$3,552 (3,672 lb of meat, 184 lb of fins) per vessel, assuming an ex-vessel price of \$0.58 for meat and \$7.68 for fins, which is an increase of \$2,368 per trip compared to the status quo alternative. The higher retention limit is likely to make each trip more profitable for fishermen, as well as more efficient, if they decide to take fewer trips and in turn save money on gas, bait, and other associated costs. Similar to Alternative A2, this alternative would have short-term minor beneficial economic impacts for fishermen that currently have three shark directed limited access permits, because these fishermen would be able to stack their permits and avail themselves of the retention limit of 108 LCS per trip. As mentioned above, the current number of shark directed permit holders is 219, with 93 percent having different owners. Therefore, it is unlikely that many of the current directed shark permit holders currently hold three directed shark permits and

would be able to benefit from this alternative in the short-term. For fishermen who do not currently have more than one directed shark permit, this alternative could have larger long-term beneficial economic impacts than Alternative 2, if these fishermen are able to acquire two additional permits and offset the cost of the additional permits by taking advantage of the potential economic benefits of retaining up to 108 LCS per trip. However, for the same reasons discussed for Alternative A2, this alternative is unlikely to have economic benefits for those shark fishermen that cannot afford to buy two additional directed permits, and thus would be unable to economically benefit from a higher retention limit. Thus, given the current make-up of the shark fishery, Alternative A3 could potentially lead to more inequity and unfairness among the directed shark permit holders than Alternative A2, especially if those fishermen that currently have multiple directed permits or that could afford to buy additional directed permits gain an economic advantage under this alternative.

#### *Commercial Retention Limits*

Alternative B1 would not change the current commercial LCS retention limit for directed shark permit holders. The retention limit would remain at 36 LCS other than sandbar sharks per trip for directed permit holders. This retention limit would result in potential trip revenues of \$1,184 (1,224 lb of meat, 61 lb of fins), assuming an ex-vessel price of \$0.58 for meat and \$7.68 for fins. It is likely that this alternative would have short-term neutral economic impacts, since the retention limits would not change under this alternative. However, not adjusting the retention limit would have long-term minor adverse economic impacts, due to the expected continuing decline in prices for shark products and increase in gas, bait, and other associated costs, which would lead to declining profitability of individual trips. In recent years, there have been changes in federal and state regulations, including the implementation of Amendment 5a and state bans

on the possession, sale, and trade of shark fins, which have impacted shark fishermen. In addition to federal and state regulations, there have also been many international efforts to prohibit shark finning at sea, as well as campaigns targeted at the shark fin soup markets. All of these efforts have impacted the market and demand for shark fins. In addition, NMFS has seen a steady decline in ex-vessel prices for shark fins in all regions since 2010.

Alternative B2, the preferred alternative, would increase the LCS retention limit to a maximum of 55 LCS other than sandbar sharks per trip for shark directed permit holders and reduce the sandbar shark research fishery quota to 90.7 mt dw (199,943 lb dw). NMFS would also set the default LCS retention limit to 45 LCS other than sandbar sharks per trip for shark directed permit holders but could adjust the retention limits to account for spatial, temporal, and other differences in the shark fisheries. This alternative would allow shark directed permit holders to retain 19 more LCS per trip than the current retention limit if the retention limit were increased to 55 LCS other than sandbar sharks per trip during the fishing season. Under a retention limit of 55 LCS other than sandbar sharks per trip, the potential trip revenues would be \$1,809 (1,870 lb of meat, 94 lb of fins), assuming an ex-vessel price of \$0.58 for meat and \$7.68 for fins. Under the 45 LCS other than sandbar sharks per trip, the potential trip revenues would be lower at \$1,488 (1,530 lb of meat, 77 lb of fins), assuming an ex-vessel price of \$0.58 for meat and \$7.68 for fins. This alternative would have short- and long-term direct minor beneficial socioeconomic impacts under both commercial retention limits, since shark directed permit holders could land more sharks per trip when compared to the current retention limit of 36 LCS per trip. The higher retention limit is likely to make each trip more profitable for fishermen, as well as more efficient, if they decide to take fewer trips, and in turn save money on fuel, bait, and other associated costs. Regarding the shark research fishery, this alternative could cause an

average annual loss of \$68,307, since the sandbar research fishery quota would be reduced by 57,113 lb dw. If NMFS continues to select the same number of vessels as in 2015, this alternative would impact 7 shark research vessel participants. Based on this number, the total average annual gross revenue loss for each shark research fishery vessel would be \$9,758 per vessel. This potential lost income for the research fishery could be positive for commercial fishermen, since the increased retention limit could make trips more profitable. NMFS estimates that this reduction in the sandbar research fishery quota would have neutral socioeconomic impacts, based on current limited resources available to fund observed trips in the fishery and the current harvest level of the sandbar research fishery quota. In 2014, the vessels participating in the Atlantic shark research fishery landed 54.2 mt dw (119,527 lb dw), or 46 percent, of the available sandbar shark quota. Under the new sandbar shark quota with the Atlantic shark research fishery, the 2014 landings would result in 60 percent of the new sandbar shark quota being landed. If available resources increase in the future for more observed trips in the fishery, then this alternative could have minor adverse economic impacts if the full quota is caught and the fishery has to close earlier in the year.

Alternative B3 would increase the LCS retention limit to a maximum of 72 LCS other than sandbar sharks per trip for shark directed permit holders and reduce the sandbar shark research fishery quota to 82.7 mt dw (182,290 lb dw). This alternative would double the current retention limit. This new retention limit would result in potential trip revenues of \$2,368 (2,448 lb of meat, 124 lb of fins), assuming an ex-vessel price of \$0.58 for meat and \$7.68 for fins. This alternative would have short- and long-term minor beneficial economic impacts, since shark directed permit holders could land twice as many LCS per trip. Shark directed trips would become more profitable, but more permit holders could become active in order to avail

themselves of this higher trip limit, and potentially causing a derby fishery and bringing the price of shark products even lower. Thus, NMFS needs to balance providing the flexibility of increasing the efficiency of trips and the associated economic benefits with the negative economic impacts of derby fishing and lower profits. This alternative could have neutral impacts for fishermen participating in the Atlantic shark research fishery, since the 2014 landings (54.2 mt dw; 119,527 lb dw) would result in 66 percent of the new sandbar shark quota being landed. Under Alternative B3, the new sandbar shark quota could result in average annual lost revenue of \$89,420 for those fishermen participating in the shark research fishery, but the income could be recouped by the increased retention limit outside the shark research fishery. If NMFS continues to select the same number of vessels as in 2015, this alternative would impact 7 shark research vessel participants. Based on this number, the total average annual gross revenue loss for each shark research fishery vessel would be \$12,774 per vessel. If available resources increase in the future for more observed trips in the fishery, then this alternative still would have neutral economic impacts, since the observed trips would be distributed throughout the year, to ensure the research fishery remains open and obtains biological and catch data all year round.

Alternative B4 would increase the LCS retention limit to a maximum of 108 LCS other than sandbar sharks per trip for shark directed permit holders and reduce the sandbar shark research fishery quota to 65.7 mt dw (144,906 lb dw). This alternative would allow shark directed permit holders to retain three times as many LCS per trip as the current retention limit. This new retention limit would result in potential trip revenues of \$3,552 (3,672 lb of meat, 184 lb of fins), assuming an ex-vessel price of \$0.58 for meat and \$7.68 for fins. This alternative could have short- and long-term moderate beneficial economic impacts, since shark directed permit holders could land three times the current LCS retention limit. This increased retention

limit could result in 3,672 lb dw of LCS per trip, which could bring the fishery almost back to historical levels of 4,000 lb dw LCS per trip. While a retention limit of 108 LCS per trip would make each trip more profitable and potentially require fishermen to take fewer trips per year, this large increase in the retention limit would likely result in more permit holders becoming active in the LCS fishery. Thus, the shark fishery could return to a derby fishery, with quotas being caught at a faster rate and the fishing season shortened. Additionally, in order to increase the retention limit to 108 LCS per trip, the sandbar shark research quota would need to be reduced to an amount comparable to the 2014 landing in the shark research fishery, which could have minor adverse impacts on fishermen in the shark research fishery, who would lose revenue associated with this loss of quota.

#### *Atlantic Regional and Sub-Regional Quotas*

Alternative C1, the No Action alternative, would not change the current management of the Atlantic shark fisheries. This alternative would likely result in short-term direct neutral economic impacts, as the shark fisheries would continue to operate under current conditions, with shark fishermen continuing to fish at current rates. Based on the 2014 ex-vessel prices, the annual gross revenues for the entire fleet from aggregated LCS and hammerhead shark meat in the Atlantic region would be \$313,464, while the shark fins would be \$85,009. Thus, total average annual gross revenues for aggregated LCS and hammerhead shark landings in the Atlantic region would be \$398,473 (\$313,464 + \$85,009), which is 9 percent of the entire revenue for the shark fishery. Based on eDealer landings, there are approximately 35 active directed shark permit holders that landed LCS in 2014. Based on this number of individual permits, the total average annual gross revenue for the active directed permit holders in the Atlantic region would be \$11,385 per vessel. For the non-blacknose SCS and blacknose shark

landings, the annual gross revenues for the entire fleet from the meat would be \$318,289, while the shark fins would be \$85,594. The total average annual gross revenues for non-blacknose SCS and blacknose shark landings in the Atlantic region would be \$403,883 (\$318,289 + \$85,594), which is 9 percent of the entire revenue for the shark fishery. Based on eDealer landings, there are approximately 26 active directed shark permit holders that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in Atlantic would be \$15,534 per vessel. However, this alternative would likely result in long-term minor adverse economic impacts. Negative impacts would be partly due to the continued negative effects of federal and state regulations related to shark finning and sale of shark fins, which have resulted in declining ex-vessel prices of fins since 2010, as well as continued changes in shark fishery management measures. Additionally, under the current regulations, fishermen operating in the south of the Atlantic region drastically impact the availability of quota remaining for fishermen operating in the north of the Atlantic region. If fishermen in the south fish early in the year and NMFS does not adjust the LCS retention limit, they have the ability to land a large proportion of the quota before fishermen in the north have the opportunity to fish, due to time/area closures and seasonal migrations of LCS and SCS, potentially resulting in indirect long-term minor adverse economic impacts. However, NMFS would intend to use existing regulations to monitor the LCS quotas and adjust the retention limit as needed to ensure equitable fishing opportunities throughout the region. This approach could result in some minor beneficial impacts over the long-term. Indirect short-term economic impacts resulting from any of the actions in Alternative C1 would likely be neutral because the measures would maintain the status quo with respect to shark landings and fishing effort. However, this alternative would likely result in indirect long-term minor beneficial

economic impacts. Beneficial economic impacts and increased revenues associated with ensuring equitable fishing opportunities through trip limit adjustments experienced by fishermen within Atlantic shark fisheries would carry over to the dealers and supporting businesses they regularly interact with.

Alternative C2 would apportion the Atlantic regional quotas for LCS and SCS along 33° 00' N. lat. (approximately at Myrtle Beach, South Carolina) into northern and southern sub-regional quotas and potentially adjust the non-blacknose SCS quota based on the results of the 2013 assessments for Atlantic sharpnose and bonnethead sharks. Establishing sub-regional quotas could allow for flexibility in seasonal openings within the Atlantic region. Different seasonal openings within sub-regions would allow fishermen to maximize their fishing effort during periods when sharks migrate into local waters or when regional time/area closures are not in effect. This would benefit the economic interests of North Carolina and Florida fishermen, the primary constituents impacted by the timing of seasonal openings for LCS and SCS in the Atlantic, by placing them in separate sub-regions with separate sub-regional quotas.

Under this alternative, the northern Atlantic sub-region would receive 21.0 percent of the total aggregated LCS quota (35.4 mt dw; 78,236 lb dw) and 34.9 percent of the total hammerhead shark quota (9.5 mt dw; 20,848 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for aggregated LCS and hammerhead shark meat in the northern Atlantic sub-region would be \$70,560, while the shark fins would be \$18,819. Thus, total average annual gross revenues for aggregated LCS and hammerhead shark landings in the northern Atlantic sub-region would be \$89,379 (\$70,560 + \$18,819). Based on eDealer landings, there are approximately 14 active directed shark permit holders in the northern Atlantic sub-region that landed LCS in 2014. Based on this number of individual permits, the total average annual gross

revenues for the active directed permit holders in this sub-region would be \$6,384 per vessel. When compared to the other alternatives, the northern Atlantic sub-region would have minor beneficial economic impacts under Alternative C2, because this alternative would result in the highest total average annual gross revenues for aggregated LCS and hammerhead sharks. In the southern Atlantic sub-region, fishermen would receive 79.0 percent of the total aggregated LCS quota (133.5 mt dw; 294,316 lb dw) and 65.1 percent of the total hammerhead shark quota (17.6 mt dw; 38,888 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for aggregated LCS and hammerhead shark meat in the southern Atlantic sub-region would be \$242,903, while the shark fins would be \$66,190. The total average annual gross revenues for aggregated LCS and hammerhead shark landings in the southern Atlantic sub-region would be \$309,093 (\$242,903 + \$66,190). Based on eDealer landings, there are approximately 21 active directed shark permit holders in the southern Atlantic sub-region that landed LCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in this sub-region would be \$14,719 per vessel. When compared to the other alternatives, the southern Atlantic sub-region would have minor adverse economic impacts under Alternative C2, because this alternative would result in lower total average annual gross revenues for aggregated LCS and hammerhead sharks.

Under Alternative C2, NMFS would determine the blacknose shark quota for each sub-region using the percentage of landings associated with blacknose sharks within each sub-region and the new non-blacknose SCS quotas in conjunction with Alternatives C5, C6, and C7. The northern Atlantic sub-region would receive 33.5 percent of the total non-blacknose SCS quota, while the southern Atlantic sub-region would receive 66.5 percent of the total non-blacknose SCS quota in this alternative. For the blacknose sharks, the northern Atlantic sub-region would

receive 6.2 percent of the total blacknose shark quota (1.1 mt dw; 2,464 lb dw), while the southern Atlantic sub-region would receive 93.8 percent of the total blacknose shark quota (16.9 mt dw; 37,285 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for blacknose shark meat in the northern Atlantic sub-region would be \$1,953, while the shark fins would be \$493. Thus, total average annual gross revenues for blacknose shark landings in the northern Atlantic sub-region would be \$2,446 (\$1,953 + \$493). Based on eDealer landings, there are approximately 5 active directed shark permit holders in the northern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in Atlantic would be \$489 per vessel. Based on the 2014 ex-vessel prices, the annual gross revenues for blacknose shark meat in the southern Atlantic sub-region would be \$29,082, while the shark fins would be \$7,457. The total average annual gross revenues for blacknose shark landings in the southern Atlantic sub-region would be \$36,539 (\$29,082 + \$7,457). Based on eDealer landings, there are approximately 21 active directed shark permit holders in the southern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in Atlantic would be \$1,740 per vessel.

Alternative C3 would apportion the Atlantic regional quotas for LCS and SCS along 34° 00' N. lat. (approximately at Wilmington, North Carolina) into northern and southern sub-regional quotas and potentially adjust the non-blacknose SCS quota based on the results of the 2013 assessments for Atlantic sharpnose and bonnethead sharks. This alternative would likely result in direct short-term minor beneficial impacts, and ultimately direct long-term moderate beneficial impacts. However, drawing the regional boundary between the northern and southern Atlantic sub-regions along 34° 00' N. lat. would result in more equitable sub-regional quotas, in

comparison to the boundary considered in Alternative C2. Under this alternative, the northern Atlantic sub-region would receive 18.4 percent of the total aggregated LCS quota (31.0 mt dw; 68,550 lb dw) and 34.9 percent of the total hammerhead shark quota (9.5 mt dw; 20,848 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for aggregated LCS and hammerhead shark meat in the northern Atlantic sub-region would be \$63,296, while the shark fins would be \$14,697. Thus, total average annual gross revenues for aggregated LCS and hammerhead shark landings in the northern Atlantic sub-region would be \$77,993 (\$63,296 + \$14,697). Based on eDealer landings, there are approximately 14 active directed shark permit holders in the northern Atlantic sub-region that landed LCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in this sub-region would be \$5,571 per vessel. When compared to Alternative C2, the northern Atlantic sub-region would have minor adverse economic impacts under this alternative. In the southern Atlantic sub-region, fishermen would receive 81.6 percent of the total aggregated LCS quota (137.9 mt dw; 304,002 lb dw) and 65.1 percent of the total hammerhead shark quota (17.6 mt dw; 38,888 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for aggregated LCS and hammerhead shark meat in the southern Atlantic sub-region would be \$250,168, while the shark fins would be \$68,219. The total average annual gross revenues for aggregated LCS and hammerhead shark landings in the southern Atlantic sub-region would be \$318,387 (\$250,168 + \$68,219). Based on eDealer landings, there are approximately 21 active directed shark permit holders in the southern Atlantic sub-region that landed LCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in this sub-region would be \$15,161 per vessel.

As in Alternative C2, NMFS would determine the blacknose shark quota for each sub-region using the percentage of landings associated with blacknose sharks within each sub-region in Alternative C3 and the new non-blacknose SCS quotas in conjunction in Alternatives C5, C6, and C7. Under Alternative C3, the northern Atlantic sub-region would receive 32.9 percent of the total non-blacknose SCS quota, while the southern Atlantic sub-region would receive 67.1 percent of the total non-blacknose SCS quota. For the blacknose sharks, the northern Atlantic sub-region would receive 4.6 percent of the total blacknose shark quota (0.8 mt dw; 1,828 lb dw), while the southern Atlantic sub-region would receive 95.4 percent of the total blacknose shark quota (16.7 mt dw; 37,921 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for blacknose shark meat in the northern Atlantic sub-region would be \$1,426, while the shark fins would be \$366. Thus, total average annual gross revenues for blacknose shark landings in the northern Atlantic sub-region would be \$1,792 (\$1,426 + \$366). Based on eDealer landings, there are approximately 5 active directed shark permit holders in the northern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in Atlantic would be \$358 per vessel. Based on the 2014 ex-vessel prices, the annual gross revenues for blacknose shark meat in the southern Atlantic sub-region would be \$29,578, while the shark fins would be \$7,584. The total average annual gross revenues for blacknose shark landings in the southern Atlantic sub-region would be \$37,162 (\$29,578 + \$7,584). Based on eDealer landings, there are approximately 21 active directed shark permit holders in the southern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in Atlantic would be \$1,770 per vessel. This alternative would have neutral economic impacts for the northern Atlantic sub-region fishermen

when compared to Alternative C2, and would have beneficial economic impacts for the southern Atlantic sub-region fishermen when compared to Alternative C2.

Alternative C4 would apportion the Atlantic regional quotas for certain LCS and SCS management groups along 34° 00' N. lat. (approximately at Wilmington, North Carolina) into northern and southern sub-regional quotas, maintain SCS quota linkages in the southern sub-region of the Atlantic region, remove the SCS quota linkages in the northern sub-region of the Atlantic region, and prohibit the harvest and landings of blacknose sharks in the northern Atlantic sub-region. The economic impacts of apportioning the Atlantic regional quotas for LCS and SCS along 34° 00' N. lat. into northern and southern sub-regional quotas would have the same impacts as described in alternative C3 above. Removing quota linkages within the northern Atlantic sub-region would have beneficial impacts, as active fishermen in this region would be able to continue fishing for non-blacknose SCS without the fishing activities in the southern Atlantic sub-region, where the majority of blacknose sharks are landed, impacting the timing of the non-blacknose SCS fishery closure. Economic advantages associated with removing quota linkages, allowing the northern Atlantic sub-region to land a larger number of non-blacknose SCS, would outweigh the income lost from prohibiting landings of blacknose sharks (\$1,426) for fishermen in the northern sub-region, particularly given the minimal landings of blacknose sharks attributed to the northern sub-region. In the southern Atlantic region, no economic impacts are expected by maintaining the quota linkages already in place for SCS. Thus, by removing quota linkages in the northern Atlantic region, in combination with apportioning the Atlantic regional quota at 34° 00' N. lat. to allow fishermen to maximize their fishing effort, and thereby maximize revenue, during periods when sharks migrate into local

waters or when regional time/area closures are not in place, Alternative C4 would result in overall direct and indirect, short- and long-term moderate beneficial economic impacts.

Alternative C5 would establish a non-blacknose SCS TAC of 353.2 mt dw and reduce the non-blacknose SCS commercial quota to 128 mt dw (282,238 lb dw). When combined with the other alternatives to establish sub-regional non-blacknose SCS quotas, the economic impacts of Alternative C5 would vary based on the alternative. Under Alternative C2, the northern Atlantic sub-region would receive 33.5 percent of the total non-blacknose SCS quota (42.9 mt dw; 94,550 lb dw) and the southern Atlantic sub-region would receive 65.5 percent of the total non-blacknose SCS quota (85.1 mt dw; 187,668 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the northern Atlantic sub-region would be \$69,967, while the shark fins would be \$18,910. Thus, total average annual gross revenues for non-blacknose SCS landings in the northern Atlantic sub-region would be \$88,877 (\$69,967 + \$18,910). Based on eDealer landings, there are approximately 5 active directed shark permit holders in the northern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in Atlantic would be \$17,775 per vessel. Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the southern Atlantic sub-region would be \$138,889, while the shark fins would be \$37,538. The total average annual gross revenues for non-blacknose SCS landings in the southern Atlantic sub-region would be \$176,427 (\$138,889 + \$37,538). Based on eDealer landings, there are approximately 21 active directed shark permit holders in the southern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenue for the active directed permit holder in Atlantic would be \$8,401 per vessel. Sub-regional quotas under Alternatives C2 are about a two

percent increase in landings allocated to the northern region for non-blacknose SCS when compared to Alternative C3. This percentage would lead to a slight increase in some of the sub-regional quotas within the northern Atlantic sub-region, as compared to Alternative C3, and would result in short-term minor beneficial economic impacts, and ultimately long-term moderate beneficial economic impacts in the northern Atlantic sub-region.

Using the quotas considered under Alternative C5 and the sub-regional split under Alternatives C3 and C4, the northern Atlantic sub-region would receive 33.5 percent of the total non-blacknose SCS quota (42.1 mt dw; 92,856 lb dw), while the southern Atlantic sub-region would receive 67.1 percent of the total non-blacknose SCS quota (85.9 mt dw; 189,382 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the northern Atlantic sub-region would be \$68,714, while the shark fins would be \$18,571. The total average annual gross revenues for non-blacknose SCS landings in the northern Atlantic sub-region would be \$87,285 ( $\$68,714 + \$18,571$ ). Based on eDealer landings, there are approximately 5 active directed shark permit holders in the northern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenue for the active directed permit holder in Atlantic would be \$17,457 per vessel. Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the southern Atlantic sub-region would be \$140,142, while the shark fins would be \$37,876. The total average annual gross revenues for non-blacknose SCS landings in the southern Atlantic sub-region would be \$178,018 ( $\$140,142 + \$37,876$ ). Based on eDealer landings, there are approximately 21 active directed shark permit holders in the southern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in Atlantic would be \$8,477 per vessel. Overall,

the non-blacknose SCS commercial quota considered under this alternative is almost thirty percent less than the current base quota and less than half of the current adjusted quota for this management group. Therefore, NMFS believes this alternative would have short- and long-term minor adverse economic impacts due to the quota being capped at a lower level than what is currently being landed in the non-blacknose SCS fisheries, leading to a loss in annual revenue for these shark fishermen. In addition, the adverse impacts would be compounded by the unknown stock status of bonnethead, which would prevent NMFS from carrying forward underharvested quota. Thus, the commercial quota of 128 mt dw would not be adjusted and the fishermen would be limited to this amount each year, which could lead to shorter seasons and reduced flexibility, potentially affecting fishermen's decisions to participate.

Under Alternative C6, NMFS would establish a non-blacknose SCS TAC and maintain the current base annual quota of 176.1 mt dw (388,222 lb dw). When combined with the other alternatives to establish sub-regional non-blacknose SCS quotas, the economic impacts of Alternative C6 would vary based on the sub-regional quotas. Under Alternatives C2, the northern Atlantic sub-region would receive 33.5 percent of the total non-blacknose SCS quota (59.0 mt dw; 130,054 lb dw) and the southern Atlantic sub-region would receive 66.5 percent of the total non-blacknose SCS quota (117.1 mt dw; 258,168 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the northern Atlantic sub-region would be \$96,240, while the shark fins would be \$26,011. Thus, total average annual gross revenues for non-blacknose SCS landings in the northern Atlantic sub-region would be \$122,251 (\$96,240 + \$26,011). Based on eDealer landings, there are approximately 5 active directed shark permit holders in the northern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active

directed permit holders in Atlantic would be \$24,450 per vessel. Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the southern Atlantic sub-region would be \$191,044, while the shark fins would be \$51,634. The total average annual gross revenues for non-blacknose SCS landings in the southern Atlantic sub-region would be \$242,678 (\$191,044 + \$51,634). Based on eDealer landings, there are approximately 21 active directed shark permit holders in the southern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in Atlantic would be \$11,556 per vessel. Sub-regional quotas under Alternative C2 would lead to some slightly higher sub-regional quotas within the northern Atlantic sub-region, as compared to Alternative C3, and would result in short-term minor beneficial impacts, and ultimately long-term moderate beneficial economic impacts in the northern Atlantic sub-region.

Using the quotas considered under Alternative C6 and the sub-regional split considered under Alternatives C3 and C4, the northern Atlantic sub-region would receive 32.9 percent of the total non-blacknose SCS quota (57.9 mt dw; 127,725 lb dw), while the southern Atlantic sub-region would receive 67.1 percent of the total non-blacknose SCS quota (118.2 mt dw; 260,497 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the northern Atlantic sub-region would be \$94,517, while the shark fins would be \$25,545. The total average annual gross revenues for non-blacknose SCS landings in the northern Atlantic sub-region would be \$120,062 (\$94,517 + \$25,545). Based on eDealer landings, there are approximately 5 active directed shark permit holders in the northern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in Atlantic would be

\$24,012 per vessel. Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the southern Atlantic sub-region would be \$192,768, while the shark fins would be \$52,099. The total average annual gross revenues for non-blacknose SCS landings in the southern Atlantic sub-region would be \$244,867 (\$192,768 + \$52,099). Based on eDealer landings, there are approximately 21 active directed shark permit holders in the southern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenue for the active directed permit holder in Atlantic would be \$11,660 per vessel. Overall, Alternative C6 would lead to a lower quota in the northern Atlantic sub-region, as compared to current landings under the higher base quota. Because this alternative would maintain the non-blacknose SCS commercial quota, it is likely to have short-term neutral economic impacts. Recent non-blacknose SCS landings have been below 176.1 mt dw, thus, this commercial quota could allow for increased landings and additional revenue if the entire quota is caught, which could have beneficial socioeconomic impacts. However, since the quota of 176.1 mt dw would not be adjusted for underharvests due to the unknown status of bonnethead sharks, the fishermen would be capped at a lower quota than is possible in the current non-blacknose SCS fisheries if there is underharvest, potentially leading to long-term minor adverse socioeconomic impacts. NMFS does not expect fishing effort to dramatically increase for non-blacknose SCS in the southern region of the Atlantic, since landings would continue to be limited by blacknose shark landings and the linkage between these two groups.

Under Alternative C7, a preferred alternative, NMFS would establish a non-blacknose SCS TAC of 489.3 mt dw and increase the quota to the current adjusted base annual quota of 264.1 mt dw (582,333 lb dw) which is equal to the 2014 adjusted non-blacknose SCS quota.

Based on the 2014 ex-vessel prices, the annual gross revenues for the entire fleet from non-blacknose SCS meat in the Atlantic region would be \$430,926 while the shark fins would be \$116,467. Thus, total average annual gross revenues for non-blacknose shark landings in the Atlantic region would be \$547,393 ( $\$430,926 + \$116,467$ ), which is 12 percent of the entire revenue for the shark fishery. The economic impacts of Alternative C7 would vary when combined with Alternatives C2 through C4 to establish sub-regional non-blacknose SCS quotas as considered in the Draft EA, and a new preferred Alternative C8 that would maintain the status quo of a regional quota for the blacknose and non-blacknose SCS management groups and would establish a management boundary to modify the blacknose and non-blacknose SCS quota linkage. Under Alternative C2, the northern Atlantic sub-region would receive 33.5 percent of the total non-blacknose SCS quota (88.4 mt dw; 195,082 lb dw) and the southern Atlantic sub-region would receive 66.5 percent of the total non-blacknose SCS quota (175.7 mt dw; 387,251 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the northern Atlantic sub-region would be \$144,360, while the shark fins would be \$39,016. Thus, total average annual gross revenues for non-blacknose SCS landings in the northern Atlantic sub-region would be \$183,376 ( $\$144,360 + \$39,016$ ). Based on eDealer landings, there are approximately 5 active directed shark permit holders in the northern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in Atlantic would be \$36,675 per vessel. Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the southern Atlantic sub-region would be \$286,566, while the shark fins would be \$77,450. The total average annual gross revenues for non-blacknose SCS landings in the southern Atlantic sub-region would be \$364,016 ( $\$286,566 + \$77,450$ ). Based on eDealer

landings, there are approximately 21 active directed shark permit holders in the southern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenue for the active directed permit holder in Atlantic would be \$17,334 per vessel.

Under Alternative C7 and either Alternative C3 or C4, the northern Atlantic sub-region would receive 32.9 percent of the total non-blacknose SCS quota (86.9 mt dw; 191,588 lb dw), while the southern Atlantic sub-region would receive 67.1 percent of the total non-blacknose SCS quota (177.2 mt dw; 390,745 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the northern Atlantic sub-region would be \$141,775, while the shark fins would be \$38,318. The total average annual gross revenues for non-blacknose SCS landings in the northern Atlantic sub-region would be \$180,093 (\$141,775 + \$38,318). Based on eDealer landings, there are approximately 5 active directed shark permit holders in the northern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenue for the active directed permit holder in Atlantic would be \$36,019 per vessel. Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the southern Atlantic sub-region would be \$289,152, while the shark fins would be \$78,149. The total average annual gross revenues for non-blacknose SCS landings in the southern Atlantic sub-region would be \$367,301 (\$289,152 + \$78,149). Based on eDealer landings, there are approximately 21 active directed shark permit holders in the southern Atlantic sub-region that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenue for the active directed permit holder in Atlantic would be \$17,491 per vessel.

Under Alternative C7 and a new preferred Alternative C8, the commercial quota for the SCS fishery would be 264.1 mt dw (582,333 lb dw) for the Atlantic region, which is equal to the 2014 adjusted non-blacknose SCS quota. Based on the 2014 ex-vessel prices, the annual gross revenues for the entire fleet from non-blacknose SCS meat in the Atlantic region would be \$430,926, while the shark fins would be \$116,467. Thus, total average annual gross revenues for non-blacknose shark landings in the Atlantic region would be \$547,393 (\$430,926 + \$116,467), which is 13 percent of the entire revenue for the shark fishery. Based on eDealer landings, there are approximately 26 active directed shark permit holders that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenue for the active directed permit holder in the Atlantic region would be \$21,054 per vessel.

The quota considered under Alternative C7 is an increase compared to the non-blacknose SCS commercial quotas under Alternatives C5 or C6. Since underharvested quota would no longer be carried forward, this quota would provide a buffer, potentially providing for landings to increase in the future, and thus, providing some beneficial socioeconomic impacts in the long-term due to the potential to gain additional revenue. The increased landings could result in additional revenues of up to \$302,526 in total average annual gross revenue for non-blacknose shark landings relative to Alternative C6, the preferred alternative in the Draft EA. However, recent landings of non-blacknose SCS have been less than half of the commercial quota under this alternative (in part because of increasing blacknose landings), so it is unlikely that fishermen would catch this entire quota in the short-term (unless this alternative is combined with Alternative C8), such that this alternative would have neutral economic impacts. When combined with Alternative C8, the increased quota in Alternative C7 could have positive economic impacts for fishermen.

Alternative C8, one of the preferred alternatives, would maintain the current aggregated LCS (168.9 mt dw; 372,552 lb dw) and hammerhead shark (27.1 mt dw; 59,736 lb dw) regional quotas in the Atlantic region, establish a management boundary for the SCS fishery, and prohibit the retention of blacknose sharks north of the management boundary at 34° 00' N. lat. Based on historical landings and 2014 ex-vessel prices, the annual gross revenues for blacknose meat in the Atlantic region south of 34° 00' N. lat. would be \$29,578, while the blacknose shark fins would be \$7,584. Thus, total average annual gross revenues for blacknose landings in the Atlantic region south of 34° 00' N. lat. would be \$37,162 (29,578 + \$7,584). Based on eDealer landings, there are approximately 21 active directed shark permit holders that landed SCS in 2014 south of 34° 00' N. lat. Based on this number of individual permits, the total average annual gross revenue for the active directed permit holder south of 34° 00' N. lat. would be \$1,770 per vessel. No economic impacts are expected from maintaining the current LCS and hammerhead regional quotas structure as fishermen would continue to fish at current rates and would not be limited by sub-regional quotas. However, NMFS would intend to use existing regulations to monitor the LCS quotas and adjust the retention limit as needed to ensure equitable fishing opportunities throughout the region. This approach could result in some minor beneficial impacts over the long-term. Establishing a management boundary and removing quota linkages north of 34° 00' N. lat. in this alternative would have beneficial impacts for fishermen north of the management boundary, as active fishermen in the area above 34° 00' N. lat. would be able to continue fishing for non-blacknose SCS without being constrained by the fishing activities south of 34° 00' N. lat., where the majority of blacknose sharks are landed. Given the fact that in recent years the SCS fishery has closed before the non-blacknose SCS quota has been harvested, fishermen north of the management boundary who would be able to

continue to fish after the fisheries are closed south of the management boundary, could have substantial economic gains under this alternative. Economic benefits associated with removing quota linkages between non-blacknose SCS and blacknose sharks, allowing fishermen north of the management boundary to land a larger number of non-blacknose SCS, would outweigh for the fishermen north of the boundary the income lost from prohibiting landings of blacknose sharks. This is in part due to the minimal landings of blacknose sharks north of 34° 00' N. lat. and the request of fishermen in the Atlantic to remove the linkage between the two management groups in order to continue fishing for non-blacknose SCS when the blacknose quota is reached. In the area south of 34° 00' N. lat., no change in socioeconomic impacts is expected by maintaining the quota linkages already in place for the SCS fishery as this alternative is essentially status quo. Fishermen south of the management boundary line would be able to continue fishing for non-blacknose SCS based upon how successful they are at avoiding blacknose sharks. If blacknose shark bycatch remains low, fishermen would have the opportunity to continue fishing the non-blacknose SCS quota. Thus, by implementing management measures considered in Alternative C8, this alternative would result in overall direct and indirect, short- and long-term minor beneficial socioeconomic impacts.

#### *Gulf of Mexico Regional and Sub-Regional Quotas*

Alternative D1, the No Action alternative, would maintain the current regional quotas and quota linkages in the Gulf of Mexico region and continue to allow harvest of hammerhead sharks throughout the entire Gulf of Mexico region. This alternative would likely result in short-term neutral direct economic impacts, because shark fishermen would continue to operate under current conditions, with shark fishermen continuing to fish at similar rates. Based on the 2014 ex-vessel prices, the annual gross revenues for the entire fleet from blacktip, aggregated LCS,

and hammerhead shark meat in the Gulf of Mexico region would be \$497,148, while the shark fins would be \$472,355. Thus, total average annual gross revenues for blacktip, aggregated LCS, and hammerhead shark landings in the Gulf of Mexico region would be \$969,503 (\$497,148+ \$472,355), which would be 22 percent of the entire shark fishery. Based on eDealer landings, there are approximately 28 active directed shark permit holders that landed LCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in the Gulf of Mexico would be \$34,625 per vessel. For the non-blacknose SCS and blacknose shark landings, the annual gross revenues for the entire fleet from the meat would be \$39,995, while the shark fins would be \$30,610. The total average annual gross revenues for non-blacknose SCS and blacknose shark landings in the Gulf of Mexico region would \$70,605 (\$39,995 + \$30,610), which is 2 percent of the entire revenue for the shark fishery. Based on eDealer landings, there are approximately 8 active directed shark permit holders that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in the Gulf of Mexico would be \$8,826 per vessel. Alternative D1 would likely result in short-term neutral direct socioeconomic impacts because shark fishermen would continue to operate under current conditions and to fish at similar rates. However, this alternative would likely result in long-term minor adverse socioeconomic impacts. Negative impacts would be partly due to the continued negative impact of federal and state regulations related to shark finning and sale of shark fins, which have resulted in declining ex-vessel prices of fins since 2010, as well as continued changes in shark fishery management measures. In addition, under the No Action alternative, the non-blacknose SCS quota would not be modified. This could potentially lead to negative socioeconomic impacts, since the non-blacknose SCS quotas could be increased based on results

from the most recent stock assessment, as described in Alternatives D6-D8 below. Additionally, under the current regulations, differences in regional season opening dates would impact the availability of quota remaining in the Gulf of Mexico. Florida fishermen prefer to begin fishing the LCS quotas in the beginning of the year, when sharks are in local waters. However, opening the season at the beginning of the year puts Louisiana fishermen at a slight economic disadvantage, as many Louisiana fishermen prefer to delay fishing, maximizing fishing efforts during the religious holiday Lent when prices for shark meat are higher. Indirect short-term socioeconomic impacts resulting from any of the actions in Alternative D1 would likely be neutral because the measures would maintain the status quo with respect to shark landings and fishing effort. However, this alternative would likely result in indirect long-term minor adverse socioeconomic impacts. Negative socioeconomic impacts and decreased revenues associated with financial difficulties experienced by fishermen within the Gulf of Mexico shark fisheries would carry over to the dealers and supporting businesses they regularly interact with. In addition, this alternative would not achieve the goals of this rulemaking of increasing management flexibility to adapt to the changing needs of the Atlantic shark fisheries.

Alternative D2 would apportion the Gulf of Mexico regional quotas for blacktip, aggregated LCS and hammerhead sharks along 89° 00' W. longitude into western and eastern sub-regional quotas. Establishing sub-regional quotas would provide flexibility in seasonal openings within the Gulf of Mexico region. Different seasonal openings within sub-regions would allow fishermen to maximize their fishing effort during periods when sharks migrate into local waters or during periods when sales of shark meat are increased (e.g., in Louisiana, during Lent). Allowing fishermen in these states more flexibility, by implementing sub-regions, could result in a higher proportion of the quota being landed and increased average annual gross

revenues. This would benefit the economic interests of the Louisiana and Florida fishermen, the primary constituents impacted by the timing of seasonal openings for LCS and SCS in the Gulf of Mexico, by placing them in separate sub-regions with separate sub-regional quotas. No negative impacts are expected for either the fishermen or the length of the fishing season since NMFS will be able to transfer quota between sub-regions to ensure that the full quota is harvested.

Under this alternative, the eastern Gulf of Mexico sub-region would receive 30.8 mt dw in blacktip shark, 88.8 mt dw in aggregated LCS, and 13.4 mt dw in hammerhead shark quotas. Based on the 2014 ex-vessel prices, the annual gross revenues for blacktip, aggregated LCS, and hammerhead shark meat in the eastern Gulf of Mexico sub-region would be \$153,897, while the shark fins would be \$145,758. Thus, total average annual gross revenues for blacktip, aggregated LCS, and hammerhead shark landings in the eastern Gulf of Mexico sub-region would be \$299,655 ( $\$153,897 + \$145,758$ ). Based on eDealer landings, there are approximately 11 active directed shark permit holders in the eastern Gulf of Mexico sub-region that landed LCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in this sub-region would be \$27,241 per vessel. When compared to Alternative D3, the eastern Gulf of Mexico sub-region would have minor beneficial economic impacts under Alternative D2, because this alternative would result in the highest total average annual gross revenues for blacktip, aggregated LCS, and hammerhead sharks. In the western Gulf of Mexico sub-region, fishermen would receive 225.8 mt dw in blacktip shark, 68.7 mt dw in aggregated LCS, and 11.9 mt dw in hammerhead shark quotas. Based on the 2014 ex-vessel prices, the annual gross revenues for blacktip, aggregated LCS, and hammerhead shark meat in the eastern Gulf of Mexico sub-region would be \$343,251, while the shark fins would be

\$326,597. Thus, total average annual gross revenues for blacktip, aggregated LCS, and hammerhead shark landings in the eastern Gulf of Mexico sub-region would be \$669,502 (\$343,251 + \$326,251). Based on eDealer landings, there are approximately 17 active directed shark permit holders in the western Gulf of Mexico sub-region that landed LCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in this sub-region would be \$39,382 per vessel.

Alternative D2 would result in \$19,753 more in annual gross revenues for the eastern Gulf of Mexico sub-region, as compared to Alternative D3. This alternative would have direct short-term minor beneficial economic impacts as a result of implementing a sub-regional quota structure, combined with higher sub-regional quotas and therefore increased potential gross revenue, received by the eastern Gulf of Mexico sub-region. However, despite the increase in the quota for the eastern Gulf of Mexico sub-region, in the long-term, there could be minor adverse economic impacts based on the boundary line chosen to separate the sub-regions in the Gulf of Mexico. Placing the boundary between the eastern and western Gulf of Mexico sub-regions along 89° 00' W. long. (i.e., between fishing catch areas 11 and 12) may not create sufficient geographic separation between the major stakeholders in the Gulf of Mexico (i.e., Louisiana and Florida), as opposed to the boundary in Alternative D3. As the range of Louisiana fishermen extends east beyond this boundary, placing the boundary along 89° 00' W. long. would allow active shark fishermen in the western sub-region to utilize both sub-regional quotas while active shark fishermen in the eastern sub-region would be limited to just the eastern sub-region quota. As such, this alternative could result in less equitable economic benefits to fishermen in both sub-regions. Fishermen in the western sub-region could potentially increase their gross annual revenues by harvesting some of the eastern sub-regional quota, which would

be lost by fishermen from the eastern sub-region, who could lose some of their potential annual revenue as a result of not fully harvesting the eastern sub-regional quota.

Alternative D3, one of the preferred alternatives, would apportion the Gulf of Mexico regional quotas for blacktip, aggregated LCS, and hammerhead sharks along 88° 00' W. long. into western and eastern sub-regional quotas. Under this alternative, the eastern Gulf of Mexico sub-region would receive 9.8 percent of the total blacktip quota (25.1 mt dw; 55,439 lb dw), 54.3 percent of the total aggregated LCS quota (85.5 mt dw; 188,593 lb dw), and 52.8 percent of the total hammerhead shark quota (13.4 mt dw; 29,421 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for blacktip, aggregated LCS, and hammerhead shark meat in the eastern Gulf of Mexico sub-region would be \$143,735 while the shark fins would be \$136,167. Thus, total average annual gross revenues for blacktip, aggregated LCS, and hammerhead shark landings in the eastern Gulf of Mexico sub-region would be \$279,902 (\$143,735 + \$136,167). Based on eDealer landings, there are approximately 11 active directed shark permit holders in the eastern Gulf of Mexico sub-region that landed LCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in this sub-region would be \$25,446 per vessel. The eastern Gulf of Mexico sub-region would have minor adverse socioeconomic impacts under Alternative D3, because this alternative would result in lower total average annual gross revenues for blacktip, aggregated LCS, and hammerhead sharks than under Alternative D2. In the western Gulf of Mexico sub-region, fishermen would receive 90.2 percent of the total blacktip quota (231.5 mt dw; 510,261 lb dw), 45.7 percent of the total aggregated LCS quota (72.0 mt dw; 158,724 lb dw), and 47.2 percent of the total hammerhead shark quota (11.9 mt dw; 23,301 lb dw). Based on the 2014 ex-vessel prices, the annual gross revenues for blacktip, aggregated LCS, and hammerhead shark meat in

the western Gulf of Mexico sub-region would be \$251,403, while the shark fins would be \$101,055. Thus, total average annual gross revenues for blacktip, aggregated LCS, and hammerhead shark landings in the western Gulf of Mexico sub-region would be \$689,601 (\$353,412 + \$336,189). Based on eDealer landings, there are approximately 17 active directed shark permit holders in the western Gulf of Mexico sub-region that landed LCS in 2014. Based on this number of individual permits, the total average annual gross revenues for the active directed permit holders in this sub-region would be \$40,565 per vessel, which would be more than the average annual gross revenue per vessel under Alternatives D1 or D2.

Alternative D3 would result in \$19,753 less in annual gross revenues to the eastern Gulf of Mexico sub-region, which would receive slightly smaller sub-regional quotas under this alternative, as compared to under Alternative D2. However, despite the economic disadvantages resulting from slightly smaller sub-regional quotas for the eastern Gulf of Mexico sub-region, overall there would be short-term minor beneficial economic impacts and long-term moderate beneficial socioeconomic impacts under this alternative, based on where the Gulf of Mexico sub-region would be split. Placing the boundary between the eastern and western Gulf of Mexico sub-regions along 88° 00' W. long. (i.e., between fishing catch areas 10 and 11) would create better geographic separation between the major stakeholders in the Gulf of Mexico (i.e., Louisiana and Florida), as opposed to the boundary in Alternative D2. This would provide more equitable economic benefits to fishermen in both sub-regions, by allowing them increased likelihood of fully harvesting their sub-regional quotas, and maximizing the potential annual revenue they could gain upon implementation of sub-regional quotas in the Gulf of Mexico.

Alternative D4 would apportion the Gulf of Mexico regional quotas for blacktip, aggregated LCS, and hammerhead sharks along 89° 00' W. longitude into western and eastern

sub-regional quotas, maintain LCS quota linkages in the eastern sub-region of the Gulf of Mexico region, remove the LCS quota linkages in the western sub-region of the Gulf of Mexico region, and prohibit the harvest of hammerhead sharks in the western Gulf of Mexico sub-region. In the Draft EA for Amendment 6, NMFS originally considered this alternative to have neutral economic impacts, as there were negligible landings of hammerhead sharks in western sub-region between 2008-2013. However, based on updated landing data resulting in comparable hammerhead shark sub-regional quotas (13.4 mt dw for the eastern Gulf of Mexico sub-region, and 11.9 mt dw for the western Gulf of Mexico sub-region), it is now apparent that there would be some negative socioeconomic impacts if NMFS were to prohibit hammerhead sharks in the western sub-region. Given this information, prohibiting retention of hammerhead sharks in the western sub-region would result in a large number of regulatory discards, and would also have negative socioeconomic impacts on fishermen in this sub-region. Under Alternative D4, there would be loss of \$25,941 for active shark fishermen operating within the western Gulf of Mexico region if they were unable to retain hammerhead sharks. Additionally, based on public comment on the preference for a boundary line at 88° 00' W. long., placing the boundary line at 89° 00' W. long. would allow fishermen operating in the western sub-region an opportunity to harvest from both sub-regional quotas. While implementing sub-regional quotas in the Gulf of Mexico would allow fishermen to maximize their fishing effort at times when fishing would be most profitable for them, thereby maximizing revenue, placing the boundary line at 89° 00' W. long. would decrease the likelihood of fishermen from each respective sub-region fully harvesting their sub-regional quota, and maximizing the potential annual revenue they could gain upon implementation of sub-regional quotas in the Gulf of Mexico. Thus, Alternative D4 would likely result in both direct and indirect short- and long-term minor adverse socioeconomic impacts

across the entire Gulf of Mexico region, as there would be potential losses from prohibiting landings of hammerhead sharks in the western Gulf of Mexico and from choosing a boundary that does not create sufficient geographic separation between the major stakeholders in the Gulf of Mexico.

Under Alternative D5, NMFS would establish a non-blacknose SCS TAC of 931.9 mt dw and maintain the current base annual quota of 45.5 mt dw (100,317 lb dw). However, given the impact of federal and state regulations related to shark finning and sale of shark fins, which have resulted in declining ex-vessel prices of fins since 2010, on fishermen in the Gulf of Mexico, maintaining the current base annual quota would likely have negative socioeconomic impacts. Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS and blacknose shark meat in the Gulf of Mexico region would be \$36,114, while the shark fins would be \$29,293. Thus, total average annual gross revenues for non-blacknose SCS landings would be \$65,407 (\$36,114 + \$29,293). Based on eDealer landings, there are approximately 8 active directed shark permit holders that landed SCS in 2014. Based on this number of individual permits, the total average annual gross revenue for the active directed permit holder in Atlantic would be \$8,176 per vessel. When compared to Alternative D8, the preferred alternative, this alternative would result in \$96,429 (\$161,836 - \$65,407) less in total gross annual revenue, or \$12,054 less per vessel. Alternative D5 would likely result in both direct and indirect short- and long-term moderate adverse socioeconomic impacts, as fishermen would continue to experience reduced revenue throughout the region, as would the dealers and supporting business that they regularly interact with.

Under Alternative D6, NMFS would establish a non-blacknose SCS TAC of 954.7 mt dw and increase the quota to the current adjusted annual quota of 68.3 mt dw (150,476 lb dw).

Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the Gulf of Mexico region would be \$54,171, while the shark fins would be \$43,939. Thus, total average annual gross revenues for non-blacknose SCS landings would be \$90,110 (\$54,171 + \$43,939). There are approximately 8 active directed shark permit holders in the entire Gulf of Mexico that landed SCS in 2014, which would result in average annual gross revenues for all SCS species of \$11,264 per vessel. Given current financial difficulties faced by fishermen, associated with declining ex-vessel prices and restrictions on the sale of shark fins, the beneficial economic impacts of increasing the annual quota by 22.8 mt dw (from the quota under Alternative D5) would likely be minimal. Thus, it is likely that Alternative D6 could result in both direct and indirect short- and long-term neutral to minor adverse economic impacts.

Under Alternative D7, NMFS would establish a non-blacknose SCS TAC of 1,064.9 mt dw and increase the quota to 178.5 mt dw (393,566 lb dw). Under this alternative, the commercial quota would be increased to twice the current 2013 landings, which is almost four times the current base annual quota for non-blacknose SCS. Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the Gulf of Mexico region would be \$141,684, while the shark fins would be \$114,921. Thus, total average annual gross revenues for non-blacknose SCS landings would be \$256,605 (\$141,684 + \$114,921). There are approximately 8 active directed shark permit holders in the entire Gulf of Mexico, which would result in average annual gross revenues for all SCS species of \$32,076 per vessel. The quota considered under this alternative would result in an increase of \$94,769 (\$256,605 - \$161,836) in annual revenues or an increase of \$11,846 per vessel, over the quota considered in preferred Alternative D8. Alternative D7 could have short-term beneficial socioeconomic impacts, since the commercial quota under this alternative is almost four times the current base quota for non-

blacknose SCS. However, if the increase in quota results in overfishing for blacknose and/or finetooth sharks, additional restrictions would be likely in the future, which would likely have large negative economic impacts.

Alternative D8, one of the preferred alternatives, would establish a non-blacknose SCS TAC of 999.0 mt dw, increase the quota to 112.6 mt dw (248,215 lb dw), and prohibit the retention of blacknose sharks in the Gulf of Mexico. Under this alternative, the commercial quota would be increased to almost twice the 2013 landings, which is almost four times the current base annual quota for non-blacknose SCS, but then would be adjusted down to account for blacknose shark discards that would occur as a result of the prohibition on retaining blacknose sharks. Based on the 2014 ex-vessel prices, the annual gross revenues for non-blacknose SCS meat in the Gulf of Mexico region would be \$89,357, while the shark fins would be \$72,479. Thus, total average annual gross revenues for non-blacknose SCS landings would be \$345,551 (\$125,941 + \$219,610). Fishermen could potentially land more non-blacknose SCS under this alternative than under either Alternatives D5 or D6, resulting in increased annual revenues. While the quota would be lower than under Alternative D7, by prohibiting blacknose sharks, this would remove the linkage between blacknose sharks and non-blacknose sharks, and increase the likelihood that fishermen could harvest the entire non-blacknose SCS quota. Additional revenue gained from increasing the non-blacknose SCS quota would outweigh a loss of \$5,199 from prohibiting blacknose in the Gulf of Mexico. Potential loss of gross revenue by shark fishermen due to the prohibition on blacknose may also be less than \$5,199, as fishermen have demonstrated an ability to largely avoid blacknose sharks with the use of gillnet gear. Fishermen in the Gulf of Mexico have also been requesting a prohibition on landing and retention of blacknose sharks since Amendment 3 to the 2006 Consolidated HMS FMP, when

blacknose sharks were separated from the SCS management group and linked to the newly created non-blacknose SCS management group. The small blacknose shark quota has resulted in early closure before the non-blacknose SCS quota could be harvested. However, in recent years, blacknose sharks have not been the limiting factor in initiating closure of the linked SCS management groups in the Gulf of Mexico; instead, it has been landings of non-blacknose SCS either exceeding or being projected to exceed 80 percent of the quota. Thus, Alternative D8 would likely result in both direct and indirect short- and long-term moderate beneficial socioeconomic impacts, since the commercial quota under this alternative would be higher than the current base quota for non-blacknose SCS.

#### *Upgrading Restrictions*

Under Alternative E1, the No Action alternative, NMFS would maintain the current upgrading restrictions in place for shark limited access permit holders. Thus, shark limited access permit holders would continue to be limited to upgrading a vessel or transferring a permit only if it does not result in an increase in horsepower of more than 20 percent or an increase of more than 10 percent overall, gross registered tonnage, or net tonnage from the vessel baseline specifications. The No Action alternative could result in direct and indirect minor adverse economic impacts if fishermen continue to be constrained by limits on horsepower and vessel size increases. Fishermen would also be limited by these upgrading restrictions when buying, selling, or transferring shark directed limited access permits.

Alternative E2, a preferred alternative, would remove current upgrading restrictions for shark directed permit holders. Eliminating these restrictions would have short- and long-term minor beneficial economic impacts, since it would allow fishermen to buy, sell, or transfer shark directed permits without worrying about the increase in horsepower of more than 20 percent or

an increase of more than 10 percent in length overall, gross registered tonnage, or net tonnage from the vessel baseline specifications. In addition, the upgrade restriction for shark permit holders was implemented to match the upgrading restrictions for the Northeast multispecies permits. NMFS is currently considering removing the upgrading restrictions for the Northeast multispecies permits, and if those are removed, then removing the upgrading restrictions for shark directed permit holders could aid in maintaining consistency for fishermen who hold multiple permits.

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. As part of this rulemaking process, a letter to permit holders that also serves as small entity compliance guide (the guide) was prepared. Copies of this final rule are available from the HMS Management Division (see ADDRESSES) and the guide (i.e., permit holder letter) will be sent to all holders of permits for the Atlantic shark commercial fisheries. The guide and this final rule will be available upon request.

## List of Subjects in 50 CFR Part 635

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

Dated: August 6, 2015.

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Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs,

National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 635 is amended as follows:

### **PART 635—ATLANTIC HIGHLY MIGRATORY SPECIES**

1. The authority citation for part 635 continues to read as follows:

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

2. In § 635.2, add the definition “Management group” in alphabetical order to read as follows:

#### **§ 635.2 Definitions.**

\* \* \* \* \*

*Management group* in regard to sharks means a group of shark species that are combined for quota management purposes. A management group may be split by region or sub-region, as defined at § 635.27(b)(1). A fishery for a management group can be opened or closed as a whole

or at the regional or sub-regional levels. Sharks have the following management groups: Atlantic aggregated LCS, Gulf of Mexico aggregated LCS, research LCS, hammerhead, Atlantic non-blacknose SCS, Gulf of Mexico non-blacknose SCS, and pelagic sharks other than blue or porbeagle.

\* \* \* \* \*

3. In § 635.4, revise paragraph (1)(2)(i), the introductory text of paragraph (1)(2)(ii), and paragraphs (1)(2)(iv) through (vi), and remove paragraph (1)(2)(x) to read as follows:

**§ 635.4 Permits and fees.**

\* \* \* \* \*

(1) \* \* \*

(2) \* \* \*

(i) Subject to the restrictions on upgrading the harvesting capacity of permitted vessels in paragraph (1)(2)(ii) of this section, as applicable, and to the limitations on ownership of permitted vessels in paragraph (1)(2)(iii) of this section, an owner may transfer a shark or swordfish LAP or an Atlantic Tunas Longline category permit to another vessel that he or she owns or to another person. Directed handgear LAPs for swordfish may be transferred to another vessel or to another person but only for use with handgear and subject to the upgrading restrictions in paragraph (1)(2)(ii) of this section and the limitations on ownership of permitted vessels in paragraph (1)(2)(iii) of this section. Shark directed and incidental LAPs and swordfish incidental LAPs are not subject to the upgrading requirements specified in paragraph (1)(2)(ii) of this section. Shark and swordfish incidental LAPs are not subject to the ownership requirements specified in paragraph (1)(2)(iii) of this section.

(ii) An owner may upgrade a vessel with a swordfish LAP or an Atlantic Tunas Longline

category permit, or transfer such permit to another vessel or to another person, and be eligible to retain or renew such permit only if the upgrade or transfer does not result in an increase in horsepower of more than 20 percent or an increase of more than 10 percent in length overall, gross registered tonnage, or net tonnage from the vessel baseline specifications. A vessel owner that concurrently held a directed or incidental swordfish LAP, a directed or incidental shark LAP, and an Atlantic Tunas Longline category permit as of August 6, 2007, is eligible to increase the vessel size or transfer the permits to another vessel as long as any increase in the three specifications of vessel size (length overall, gross registered tonnage, and net tonnage) does not exceed 35 percent of the vessel baseline specifications, as defined in paragraph (1)(2)(ii)(A) of this section; horsepower for those eligible vessels is not limited for purposes of vessel upgrades or permit transfers.

\* \* \* \* \*

(iv) In order to transfer a swordfish, shark or an Atlantic Tunas Longline category limited access permit to a replacement vessel, the owner of the vessel issued the limited access permit must submit a request to NMFS, at an address designated by NMFS, to transfer the limited access permit to another vessel, subject to requirements specified in paragraph (1)(2)(ii) of this section, if applicable. The owner must return the current valid limited access permit to NMFS with a complete application for a limited access permit, as specified in paragraph (h) of this section, for the replacement vessel. Copies of both vessels' U.S. Coast Guard documentation or state registration must accompany the application.

(v) For swordfish, shark, and an Atlantic Tunas Longline category limited access permit transfers to a different person, the transferee must submit a request to NMFS, at an address designated by NMFS, to transfer the original limited access permit(s), subject to the

requirements specified in paragraphs (1)(2)(ii) and (iii) of this section, if applicable. The following must accompany the completed application: The original limited access permit(s) with signatures of both parties to the transaction on the back of the permit(s) and the bill of sale for the permit(s). A person must include copies of both vessels' U.S. Coast Guard documentation or state registration for limited access permit transfers involving vessels.

(vi) For limited access permit transfers in conjunction with the sale of the permitted vessel, the transferee of the vessel and limited access permit(s) issued to that vessel must submit a request to NMFS, at an address designated by NMFS, to transfer the limited access permit(s), subject to the requirements specified in paragraphs (1)(2)(ii) and (iii) of this section, if applicable. The following must accompany the completed application: The original limited access permit(s) with signatures of both parties to the transaction on the back of the permit(s), the bill of sale for the limited access permit(s) and the vessel, and a copy of the vessel's U.S. Coast Guard documentation or state registration.

\* \* \* \* \*

4. In § 635.24, revise paragraphs (a)(2) and (3), (a)(4)(ii) and (iii), and (a)(8) to read as follows:

**§ 635.24 Commercial retention limits for sharks, swordfish, and BAYS tunas.**

\* \* \* \* \*

(a) \* \* \*

(2) Except as noted in paragraphs (a)(4)(iv) through (vi) of this section, the commercial retention limit for LCS other than sandbar sharks for 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 range between zero and 55 LCS other than sandbar sharks per vessel per trip if the respective LCS management group(s) is open per §§ 635.27 and 635.28. Such persons may not retain, possess, or land sandbar sharks. At the start of each fishing year, the default commercial retention limit is 45 LCS other than sandbar sharks per vessel per trip unless NMFS determines otherwise and files with the Office of the Federal Register for publication notification of an inseason adjustment. During the fishing year, NMFS may adjust the retention limit per the inseason trip limit adjustment criteria listed in § 635.24(a)(8).

(3) Except as noted in paragraphs (a)(4)(iv) through (vi) of this section, 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 LCS other than sandbar sharks per vessel per trip if the respective LCS management group(s) is open per §§ 635.27 and 635.28. Such persons may not retain, possess, or land sandbar sharks.

(4) \* \* \*

(ii) A person who owns or operates a vessel that has been issued a shark LAP and is operating south of 34° 00' N. lat. in the Atlantic region, as defined at § 635.27(b)(1), may retain, possess, land, or sell blacknose and non-blacknose SCS if the respective blacknose and non-blacknose SCS management groups are open per §§ 635.27 and 635.28. A person who owns or operates a vessel that has been issued a shark LAP and is operating north of 34° 00' N. lat. in the Atlantic region, as defined at § 635.27(b)(1), or a person who owns or operates a vessel that has been issued a shark LAP and is operating in the Gulf of Mexico region, as defined at §

635.27(b)(1), may not retain, possess, land, or sell any blacknose sharks, but may retain, possess, land, or sell non-blacknose SCS if the respective non-blacknose SCS management group is open per §§ 635.27 and 635.28.

(iii) Consistent with paragraph (a)(4)(ii) of this section, a person who owns or operates a vessel that has been issued an incidental shark LAP may retain, possess, or land no more than 16 SCS and pelagic sharks, combined, per trip, if the respective fishery is open per §§ 635.27 and 635.28.

\* \* \* \* \*

(8) *Inseason trip limit adjustment criteria.* NMFS will file with the Office of the Federal Register for publication notification of any inseason adjustments to trip limits by region or sub-region. Before making any adjustment, NMFS will consider the following criteria and other relevant factors:

(i) The amount of remaining shark quota in the relevant area, region, or sub-region, to date, based on dealer reports;

(ii) The catch rates of the relevant shark species/complexes in the region or sub-region, to date, based on dealer reports;

(iii) Estimated date of fishery closure based on when the landings are projected to reach 80 percent of the quota given the realized catch rates;

(iv) Effects of the adjustment on accomplishing the objectives of the 2006 Consolidated HMS FMP and its amendments;

(v) Variations in seasonal distribution, abundance, or migratory patterns of the relevant shark species based on scientific and fishery-based knowledge; and/or

(vi) Effects of catch rates in one part of a region or sub-region precluding vessels in

another part of that region or sub-region from having a reasonable opportunity to harvest a portion of the relevant quota.

\* \* \* \* \*

5. In § 635.27, revise paragraph (b)(1), paragraph (b)(2) introductory text, paragraph (b)(2)(i), paragraph (b)(2)(ii), paragraph (b)(2)(iii) introductory text, and paragraph (b)(3) introductory text to read as follows:

**§ 635.27 Quotas.**

\* \* \* \* \*

(b) *Sharks--(1) Commercial quotas.* The commercial quotas for sharks specified in this section apply to all sharks harvested from the management unit, regardless of where harvested. Sharks caught and landed commercially from state waters, even by fishermen without Federal shark permits, must be counted against the appropriate commercial quota. Any of the base quotas listed below, including regional and/or sub-regional base quotas, may be adjusted per paragraph (b)(2) of this section. Any sharks landed commercially as “unclassified” will be counted against the appropriate 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. 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.

(i) *Commercial quotas that apply only in the Atlantic Region.* The commercial quotas specified in this paragraph (b)(1)(i) apply only to those species of sharks and management groups within the management unit that were harvested in the Atlantic region, as defined in paragraph (b)(1) of this section.

(A) *Atlantic aggregated LCS.* The base annual commercial quota for Atlantic aggregated LCS is 168.9 mt dw.

(B) *Atlantic hammerhead sharks.* The regional base annual commercial quota for hammerhead sharks caught in the Atlantic region is 27.1 mt dw (51.7% of the overall base quota established in paragraph (b)(1)(iii) of this section).

(C) *Atlantic non-blacknose SCS.* The base annual commercial quota for Atlantic non-blacknose SCS is 264.1 mt dw.

(D) *Atlantic blacknose sharks.* The base annual commercial quota for Atlantic blacknose sharks is 17.2 mt dw. Blacknose sharks may only be harvested for commercial purposes in the Atlantic region south of 34° 00' N. lat. The harvest of blacknose sharks by persons aboard a vessel that has been issued or should have been issued a shark LAP and that is operating north of 34° 00' N. lat. is prohibited.

(ii) *Commercial quotas that apply only in the Gulf of Mexico Region.* The commercial quotas specified in this paragraph (b)(1)(ii) apply only to those species of sharks and management groups within the management unit that were harvested in the Gulf of Mexico region, as defined in paragraph (b)(1) of this section. The Gulf of Mexico region is further split into western and eastern Gulf of Mexico sub-regions by a boundary that is drawn along 88° 00' W. long. All sharks harvested within the Gulf of Mexico region in fishing catch areas in waters

westward of 88° 00' W. long. are considered to be from the western Gulf of Mexico sub-region, and all sharks harvested within the Gulf of Mexico region in fishing catch areas in waters east of 88° 00' W. long., including within the Caribbean Sea, are considered to be from the eastern Gulf of Mexico sub-region.

(A) *Gulf of Mexico aggregated LCS*. The base annual commercial quota for Gulf of Mexico aggregated LCS is 157.5 mt dw. The eastern Gulf of Mexico sub-region base quota is 85.5 mt dw (54.3% of the Gulf of Mexico region base quota) and the western Gulf of Mexico sub-region base quota is 72.0 mt dw (45.7% of the Gulf of Mexico region base quota).

(B) *Gulf of Mexico hammerhead sharks*. The regional base annual commercial quota for hammerhead sharks caught in the Gulf of Mexico region is 25.3 mt dw (48.3% of the overall base quota established in paragraph (b)(1)(iii) of this section). The eastern Gulf of Mexico sub-region base quota is 13.4 mt dw (52.8% of this regional base quota) and the western Gulf of Mexico sub-region base quota is 11.9 mt dw (47.2% of this regional base quota).

(C) *Gulf of Mexico blacktip sharks*. The base annual commercial quota for Gulf of Mexico blacktip sharks is 256.6 mt dw. The eastern Gulf of Mexico sub-region base quota is 25.1 mt dw (9.8% of the Gulf of Mexico region base quota) and the western Gulf of Mexico sub-region base quota is 231.5 mt dw (90.2% of the Gulf of Mexico region base quota).

(D) *Gulf of Mexico non-blacknose SCS*. The base annual commercial quota for Gulf of Mexico non-blacknose SCS is 112.6 mt dw. This base quota is not split between the eastern and western Gulf of Mexico sub-regions.

(E) *Gulf of Mexico blacknose sharks*. The base annual commercial quota for Gulf of Mexico blacknose sharks is 0.0 mt dw. The harvest of blacknose sharks by persons aboard a vessel that has been issued or should have been issued a shark LAP and that is operating in the

Gulf of Mexico region is prohibited.

(iii) *Commercial quotas that apply in all regions.* The commercial quotas specified in this section apply to any sharks or management groups within the management unit that were harvested in either the Atlantic or Gulf of Mexico regions.

(A) *Sandbar sharks.* The base annual commercial quota for sandbar sharks is 90.7 mt dw. This quota, as adjusted per paragraph (b)(2) of this section, 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.

(B) *Research LCS.* The base annual commercial quota for Research LCS is 50 mt dw. This quota, as adjusted per paragraph (b)(2) of this section, 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.

(C) *Hammerhead sharks.* The overall base annual commercial quota for hammerhead sharks is 52.4 mt dw. This overall base quota is further split for management purposes between the regions defined in paragraphs (b)(1)(i) and (ii) of this section.

(D) *Pelagic sharks.* The base annual commercial quotas for pelagic sharks are 273.0 mt dw for blue sharks, 1.7 mt dw for porbeagle sharks, and 488.0 mt dw for pelagic sharks other than blue sharks or porbeagle sharks.

(2) *Annual and inseason adjustments of commercial quotas.* NMFS will publish in the Federal Register any annual or inseason adjustments to the base annual commercial overall, regional, or sub-regional quotas. No quota will be available, and the fishery will not open, until any adjustments are published in the Federal Register and effective. Within a fishing year or at the start of a fishing year, NMFS may transfer quotas between regions and sub-regions of the

same species or management group, as appropriate, based on the criteria in paragraph (b)(2)(iii) of this section.

(i) *Annual overharvest adjustments--(A) Adjustments of annual overall and regional base quotas.* Except as noted in this section, if any of the available commercial base or adjusted overall quotas or regional quotas, as described in this section, is exceeded in any fishing year, NMFS will deduct an amount equivalent to the overharvest(s) from the base overall or regional quota the following fishing year or, depending on the level of overharvest(s), NMFS may deduct from the overall or regional base quota an amount equivalent to the overharvest(s) spread over a number of subsequent fishing years to a maximum of five years. 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 year or, depending on the level of overharvest(s), deduct an amount equivalent to the overharvest(s) spread over a number of subsequent fishing years to a maximum of five years.

(B) *Adjustments to sub-regional quotas.* If a sub-regional quota is exceeded but the regional quota is not, NMFS will not reduce the annual regional base quota the following year and sub-regional quotas will be determined as specified in paragraph (b)(1) of this section. If both a sub-regional quota(s) and the regional quota are exceeded, for each sub-region in which an overharvest occurred, NMFS will deduct an amount equivalent to that sub-region's overharvest from that sub-region's quota the following fishing year or, depending on the level of overharvest, NMFS may deduct from that sub-region's base quota an amount equivalent to the overharvest spread over a number of subsequent fishing years to a maximum of five years.

(C) *Adjustments to quotas when the species or management group is split into regions or sub-regions for management purposes and not as a result of a stock assessment.* If a regional

quota for a species that is split into regions for management purposes only is exceeded but the overall quota is not, NMFS will not reduce the overall base quota for that species or management group the following year and the regional quota will be determined as specified in paragraph (b)(1) of this section. If both a regional quota(s) and the overall quota is exceeded, for each region in which an overharvest occurred, NMFS will deduct an amount equivalent to that region's overharvest from that region's quota the following fishing year or, depending on the level of overharvest(s), NMFS may deduct from that region's base quota an amount equivalent to the overharvest spread over a number of subsequent fishing years to a maximum of five years. If a sub-regional quota of a species or management group that is split into regions for management purposes only is exceeded, NMFS will follow the procedures specified in paragraph (b)(2)(i)(B) of this section.

(ii) *Annual underharvest adjustments.* Except as noted in this paragraph (b)(2)(ii), if any of the annual base or adjusted quotas, including regional quotas, as described in this section is not harvested, NMFS may adjust the annual base quota, including regional quotas, depending on the status of the stock or management group. If a species or a specific species within a management group is declared to be overfished, to have overfishing occurring, or to have an unknown status, NMFS may not adjust the following fishing year's base quota, including regional quota, for any underharvest, and the following fishing year's quota will be equal to the base annual quota. If the species or all species in a management group 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, including regional quota, by an equivalent amount of the underharvest up to 50 percent above the base annual quota. Except as noted in paragraph (b)(2)(iii) of this section, underharvests are not transferable between regions, species, and/or

management groups.

(iii) *Determination criteria for inseason and annual quota transfers between regions and sub-regions.* Inseason or annual quota transfers of quotas between regions or sub-regions may be conducted only for species or management groups where the species are the same between regions or sub-regions and the quota is split between regions or sub-regions for management purposes and not as a result of a stock assessment. Before making any inseason or annual quota transfer between regions or sub-regions, NMFS will consider the following criteria and other relevant factors:

\* \* \* \* \*

(3) *Opening commercial fishing season criteria.* NMFS will file with the Office of the Federal Register for publication notification of the opening dates of the overall, regional, and sub-regional shark fisheries for each species and management group. Before making any decisions, NMFS would consider the following criteria and other relevant factors in establishing the opening dates:

\* \* \* \* \*

6. In § 635.28, revise paragraph (b) to read as follows:

**§ 635.28 Fishery closures.**

\* \* \* \* \*

(b) *Sharks.* (1) A shark fishery that meets any of the following circumstances is closed and subject to the requirements of paragraph (b)(6) of this section:

(i) No overall, regional, and/or sub-regional quota, as applicable, is specified at § 635.27(b)(1);

(ii) The overall, regional, and/or sub-regional quota, as applicable, specified at §

635.27(b)(1) is zero;

(iii) After accounting for overharvests as specified at § 635.27(b)(2), the overall, regional, and/or sub-regional quota, as applicable, is determined to be zero or close to zero and NMFS has closed the fishery by publication of a notice in the **Federal Register**;

(iv) The species is a prohibited species as listed under Table 1 of appendix A of this part;  
or

(v) Landings of the species and/or management group meet the requirements specified in § 635.28(b)(2) through (5) and NMFS has closed the fishery by publication of a notice in the **Federal Register**.

(2) *Non-linked quotas*. If the overall, regional, and/or sub-regional quota of a species or management group is not linked to another species or management group and that overall, regional, and/or sub-regional quota is available as specified by a publication in the Federal Register, then that overall, regional, and/or sub-regional commercial fishery for the shark species or management group will open as specified in § 635.27(b). When NMFS calculates that the overall, regional, and/or sub-regional landings for a shark species and/or management group, as specified in § 635.27(b)(1), has reached or is projected to reach 80 percent of the available overall, regional, and/or sub-regional quota as specified in § 635.27(b)(1), NMFS will file for publication with the Office of the Federal Register a notice of an overall, regional, and/or sub-regional closure, as applicable, for that shark species and/or shark management 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 the publication of a notice in the **Federal Register**, that additional overall, regional, and/or sub-regional quota is available and the season is reopened, the overall, regional, and/or sub-regional fisheries for that shark species or management group are

closed, even across fishing years.

(3) *Linked quotas.* As specified in paragraph (b)(4) of this section, the overall, regional, and/or sub-regional quotas of some shark species and/or management groups are linked to the overall, regional, and/or sub-regional quotas of other shark species and/or management groups. For each pair of linked species and/or management groups, if the overall, regional, and/or sub-regional quota specified in § 635.27(b)(1) is available for both of the linked species and/or management groups as specified by a publication in the **Federal Register**, then the overall, regional, and/or sub-regional commercial fishery for both of the linked species and/or management groups will open as specified in § 635.27(b)(1). When NMFS calculates that the overall, regional, and/or sub-regional landings for any species and/or management group of a linked group has reached or is projected to reach 80 percent of the available overall, regional, and/or sub-regional quota as specified in § 635.27(b)(1), NMFS will file for publication with the Office of the Federal Register a notice of an overall, regional, and/or sub-regional closure for all of the species and/or management groups in that linked 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 the publication of a notice in the **Federal Register**, that additional overall, regional, and/or sub-regional quota is available and the season is reopened, the overall, regional, and/or sub-regional fishery for all species and/or management groups in that linked group is closed, even across fishing years.

(4) The quotas of the following species and/or management groups are linked:

(i) Atlantic hammerhead sharks and Atlantic aggregated LCS.

(ii) Eastern Gulf of Mexico hammerhead sharks and eastern Gulf of Mexico aggregated LCS.

(iii) Western Gulf of Mexico hammerhead sharks and western Gulf of Mexico aggregated LCS.

(iv) Atlantic blacknose sharks and Atlantic non-blacknose SCS south of 34° 00' N. lat.

(5) NMFS may close the regional or sub-regional Gulf of Mexico blacktip shark management group(s) before landings reach, or are expected to reach, 80 percent of the quota, after considering the following criteria and other relevant factors:

(i) Estimated Gulf of Mexico blacktip shark season length based on available sub-regional quotas and average sub-regional weekly catch rates during the current fishing year and from previous years;

(ii) Variations in regional and/or sub-regional seasonal distribution, abundance, or migratory patterns of blacktip sharks, hammerhead sharks, and aggregated LCS based on scientific and fishery information;

(iii) Effects of the adjustment on accomplishing the objectives of the 2006 Consolidated HMS FMP and its amendments;

(iv) The amount of remaining shark quotas in the relevant sub-regions, to date, based on dealer or other reports; and,

(v) The regional and/or sub-regional catch rates of the relevant shark species or management group(s), to date, based on dealer or other reports.

(6) When the overall, regional, and/or sub-regional fishery for a shark species and/or management group is closed, a fishing vessel, issued a Federal Atlantic commercial shark permit pursuant to § 635.4, may not possess, retain, land, or sell a shark of that species and/or management group that was caught within the closed region or sub-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, a NMFS-approved observer is onboard, and the sandbar and/or Research LCS fishery, as applicable, is open. A shark dealer, issued a permit pursuant to § 635.4, may not purchase or receive a shark of that species and/or management group that was caught within the closed region or sub-region from a vessel issued a Federal Atlantic commercial shark permit, except that a permitted shark dealer or processor may possess sharks that were caught in the closed region or sub-region 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 or management 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 or management group if the shark was harvested, off-loaded, and sold, traded, or bartered from a vessel that fishes only in State waters and that has not been issued a Federal Atlantic commercial shark permit, HMS Angling permit, or HMS Charter/Headboat permit pursuant to § 635.4. Additionally, under an overall, a regional, or a sub-regional closure for a shark species and/or management group, a shark dealer, issued a permit pursuant to § 635.4, may purchase or receive a shark of that species group if the sandbar or Research LCS fishery, as applicable, is open and the shark was 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 the shark was collected.

(7) If the Atlantic Tunas Longline category quota is closed as specified in paragraph (a)(4) of this section, vessels that have pelagic longline gear on board cannot possess, retain, land, or sell sharks.

\* \* \* \* \*

7. In § 635.31, revise paragraphs (c)(1) and (4) to read as follows:

**§ 635.31 Restrictions on sale and purchase.**

\* \* \* \* \*

(c) \* \* \*

(1) Persons that own or operate a vessel that possesses, retains, or lands 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, retain, land, and sell a shark only to a federally-permitted dealer and only when the fishery for that species, management group, region, and/or sub-region has not been closed, as specified in § 635.28(b). Persons that own or operate a vessel that has pelagic longline gear onboard can possess, retain, land, and sell a shark only if the Atlantic Tunas Longline category has not been closed, as specified in § 635.28(a).

\* \* \* \* \*

(4) Only dealers who have a valid Federal Atlantic shark dealer permit and who have submitted reports to NMFS according to reporting requirements of §635.5(b)(1)(ii) may first receive a shark from an owner or operator of a vessel that has, or is required to have, a valid Federal Atlantic commercial shark permit issued under this part. 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 who does not have a Federal Atlantic commercial shark permit if that vessel fishes exclusively in state waters and does not possess a HMS Angling permit or HMS Charter/Headboat permit pursuant to § 635.4. Atlantic shark 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. Atlantic shark dealers may purchase a shark from an owner or operator of a fishing vessel who has a valid commercial shark permit issued under this part only when the fishery for that species,

management group, region, and/or sub-region has not been closed, as specified in § 635.28(b). Atlantic shark dealers may first receive a shark from a vessel that has pelagic longline gear onboard only if the Atlantic Tunas Longline category has not been closed, as specified in § 635.28(a).

\* \* \* \* \*

8. In § 635.34, revise paragraphs (a) and (b) to read as follows:

**§ 635.34 Adjustment of management measures.**

(a) NMFS may adjust the IBQ shares or resultant allocations for bluefin tuna, as specified in § 635.15; catch limits for bluefin tuna, as specified in § 635.23; the overall, regional, and/or sub-regional quotas for bluefin tuna, sharks, swordfish, and northern albacore tuna as specified in § 635.27; the retention limits for sharks, as specified at § 635.24; the regional retention limits for Swordfish General Commercial permit holders, as specified at § 635.24; the marlin landing limit, as specified in § 635.27(d); and the minimum sizes for Atlantic blue marlin, white marlin, and roundscale spearfish as specified in § 635.20.

(b) In accordance with the framework procedures in the 2006 Consolidated HMS FMP, NMFS may establish or modify for species or species groups of Atlantic HMS the following management measures: maximum sustainable yield or optimum yield based on the latest stock assessment or updates in the SAFE report; domestic quotas; recreational and commercial retention limits, including target catch requirements; size limits; fishing years or fishing seasons; shark fishing regions, or regional and/or sub-regional quotas; species in the management unit and the specification of the species groups to which they belong; species in the prohibited shark species group; classification system within shark species groups; permitting and reporting requirements; workshop requirements; the IBQ shares or resultant allocations for bluefin tuna;

administration of the IBQ program (including but not limited to requirements pertaining to leasing of IBQ allocations, regional or minimum IBQ share requirements, IBQ share caps (individual or by category), permanent sale of shares, NED IBQ rules, etc.); time/area restrictions; allocations among user groups; gear prohibitions, modifications, or use restriction; effort restrictions; observer coverage requirements; EM requirements; essential fish habitat; and actions to implement ICCAT recommendations, as appropriate.

\* \* \* \* \*

9. In § 635.71, revise paragraphs (d)(3) and (4) to read as follows:

**§ 635.71 Prohibitions.**

\* \* \* \* \*

(d) \* \* \*

(3) Retain, possess, or land a shark of a species or management group when the fishery for that species, management group, region, and/or sub-region is closed, as specified in § 635.28(b).

(4) Sell or purchase a shark of a species or management group when the fishery for that species, management group, region, and/or sub-region is closed, as specified in § 635.28(b).

\* \* \* \* \*

10. In appendix A to part 635, revise Section B of Table 1 to read as follows:

**Appendix A to Part 635—Species Tables**

**Table 1 of Appendix A to Part 635—Oceanic Sharks**

* * * * *
B. Small Coastal Sharks
Atlantic and Gulf of Mexico Atlantic sharpnose, <i>Rhizoprionodon terraenovae</i>

Atlantic and Gulf of Mexico blacknose, <i>Carcharhinus acronotus</i>
Atlantic and Gulf of Mexico bonnethead, <i>Sphyrna tiburo</i>
Finetooth, <i>Carcharhinus isodon</i>
* * * * *

[FR Doc. 2015-19914 Filed: 8/17/2015 08:45 am; Publication Date: 8/18/2015]