

**DRAFT**

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT,  
REGULATORY IMPACT REVIEW, AND  
INITIAL REGULATORY FLEXIBILITY ANALYSIS

FOR A  
PROPOSED RULE  
FOR THE 2010 ATLANTIC COMMERCIAL SHARK SEASON  
SPECIFICATIONS

United States Department of Commerce  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Office of Sustainable Fisheries  
Highly Migratory Species Management Division

October 2009

## **Proposed Rule For The 2010 Atlantic Commercial Shark Season Specifications**

**Actions:** Establish quota levels and opening dates for the 2010 Atlantic commercial large coastal shark (LCS), small coastal shark (SCS) and pelagic shark fisheries.

**Type of Statement:** Supplemental Environmental Assessment, Regulatory Impact Review, and Initial Regulatory Flexibility Analysis

**Lead Agency:** National Marine Fisheries Service

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### **Abstract:**

The 2010 Atlantic Commercial Shark Season Specifications would adjust quotas for the 2010 fishing season for sandbar sharks, non-sandbar large coastal sharks (LCS), small coastal sharks (SCS), and pelagic sharks based on any over- and/or underharvests experienced during the 2008 and 2009 Atlantic commercial shark fishing season and announce the start of the fishing season for all Atlantic shark fisheries including the shark research fishery. This rulemaking would not affect the annual base quotas established in Amendment 2 to the 2006 Consolidated Highly Migratory Species (HMS) Fishery Management Plan (FMP) (73 FR 35778, June 24, 2008; corrected at 73 FR 40658, July 15, 2008). In this proposed action, NMFS is considering delaying the start of the non-sandbar LCS non-research and SCS fishing seasons to ensure equitable shark fishing opportunities in all states in regions of the Atlantic, Gulf of Mexico, and Caribbean Sea. Background information on the issues and a description of the alternatives being considered for this rulemaking are described in detail in this supplemental environmental assessment.

**FINDING OF NO SIGNIFICANT ENVIRONMENTAL IMPACT FOR A PROPOSED RULE FOR THE  
2010 ATLANTIC COMMERCIAL SHARK SEASON SPECIFICATIONS  
NATIONAL MARINE FISHERIES SERVICE**

The Highly Migratory Species (HMS) Management Division of the Office of Sustainable Fisheries submits the attached Supplemental Environmental Assessment (SEA) for the Atlantic shark fisheries for Secretarial review under the procedures of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). This SEA was developed as an integrated document that includes a Regulatory Impact Review and Final Regulatory Flexibility Analysis. Copies of the SEA and Regulatory Impact Review are available at the following address:

Highly Migratory Species Management Division, F/SF1  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910  
(301) 713-2347

or

<http://www.nmfs.noaa.gov/sfa/hms>

This action would:

- Adjust quotas in the Atlantic commercial non-sandbar LCS and porbeagle fisheries for the 2010 season to address the overharvests experienced during 2008 and 2009 season;
- Propose alternatives to delay the start of the 2010 SCS fishing season until implementation of the final rule for Amendment 3; and
- Delay the start of the non-sandbar LCS non-research fishing seasons to ensure equitable shark fishing opportunities in all states in regions of the Atlantic, Gulf of Mexico, and Caribbean Sea.

The SEA considers information contained in the Environmental Impact Statement associated with the 1999 Final Fishery Management Plan (FMP) for Atlantic Tunas, Swordfish, and Sharks, 2003 Amendment 1 to the 1999 FMP for Atlantic Tunas, Swordfish, and Sharks, the 2006 Consolidated HMS FMP, Amendment 2 to the Consolidated HMS FMP, and the draft Amendment 3 to the Consolidated HMS FMP. The responses in the Finding of No Significant Environmental Impact statement are supported by the analyses in the SEA as well as in the other NEPA documents referenced.

The National Oceanic and Atmospheric Administration Administrative Order 216-6 (NAO 216-6) (May 20, 1999) contains criteria for determining the significance of the impacts of an action. In addition, the Council on Environmental Quality regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of context and intensity. Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQs context and intensity criteria. These include:

1. Can the action be reasonably expected to jeopardize the sustainability of any target species that may be affected by the action?

No. The final action is consistent with the overall quotas for non-sandbar LCS and SCS, including regional quotas. These quotas do not represent potential jeopardy because they were established consistent with the Magnuson-Stevens Act requirements for sustainable fisheries. The management measures would address overharvests of non-sandbar LCS in the Atlantic region that occurred in the 2009 season and porbeagle sharks that occurred in the 2008 season. The measures are not expected to significantly increase fishing mortality of any target species beyond what has been previously analyzed. NMFS is proposing to open the non-sandbar LCS fishery in the Atlantic and the GOM regions on July 15, 2010. Delaying the start of the 2010 non-sandbar LCS fishery in both the Atlantic and Gulf of Mexico regions would provide equitable fishing opportunities among shark fishery participants in all states to catch the non-sandbar LCS quota in both regions. In addition, NMFS is considering delaying the opening of the 2010 SCS fishing season to allow for the implementation of Amendment 3, which would implement new blacknose and non-blacknose SCS quotas to rebuild the blacknose shark stock and end overfishing of this species.

2. Can the action be reasonably expected to jeopardize the sustainability of any non-target species?

No. The final action is not expected to jeopardize the sustainability of any non-target species or bycatch because it is not expected to result in a significant increase in bottom longline (BLL) or gillnet fishing effort, the primary gears used to harvest Atlantic sharks. The management measures maintain the same overall quotas established for non-sandbar LCS in Amendment 2 to the 2006 Consolidated HMS FMP. Furthermore, delaying the opening of the 2010 non-sandbar LCS and SCS fishery in all regions would decrease non-target species interaction rates because there would be no directed non-sandbar LCS or SCS fishing in the Atlantic and Gulf of Mexico

regions during the start of the 2010 seasons. Some fishing effort may be displaced to other gillnet and BLL fisheries in which participants are permitted. However, other fisheries such as the South Atlantic snapper/grouper and Gulf of Mexico reef fisheries are limited access fisheries. If fishermen do not currently hold permits in these fisheries, it would be difficult and expensive for them to enter these fisheries in the future. In addition, for shark fishermen that are currently permitted in these fisheries, strict retention limits and quotas are either in place or will be implemented in the near future, which would protect these stocks from further overfishing and being overfished by any redirected shark fishing effort. Therefore, redistributed effort is not anticipated to result in significant increase in bycatch of non-target species or interaction with protected resources.

3. Can the action be reasonably expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat (EFH) as defined under the Magnuson-Stevens Act and identified in FMPs?

No. As described in Amendment 1 to the 2006 Consolidated HMS FMP, there is no evidence that physical effects caused by shark BLL or gillnet gear are adversely affecting EFH for targeted or non-targeted species, to the extent that physical effects can be identified on the habitat or the fisheries. The management measures would reduce fishing effort by delaying the opening of the non-sandbar LCS commercial fishery in all regions during the start of the 2010 season and the SCS fishery until the effective date of draft Amendment 3. Therefore, the proposed alternatives are not expected to have significant impacts on EFH. As a precautionary measure, NMFS recommends fishermen take appropriate steps to identify and avoid bottom obstructions in order to mitigate any adverse impacts on EFH. The other gear types used to target sharks, such pelagic longline (PLL) and rod and reel gear, are unlikely to have any impact on EFH because they are fished in the water column and not in contact with the bottom.

4. Can the action be reasonably expected to have a substantial adverse impact on public health and safety?

No. The management measures address overharvests of non-sandbar LCS and porbeagle fisheries during the 2008 and 2009 season as well as delaying the opening of the 2010 non-sandbar LCS and SCS commercial fishing seasons; public health and safety would not be affected.

5. Can the action reasonably be expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?

No. The management measures are not expected to have significant impacts on endangered or threatened species, marine mammals, or critical habitat of these species. This rulemaking would ensure the fishery operates in a manner consistent with previous analyses and would result in a delay of the 2010 non-sandbar LCS commercial fishery July 15, 2010. In addition, this action would result in the delay of the 2010 SCS commercial fishery until the implementation of Amendment 3 to the Consolidated HMS FMP in 2010. This action would not result in any change or increase in fishing activity beyond what was analyzed in the May 2008 Biological Opinion (BiOp) for Amendment 2 to the Consolidated HMS FMP (Amendment 2). The May

2008 BiOp concluded, based on the best available scientific information, that the continuation of the Atlantic shark fishery under the new management measures implemented in Amendment 2 was not likely to jeopardize the continued existence of endangered green, leatherback, and Kemp's ridley sea turtles; the endangered smalltooth sawfish; or the threatened loggerhead sea turtle. The BiOp found that Amendment 2 was not expected to increase endangered species or marine mammal interaction rates. Furthermore, the BiOp concluded that Amendment 2 was not likely to adversely affect any listed species of marine mammals, invertebrates (*i.e.*, listed species of coral) or other listed species of fishes (*i.e.*, Gulf sturgeon and Atlantic salmon) in the action area.

6. Can the final action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g. benthic productivity, predator-prey relationships, etc.)?

No. The management measures would not have a substantial impact on biodiversity and ecosystem function within the affected area because it would result in a reduction of fishing effort and fishing mortality as a result of the delay in the non-sandbar LCS and SCS commercial fishing seasons at the beginning of 2010. The reduction of fishing effort at the beginning of the year, including during the pupping season, would lead to decreased mortality of sharks, including pregnant females, that are important top predators which may help to preserve biodiversity and ecosystem function.

7. Are significant social or economic impacts interrelated with significant natural or physical environmental effects?

No. The management measures would delay the opening of the 2010 non-sandbar LCS and SCS commercial fisheries in the Atlantic and Gulf of Mexico regions during the start of the 2010 season. This could provide positive ecological benefits to non-sandbar LCS and SCS stocks. First, it would protect pupping female sharks from fishing mortality during April, May, and June. Second, keeping the SCS fishery closed until the final rule for Amendment 3 to the Consolidated HMS FMP would ensure that excessive fishing pressure does not occur for blacknose sharks, allowing the stock to rebuild in the shortest time possible. However, there would be potential negative economic impacts for participants in the non-sandbar LCS fisheries in the Atlantic and Gulf of Mexico regions since delaying the opening of the non-sandbar LCS fisheries until July 15, 2010, would mean that the non-sandbar LCS commercial fishery would have been closed for more than a year in both regions. On June 6, 2009, the non-sandbar LCS fishing season closed in the Gulf of Mexico region (74 FR 26803, June 4, 2009) and on July 1, 2009 (74 FR 30479, June 26, 2009) the non-sandbar LCS fishing season closed in the Atlantic region. Negative economic impacts would also affect the SCS commercial fishery since the 2010 season opening would be delayed until the implementation of the final rule for Amendment 3, which may implement reduced non-blacknose SCS and blacknose quotas as well as the prohibition from harvesting all Atlantic sharks with gillnets. However, the pelagic shark fishery and the shark research fishery would not be affected and would open upon the effective date of the final rule for the 2010 Atlantic shark season specifications.

8. To what degree are the effects on the quality of the human environment expected to be highly controversial?

The final actions in this rulemaking try to mitigate the effects on the quality of the human environment by delaying the opening of the non-sandbar LCS and SCS commercial fishery in the Atlantic and Gulf of Mexico regions until July 15, 2010, which has been a timeframe that many constituents and States have requested to open the commercial Atlantic shark fisheries. In addition, such a delay would allow more equitable access of the non-sandbar LCS and SCS quotas to the North Atlantic and portions of the Gulf of Mexico. The non-sandbar LCS closure may be controversial because the fishery would have been closed for a more than a year in the Atlantic and Gulf of Mexico regions and because non-sandbar LCS are available in waters of the southeastern United States and Gulf of Mexico early in the year. It is controversial because the delay would cause an economic loss to the fishermen. The SCS closure would allow NMFS time to establish new quotas to significantly reduce the non-blacknose SCS and blacknose shark mortality in order to rebuild blacknose sharks and end overfishing of this species. However, some gillnet fishermen may not have access to these quotas depending on the final management measures implemented under Amendment 3 to the Consolidated HMS FMP. However, no controversy is anticipated for the pelagic shark and shark research fishery as these fisheries' quotas would remain the same and would open upon the effective date of the final rule for the 2010 Atlantic shark season specifications.

9. Can the action be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?

No. This final action would not result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas because fishing effort would occur in open areas of the ocean. In addition, there is no park land, prime farmlands, wetlands, or wild and scenic rivers within the action area so there would be no adverse impacts on these areas.

10. Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

The effects of the commercial shark fishery on the human environment have been analyzed in previous environmental impacts statements, such as the Amendment 2 to the 2006 Consolidated HMS FMP and draft Amendment 3 to the 2006 Consolidated HMS FMP, and therefore are not highly uncertain or involve unique or unknown risks.

11. Is the action related to other actions with individually insignificant, but cumulatively significant impacts?

No. The overall impact of the commercial Atlantic shark fishing seasons have been previously analyzed in FEIS for Amendment 2 to the Consolidated HMS FMP and the DEIS for draft Amendment 3 to the Consolidated HMS FMP. The proposed action is not anticipated to have additional impacts resulting from this action beyond impacts that have already been analyzed in

these documents. The proposed action would affect the commercial SCS and non-sandbar LCS fishery during the start of the 2010 commercial fishing season. The proposed alternatives for the SCS fishery would delay the opening of the fishery until the new quotas proposed in Amendment 3 could be implemented. The proposed alternatives for the non-sandbar LCS fishery seek to address the socioeconomic ramifications of providing equitable fishing opportunities among shark fishery participants in all states to catch the non-sandbar LCS quota in the Atlantic and Gulf of Mexico regions. The delay in the SCS and non-sandbar LCS fishing seasons could result in direct negative socio-economic impacts on shark fishermen who would not be able to fish for SCS and non-sandbar LCS until July 15, 2010. In addition, shark dealers and other entities that deal with shark products could experience negative economic impacts as SCS and non-sandbar LCS products would not be available at the beginning of the season. This would be most prevalent in areas of the southeast Atlantic and Gulf of Mexico where non-sandbar LCS and SCS are available early in the fishing season. Gillnet fishermen could also experience negative economic impacts as they would not be able to fish for sharks prior to the implementation of Amendment 3 in 2010, and may not be able to fish for shark with gillnets after the implementation of Amendment 3, depending on the final management measures implemented under Amendment 3. However, the proposed alternatives would have direct positive socioeconomic impacts on fishermen in the North Atlantic and in parts of the Gulf of Mexico who did not have or had a limited non-sandbar LCS fishing season in 2009 due to lack of available quota. There would also be indirect positive socioeconomic impacts to shark dealers and other entities that deal with shark products in these areas as they would also have access to SCS and non-sandbar LCS products in 2010, where they did not have access or had limited access in 2009.

12. Is the action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

No. The management measures would occur in inshore waters of the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea and would not occur in any areas listed or eligible for listing in the National Register or Historic Places, and would not cause loss or destruction of significant scientific, cultural or historical resources because there are no significant scientific, cultural or historic resources within the action area.

13. Can the final action reasonably be expected to result in the introduction or spread of a non-indigenous species?

No. Commercial shark fishing is a targeted fishery using BLL and gillnet gear and bait caught from the same area where the shark fishing occurs. Therefore this action would not result in the introduction or spread of non-indigenous species.

14. Is the action likely to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?

No. The management measures in this action would be in place from January 1, 2010, until December 31, 2010. There would be no additional regulatory action to determine quotas and

season lengths for Atlantic sharks for the 2010 season outside of this action. A separate action would be taken to establish the 2011 commercial Atlantic shark fishing season and would not be dependent on this proposed action. Thus, the measures finalized in this rule will not set a precedent or represent a decision in principle about any future actions.

15. Can the action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

No. The proposed action is consistent with the Magnuson-Stevens Act and the regulations at 50 CFR 635. The proposed action is also consistent with the Coastal Zone Management Plans of the 20 coastal states of the Atlantic, Gulf of Mexico and Caribbean Oceans, the Endangered Species Act, the Marine Mammal Protect Act, and any other applicable law. Therefore, the proposed action would not be expected to threaten a violation of Federal, State, or local law or requirement imposed for the protection of the environment.

16. Can the action reasonably be expected to result in cumulative adverse effects that could have substantial effect on the target species or non-target species?

No. The management measures would delay the start of the 2010 commercial SCS and no-sandbar LCS fisheries in the Gulf of Mexico and Atlantic regions. This action would predominantly have socio-economic impacts for shark fishery participants, which have been analyzed in the RIR and IRFA in the attached SEA. The overall Atlantic shark fishing seasons have previously been analyzed in the FEIS for Amendment 2 to the Consolidated HMS FMP and the DEIS for draft Amendment 3 to the Consolidated HMS FMP, and no additional impacts are expected for target and non-target species besides what has been previously analyzed.

In addition, a BiOp for Atlantic Shark Fisheries was prepared in May 2008 in response to the proposed measures in Amendment 2 to the Consolidated HMS FMP. The BiOp concluded, based on the best available scientific information, that the continuation of the Atlantic shark fishery under the new management measures implemented in Amendment 2 was not likely to jeopardize the continued existence of endangered green, leatherback, and Kemp's ridley sea turtles; the endangered smalltooth sawfish; or the threatened loggerhead sea turtle. The BiOp found that Amendment 2 was not expected to increase endangered species or marine mammal interaction rates. Furthermore, the BiOp concluded that Amendment 2 was not likely to adversely affect any listed species of marine mammals, invertebrates (*i.e.*, listed species of coral) or other listed species of fishes (*i.e.*, Gulf sturgeon and Atlantic salmon) in the action area.

In view of the information presented in this document and the analysis contained in the attached SEA prepared for quota and season length management measures in the Atlantic non-sandbar LCS and SCS fisheries, it is hereby determined that this action would not significantly impact the quality of the human environment as described above and in the SEA. In addition, all impacts to potentially affected areas, including national, regional and local, have been addressed to reach

the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

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Date

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## **Supplemental Environmental Assessment For The 2010 Atlantic Commercial Shark Season Specifications**

### **Section 1 Introduction**

The 2010 Atlantic Commercial Shark Season Specifications would adjust quotas for the 2010 fishing season for sandbar sharks, non-sandbar large coastal sharks (LCS), small coastal sharks (SCS), and pelagic sharks based on any over- and/or underharvests experienced during the 2008 and 2009 Atlantic commercial shark fishing season and announce the start of the fishing season for all Atlantic shark fisheries including the shark research fishery. This rulemaking would not affect the annual base quotas established in Amendment 2 to the 2006 Consolidated Highly Migratory Species (HMS) Fishery Management Plan (FMP) (73 FR 35778, June 24, 2008; corrected at 73 FR 40658, July 15, 2008). In this proposed action, NMFS is considering delaying the start of the non-sandbar LCS and SCS fishing seasons to ensure equitable shark fishing opportunities in all states in regions of the Atlantic, Gulf of Mexico, and Caribbean Sea.

#### **Purpose and Need for the Action**

In Amendment 2 to the 2006 Consolidated HMS FMP (Amendment 2), NMFS changed the fishing seasons from trimester seasons to one season, which opens upon the effective date of the shark fishing season specifications' final rule, usually at the beginning of January of each year. In order to prevent quota overharvests, the commercial fishing seasons for each shark complex/species close when 80 percent of the quota has been filled or is projected to be filled. It was the intent of Amendment 2, in order to rebuild overfished shark stocks and prevent overfishing, that the reduced quotas and retention limits for non-sandbar LCS would translate into an incidental fishery that would be open all year. A year-round commercial fishery would give the northern fishery participants opportunity to catch the quota during the summer months when the sharks migrate northward and for all participants to be able to land sharks incidentally year-round as they target species in other fisheries.

In 2009, all the Atlantic commercial shark fisheries opened on January 23, 2009 (73 FR 79005, December 24, 2008). On June 6, 2009, the non-sandbar LCS fishery closed in the Gulf of Mexico (GOM) region (74 FR 26803, June 4, 2009) and on July 1, 2009 (74 FR 30479, June 26, 2009) both the non-sandbar LCS fishery in the Atlantic region and the non-sandbar research fishery closed. In the Atlantic region, due to the July 1, 2009, closing of the non-sandbar LCS fishery, the mid-Atlantic bottom longline (BLL) closure in federal waters from January 1 – July 31, the state water closure in Virginia, Maryland, Delaware and New Jersey from May 15 – July 15<sup>1</sup>, and the limited availability of non-sandbar LCS in northern Atlantic waters at the beginning of the year (due to migratory patterns), the fishery participants from North Carolina north did not have a non-sandbar LCS fishing season in 2009. In the GOM region, due to the June 6, 2009 closure of the non-sandbar LCS fishery and the Louisiana state water closure from April 1 – June 30, many fishery participants in the GOM did not have the full opportunity to harvest the 2009

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<sup>1</sup> This regulation will not be effective until January 1, 2010; however the state of Delaware closed state waters to the harvest of tiger, nurse, lemon, blacktip, spinner, bull, great hammerhead, scalloped hammerhead, smooth hammerhead, and silky from May 15-July 15 starting in 2009.

GOM non-sandbar LCS quota. As such, NMFS has received requests from constituents that NMFS should consider the delay of the 2010 non-sandbar LCS fishing season until July to allow for more equitable shark fishing opportunities in 2010. Because it was the intent of Amendment 2 to have the non-sandbar LCS quota last the entire year and given that this did not happen in 2009, NMFS is taking an adaptive management approach in this action to ensure equitable distribution of the 2010 non-sandbar LCS quotas among all fishery participants. In addition to this rulemaking, NMFS is also considering future rulemaking to consider ways to adjust the retention limits on a fishery-wide basis in order to meet the original intent of Amendment 2 of having the non-sandbar LCS quota last the entire year.

In addition, the 2010 SCS fishery would open under the current quota of 454 metric tons (mt) dressed weight (dw) on the effective date of the final rule for the 2010 Atlantic shark specifications. However, NMFS is currently in the proposed rule stage of Amendment 3 to the Consolidated HMS FMP (Amendment 3). Amendment 3 proposes, among other things, measures to significantly reduce the non-blacknose SCS and blacknose shark quotas in order to rebuild blacknose sharks and end overfishing of this species and also establishes a mechanism for implementing annual catch limits (ACL) and accountability measures (AM). In this proposed action, NMFS considers delaying the opening of the 2010 SCS fishing season to allow for the implementation of Amendment 3. In addition, for stocks that were determined to be overfished before July 12, 2009, ACLs must be established before the 2010 fishing year. A delay in the 2010 SCS fishing season would allow ACLs to be established under Amendment 3 to be implemented before the start of the fishing season.

After reviewing the proposed action, NMFS has determined that the action described below supplements Amendment 2 to the 2006 Consolidated HMS FMP and references draft Amendment 3 to the 2006 Consolidated HMS FMP. NMFS has also determined that most of the impacts of the action falls within the analyses of the scope and effect of activities conducted in the April 2008 Final Environmental Impact Statement (FEIS) for Amendment 2 and the July 2009 Draft Environmental Impacts Statement (DEIS) for Amendment 3. However, the impacts related to socioeconomic impacts to commercial non-sandbar LCS and SCS fishery participants (see Table 1.1) do not fall within the scope and effect of activities of the previous documents due to the delay in the 2010 fishing season for these fisheries. Therefore, NMFS prepared a Supplemental Environmental Assessment (SEA) to analyze those specific socioeconomic impacts related to the proposed action. Pursuant to 50 CFR §1502.20, this SEA tiers to and incorporates by reference the pre-existing FEIS and DEIS. This SEA appropriately focuses only on consideration of effects to commercial non-sandbar LCS and SCS shark fishery participants and means for mitigating those effects.

**Table 1 Indication of Impacts of proposed action.**

<b>Impacts</b>	<b>No additional effect</b>	<b>Potential effect</b>
Ecological	X	
Essential Fish Habitat	X	
Protected Resources	X	
Costal Zone Management	X	
Social		X
Economic		X

## Section 2 Preferred Alternatives: Description of Proposed Action

### Small Coastal Sharks

NMFS is proposing the following alternatives for SCS:

- Alternative A1 No Action. Allow the 2010 SCS fishing season to open upon the effective date of the final rule for the 2010 Atlantic shark specifications
- Alternative A2 *Open the 2010 SCS fishing season on the effective date of the final rule for Amendment 3 to the Consolidated HMS FMP – Preferred Alternative*

The preferred alternative would keep the SCS fishery closed until the effective date of the final rule for Amendment 3. This delayed opening would allow the SCS fishery to open under the new quotas proposed in Amendment 3, which would help in the rebuilding of blacknose sharks that are currently overfished and experiencing overfishing. In addition, for stocks that were determined to be overfished before July 12, 2009, ACLs must be established before the 2010 fishing year. A delay in the 2010 SCS fishing season would allow ACLs to be established under Amendment 3 to be implemented before the start of the fishing season.

### Non-Sandbar Large Coastal Sharks

NMFS is proposing the following alternatives for non-sandbar LCS:

- Alternative B1 No Action. Allow the 2010 non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions to open upon the effective date of the final rule for the 2010 Atlantic shark specifications
- Alternative B2 Open the 2010 non-sandbar LCS fishery in the Atlantic region on July 15, 2009; open the 2010 non-sandbar LCS fishery in the Gulf of Mexico region upon the effective date of the final rule for the 2010 Atlantic shark specifications
- Alternative B3 *Open the 2010 non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions on July 15, 2009 – Preferred Alternative*

The preferred alternative would open the non-sandbar LCS fishery in the GOM and the Atlantic regions on July 15, 2010. In the Atlantic, in 2009, the non-sandbar LCS fishery was only open approximately five and a half months, which did not allow fishery participants in the North Atlantic to have a fishing season as the quota was taken before these sharks moved northward into their waters. In addition, fishermen in the North Atlantic were also limited in their fishing opportunities due to state water closures from May 15 – July 15 and a federal water closure from January 1 – July 31, which is during the time frame when the non-sandbar fishery opened and closed in the Atlantic. In the GOM, in 2009, the non-sandbar fishery was open for approximately four months, and many fishermen experienced state water closures during this time frame and were limited in their ability to catch the GOM non-sandbar LCS quota. Thus, delaying the start of the 2010 non-sandbar LCS fishery in both the Atlantic and Gulf of Mexico regions would provide equitable fishing opportunities among shark fishery participants in all states to catch the non-sandbar LCS quota.

## **No Action Alternatives**

The No Action alternatives for the 2010 SCS and non-sandbar LCS fisheries would involve opening the fishery upon the effective date of the final rule for the 2010 Atlantic shark specifications, which is anticipated to be on or about January 1, 2010. The No Action alternative would not allow for the new SCS quotas from Amendment 3 to be implemented or for the equitable distribution of the non-sandbar LCS quotas among fishery participants in all states of the Atlantic and Gulf of Mexico regions.

### **Section 3      Affected Environment**

Ecological resources that generally may be affected and benefited by this proposed action are described in Chapter 3 of the FEIS for Amendment 2 and the DEIS of draft Amendment 3. Chapter 3 of the EIS's describes the life history and biological characteristics of the various shark species that are considered in this analysis as well as describes the physical, social and economic environment pertinent to the commercial shark fishery. The affected environment includes the waters off of the Southeastern United States, including Florida, Georgia, North and South Carolina and the coastal communities that depend on the fishery in that region. The ecological impacts analyzed in Amendment 2 were based on having the commercial shark fishing season open year round. Delaying the commercial shark fishing season would minimize the ecological impacts. NMFS determined that this proposed action may have additional socioeconomic effects to the commercial shark fishery participants beyond those analyzed in Amendment 2 and draft Amendment 3 that warranted additional NEPA analysis. Therefore, this SEA specifically analyzes the socioeconomic resources that may be affected by this proposed action.

### **Section 4      Impacts of the No Action Alternatives**

The No Action alternatives would affect the same universe of permit holders as those affected by the preferred alternatives described above. The social and economic impacts of the No Action alternatives, which would not delay the opening of the 2010 SCS and non-sandbar LCS fishing seasons, would be the same as analyzed under the FEIS for Amendment 2. However, as described in Sections 5 and 6, depending on the level of harvest in 2010 prior to the implementation of Amendment 3, once Amendment 3 is implemented, there may be no non-blacknose SCS and blacknose shark quota available for the rest of 2010 due to the reduced quotas for blacknose and non-blacknose SCS considered under Amendment 3. This would have direct negative social and economic impacts to fishermen that fish for SCS as they would have to switch to other fisheries to make up for lost SCS gross revenues. This could also have indirect negative social and economic impacts for shark dealers and other entities that deal with shark products as they would have to diversify to make up for lost SCS gross revenues later in the year. Additionally, because the proposed quotas in Amendment 3 are so low, if they are implemented, it is likely that those quotas would have been exceeded before Amendment 3 was finalized and effective. Any such overharvests of the reduced blacknose and non-blacknose SCS quotas implemented under Amendment 3 due to the level of harvest of blacknose and non-blacknose SCS in 2010 prior to the implementation of Amendment 3 would lower quotas and create more severe economic losses for the 2011 fishing season in addition to allowing excessive fishing pressure on blacknose sharks, which may affect the rebuilding time for this species.

Also, under the No Action alternatives, due to the availability of SCS and non-sandbar LCS later in the year in northern Atlantic waters, fishermen in the North Atlantic would most likely not have a SCS or non-sandbar LCS fishing season in 2010. In addition, under the No Action alternative, B1, parts of the Gulf of Mexico may also have a limited non-sandbar LCS fishery in 2010. In 2009 in the Gulf of Mexico region, the non-sandbar LCS fishery closed on June 6, 2009. However, Louisiana state waters were closed to LCS fishing from April 1 – June 30, thus many fishery participants in the Gulf of Mexico region did not have the full opportunity to harvest the 2009 Gulf of Mexico non-sandbar LCS quota. The same scenario for the non-sandbar LCS fishery could occur again in 2010 in the Gulf of Mexico region under the No Action alternative, B1.

### **Impacts of the Preferred Alternatives**

The preferred alternatives A2 and B3, which would delay the SCS and non-sandbar LCS fishing seasons, could potentially affect the 223 directed shark and 279 incidental shark permit holders. Of those, the 143 directed and 155 incidental shark permit holders that landed LCS and 85 directed and 31 incidental shark permit holders that landed SCS would likely be affected. The permit holders that land both LCS and SCS would be the most affected. The delay in the SCS and non-sandbar LCS fishing seasons could result in direct negative social impacts as fishermen would have to fish in other fisheries to make up for lost SCS and non-sandbar LCS revenues during the beginning of the 2010 fishing season, and indirect negative social impacts on shark dealers and other entities that deal with shark products as they may have to diversify during the beginning of the season when SCS and non-sandbar LCS shark products would not be available. This would be most prevalent in areas of the southeast Atlantic and Gulf of Mexico where non-sandbar LCS and SCS are available early in the fishing season. In addition, the preferred alternatives could have direct negative social impacts on gillnet fishermen as they would not be able to harvest sharks with gillnets prior to the implementation of Amendment 3 in 2010, and may not be able to harvest sharks at all after the implementation of Amendment 3, depending on the final management measures in Amendment 3<sup>2</sup>. These fishermen would have to either switch to other gillnet fisheries, leave the gillnet fisheries and switch gear types, or leave fishing altogether.

The preferred alternatives would likely have direct positive social impacts on fishermen in the North Atlantic and in parts of the Gulf of Mexico who did not have or had a limited non-sandbar LCS fishing season in 2009 due to lack of available quota as explained in Sections 5 and 6. There would also be indirect positive social impacts to shark dealers and other entities that deal with shark products in these areas as they would also have access to SCS and non-sandbar LCS products in 2010 where they did not have access or had limited access in 2009.

The delay in the SCS and non-sandbar LCS fishing seasons could result in direct negative economic impacts on shark fishermen who would not be able to fish for SCS until Amendment 3 is implemented or non-sandbar LCS until July 15, 2010. In addition, shark dealers and other entities that deal with shark products could experience negative economic impacts as SCS and non-sandbar LCS products would not be available at the beginning of the season. This would be

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<sup>2</sup> Under the preferred alternatives A4 and B3 in draft Amendment 3 to the Consolidated HMS FMP, NMFS would prohibit the landings of all sharks in gillnet gear from South Carolina south.

most prevalent in areas of the southeast Atlantic and Gulf of Mexico where non-sandbar LCS and SCS are available early in the fishing season. The delay in the non-sandbar LCS and SCS fishing seasons could cause changes in ex-vessel prices. From 2004 through 2008, the average ex-vessel price of LCS meat in January is approximately \$0.57, while the average ex-vessel price in July is \$0.48. From 2004 through 2008, the average ex-vessel price of SCS meat in January is approximately \$0.58, whereas the average ex-vessel price in mid- to late-Spring is \$0.69. Fin prices are not reported by species. As such, the ex-vessel price data for shark fins is the same for LCS and SCS. The average price for fins in January is \$16.36. When the LCS fishery opens in July, the average price for fins would be \$19.06, while the average price in mid- to late-Spring would be \$7.35 when the SCS fishery is expected to open. Gillnet fishermen could also experience negative economic impacts as they would not be able to fish for sharks prior to the implementation of Amendment 3 in 2010, and may not be able to fish for shark with gillnets after the implementation of Amendment 3 in 2010, depending on the final management measures implemented under Amendment 3. The proposed removal of gillnet gear under Amendment 3 could result in lost non-sandbar LCS gross revenues of \$106,479 to \$109,479 and lost SCS gross revenues of \$365,067 to \$377,928 for gillnet fishermen as analyzed in the DEIS for draft Amendment 3. In addition, there would be negative economic impacts to SCS fishermen associated with the reduced quotas that may be implemented under Amendment 3 to rebuild blacknose sharks and end overfishing of this species. However, the negative impacts as a result of reduced quotas and the prohibition of gillnet gear would be experienced by SCS fishermen regardless of this proposed action, and those negative impacts have been fully analyzed in the DEIS for draft Amendment 3.

Fishermen in the North Atlantic and portions of the Gulf of Mexico could experience direct positive economic impacts as they would have access to the SCS and non-sandbar LCS quotas in 2010. Fishermen in the North Atlantic did not have access to the non-sandbar LCS quota in 2009, and fishermen in parts of the Gulf of Mexico had limited access to the non-sandbar LCS quota in 2009 as described in Sections 5 and 6. Delaying the 2010 SCS fishing season under preferred alternative A2 could also allow for the rebuilding of blacknose sharks to begin sooner than under the no action alternative. Thus, delaying the SCS and non-sandbar LCS seasons under the preferred alternatives would allow for a more equitable distribution of the quotas among constituents in all regions, which was the original intent of Amendment 2, and would allow for the fastest rebuilding of blacknose sharks of all the alternatives considered in this rulemaking.

### **Mitigation**

NMFS is taking an adaptive management approach in this proposed action to mitigate adverse socioeconomic impacts to shark fishery participants that did not have a non-sandbar LCS fishing season in 2009. Although shark fishing opportunities will not be afforded to shark fishery participants at the beginning of the year in 2010, under the preferred alternatives all of the federally permitted shark fishery participants will have equal access and opportunities to harvest the entire non-sandbar LCS and SCS quotas. By delaying the 2010 SCS and non-sandbar LCS fishing seasons, there may be socioeconomic impacts to the fishery participants that had shark landings revenue from the 2009 fishing seasons, however; the 2010 revenues from landings will be distributed across the later part of the year and will be distributed more evenly among fishery participants than in 2009. The preferred alternatives were specifically selected to mitigate potential socioeconomic impacts and at this time NMFS has not identified other mitigation

measures to offset adverse impacts beyond those analyzed in the SEA. NMFS would monitor the impacts of the management measures in the preferred alternatives and would consider other mitigation measures in the future if necessary.

### Comparison of Alternatives

Based on the analysis here, the interaction of the No Action alternative, A1, and the implementation of Amendment 3 could have additional social and economic impacts as discussed above under the impacts of the No Action alternatives and in Sections 5 and 7. In addition, the No Action alternatives would not allow for a more equitable distribution of the SCS and non-sandbar LCS quotas in the Atlantic and Gulf of Mexico regions. The alternative B2 would not allow for the more equitable distribution of the non-sandbar LCS quota in the Gulf of Mexico region. The preferred alternatives would allow for the North Atlantic to have access to the SCS and non-sandbar LCS quotas in the latter part of the 2010 fishing season and would allow for all portions of the Gulf of Mexico region to have full access to the non-sandbar LCS quota in the Gulf of Mexico region in 2010, which follows the original intent of Amendment 2. In addition, the preferred alternative, A2, would allow for the delay of the 2010 SCS fishing season until the implementation of Amendment 3, which would implement reduced non-blacknose SCS and blacknose shark quotas to help rebuild blacknose sharks and end overfishing of this species. By delaying the 2010 SCS fishing season, NMFS can reduce excessive fishing pressure on blacknose sharks that could affect the rebuilding time for this species.

### Section 6 Cumulative Impacts

Cumulative impact are the impacts on the environment, which results from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions. A cumulative impact includes the total effect on a natural resource, ecosystem, or human community due to past, present, and reasonably foreseeable future activities or actions of federal, non-federal, public, and private entities. As described in the SEA and Amendment 2, NMFS analyzed the cumulative impacts affecting fishermen like current state regulations, increases in fuel prices, cost of shark products, redirecting effort into other fisheries, and gear restrictions in the social and economic impacts table. Cumulative impacts may also include the effects of natural processes and events, depending on the specific resource in question. Cumulative impacts include the total of all impacts to a particular resource that have occurred, are occurring, and would likely occur as a result of any action or influence, including the direct and reasonably foreseeable indirect impacts of a federal activity. The goal of this section is to describe the cumulative ecological, economic and social impacts of past, present and reasonably foreseeable future actions with regard to the management measures presented in this document.

**Table 2 Comparison of alternatives considered. (+) denotes positive impact, (-) denotes negative impact, (0) denotes neutral impact**

Alternative	Alternative Description	Social Impacts	Economic Impacts
Alternative A1	No Action. Allow the 2010 SCS fishing season to open upon the effective date of the final rule for the 2010 Atlantic shark specifications	0	0

Alternative	Alternative Description	Social Impacts	Economic Impacts
Alternative A2	<i>Open the 2010 SCS fishing season on the effective date of the final rule for Amendment 3 to the Consolidated HMS FMP – Preferred Alternative</i>	-	-
Alternative B1	No Action. Allow the 2010 non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions to open upon the effective date of the final rule for the 2010 Atlantic shark specifications	0	0
Alternative B2	Open the 2010 non-sandbar LCS fishery in the Atlantic region on July 15, 2009; open the 2010 non-sandbar LCS fishery in the Gulf of Mexico region upon the effective date of the final rule for the 2010 Atlantic shark specifications	-	-
Alternative B3	<i>Open the 2010 non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions on July 15, 2009 – Preferred Alternative</i>	-	-

## Section 7 Regulatory Impact Review

The Regulatory Impact Review (RIR) is conducted to comply with Executive Order 12866 (E.O. 12866) and provides analyses of the economic benefits and costs of each alternative to the nation and the fishery as a whole. The information contained in Section 5, taken together with the data and analysis incorporated by reference, comprise the complete RIR.

The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following statement from the order:

*In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits should be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nonetheless essential to consider. Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.*

E.O. 12866 further requires Office of Management and Budget review of proposed regulations that are considered to be “significant.” A significant regulatory action is one that is likely to:

- Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, local or tribal governments of communities;

- Create serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the president's priorities, or the principles set forth in this Executive Order.

### **Description of Management Objectives**

Please see Section 1 for a full description of the purpose and need for the proposed rule and SEA for the 2010 Atlantic shark specifications. The management goals and objectives of the proposed fishery management actions are to provide for the sustainable management of shark species under authority of the Secretary consistent with the requirements of the Magnuson-Stevens Act and other statutes which may apply to such management, including the ESA, MMPA and ATCA. The primary mandate of the Magnuson-Stevens Act is for the Secretary to provide for the conservation and management of HMS through development of an FMP for species identified for management and to implement the FMP with necessary regulations. In addition, the Magnuson-Stevens Act directs the Secretary in managing HMS to prevent overfishing of species while providing for their OY on a continuing basis and to rebuild fish stocks that are considered overfished. The management objectives of the 2010 Atlantic shark specifications proposed rule and SEA would be to implement the opening of the 2010 shark fishing season for non-sandbar LCS and SCS in a manner that would ensure equitable shark fishing opportunities in all states in regions of the Atlantic, Gulf of Mexico, and Caribbean Sea.

### **Description of Fishery**

Please see Section 3 and Chapters 3 of the FEIS for Amendment 2 and DEIS for draft Amendment 3 to the Consolidated HMS FMP for a description of the fisheries that could be affected by these proposed management actions.

### **Statement of the Problem**

Please see Section 1 for a description of a full discussion of the problem and need for these management actions. The proposed management measures are designed to address the following problems. One of the main objectives of Amendment 2 to the Consolidated HMS FMP was to allow for a year-round shark fishery in the Atlantic and Gulf of Mexico regions. Reduced trip limits under Amendment 2 were developed to allow for incidental landings of sharks while fishermen targeted other species and encountered sharks, thus reducing unnecessary bycatch and discards of sharks. However, the 2009 shark fishing season did not last year-round and the non-sandbar LCS quota in the Gulf of Mexico reached near 80 percent and was closed on June 6, 2009 (74 FR 26803, June 4, 2009), and the Atlantic non-sandbar LCS quota reach 80 percent and was closed on July 1, 2009 (74 FR 30479, June 26, 2009). NMFS is currently exploring reasons for the early closures of the non-sandbar LCS fisheries and may take an adaptive management approach in a future rulemaking to adjust management measures implemented under Amendment 2 to help ensure the non-sandbar LCS shark seasons last year-round. In the meantime, NMFS is proposing to delay the 2010 non-sandbar LCS shark fishery seasons in the Gulf of Mexico and Atlantic regions to allow for a more equitable distribution of the available

quotas among constituents as well as delay the opening of the 2010 SCS fishing season to allow for the implementation of Amendment 3 to the Consolidated HMS FMP, which would implement new blacknose and non-blacknose SCS quotas to rebuild the blacknose shark stock and end overfishing of this species.

### **Description of Each Alternative**

Please see Sections 2 and 4 for a summary of the preferred and No Action alternatives and Section 6 for a complete description of each alternative and its expected impacts.

## Economic Analysis of Expected Effects of Each Alternative Relative to the Baseline (No Action)

**Table 3 Net Economic Benefits and Costs of Alternatives**

Alternatives	Net Economic Benefits	Net Economic Costs
<p>Alternative A1 No Action. Allow the 2010 SCS fishing season to open upon the effective date of the final rule for the 2010 Atlantic shark specifications</p>	<p>This alternative would maintain the economic activity associated with SCS landing levels as outlined in Amendment 2 until the implementation of Amendment 3, including the ability of gillnet vessels to land SCS.</p>	<p>Depending on the level of harvest in 2010 prior to the implementation of Amendment 3, once Amendment 3 is implemented, there may be no non-blacknose SCS and blacknose shark quota available for the rest of 2010 due to the reduced quotas for blacknose and non-blacknose SCS considered under Amendment 3. In addition, any overharvests of the reduced blacknose and non-blacknose SCS quotas implemented under Amendment 3 due to the level of harvest of blacknose and non-blacknose SCS in 2010 prior to the implementation of Amendment 3 would lower quotas and create more severe economic losses for the 2011 fishing season.</p> <p>Due to the availability of SCS later in the year in waters off the North Atlantic, fishermen in the North Atlantic would most likely not have a SCS fishing season in 2010.</p>
<p><i>Alternative A2</i> <i>Open the 2010 SCS fishing season on the effective date of the final rule for Amendment 3 to the Consolidated HMS FMP – Preferred Alternative</i></p>	<p>There would be unquantified benefits to the public associated with reducing the landings and discards of overfished blacknose sharks and for non-blacknose SCS. These benefits include passive use values, such as shark viewing trips, and nonuse values including knowing that shark species remain for future generations (bequest value) and values placed on knowing shark species will continue to survive (existence value).</p> <p>In the long-term, the SCS stocks could rebuild. Then non-blacknose SCS and blacknose quotas could be increased to sustainable levels and allow for increased harvests and associated revenues.</p> <p>Due to the availability of SCS later in the year in waters off the North Atlantic, fishermen in the North Atlantic would most likely have a SCS fishing season in 2010, allowing for more equitable access to the quotas and associated gross revenues by all constituents.</p>	<p>Fishermen in the southeast Atlantic and Gulf of Mexico would not be able to land SCS when SCS would be available early in 2010. Could result in economic costs if these fishermen depend on SCS revenues early in the shark fishing season.</p> <p>There would be estimated economic costs associated with reduced gross revenues from reduced blacknose and non-blacknose SCS quotas implemented under Amendment 3, and fishermen would not be able to harvest any SCS before the implementation of Amendment 3. Estimated losses due to the reduced quotas under Amendment 3 could range from \$172,197 to \$126,174 for blacknose sharks and \$661,513 to \$502,145 for non-blacknose SCS, depending on the final measures implemented in Amendment 3.</p> <p>Depending on the final measures implemented under Amendment 3, gillnet fishermen could lose gross revenues from lost SCS fishing opportunities in 2010. Estimated losses for shark gillnet fishermen could be between \$90,059 to \$90,501 for blacknose sharks and \$275,008 to \$287,427 for non-blacknose SCS.</p> <p>Could result in economic costs due to discards of SCS if there is a delayed opening of the 2010 SCS fishing season but not the non-sandbar LCS fishing seasons.</p>

Alternatives	Net Economic Benefits	Net Economic Costs
<p>Alternative B1 No Action. Allow the 2010 non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions to open upon the effective date of the final rule for the 2010 Atlantic shark specifications</p>	<p>This would allow fishermen in the Gulf of Mexico region and southeast Atlantic to have access to the non-sandbar LCS shark quotas at the beginning of 2010.</p> <p>Since most non-sandbar LCS are available in waters off the North Atlantic later in the year, and the non-sandbar LCS quota was taken by July in the Atlantic region in 2009, shark fishermen in the southeast Atlantic will most likely harvest the entire non-sandbar LCS proposed quota of 177.5 mt dw (391,307 lb dw) in 2010, estimated to be worth \$381,525 based on 2008 ex-vessel prices.</p> <p>Gillnet fishermen in the Atlantic and Gulf of Mexico regions could harvest non-sandbar LCS with gillnets prior to the implementation of Amendment 3, which may prohibit the landing of sharks with gillnet gear.</p>	<p>Fishermen in the North Atlantic would most likely not have a non-sandbar LCS fishing season in 2010; they did not have a non-sandbar LCS fishing season in 2009 due to the lack of available quota. Thus, North Atlantic shark fishermen would lose any opportunity to harvest the 2010 non-sandbar LCS quota for the Atlantic region worth an estimated \$381,525.</p> <p>Could result in economic costs due to discards of SCS if there is a delayed opening of the 2010 SCS fishing season but not the non-sandbar LCS fishing season.</p>

Alternatives	Net Economic Benefits	Net Economic Costs
<p>Alternative B2 Open the 2010 non-sandbar LCS fishery in the Atlantic region on July 15, 2009; open the 2010 non-sandbar LCS fishery in the Gulf of Mexico region upon the effective date of the final rule for the 2010 Atlantic shark specifications</p>	<p>This would allow fishermen in the Gulf of Mexico region to have access to the non-sandbar LCS shark quotas at the beginning of 2010 when non-sandbar LCS are present in waters off the Gulf of Mexico.</p> <p>Gillnet fishermen in the Gulf of Mexico region could harvest non-sandbar LCS with gillnets prior to the implementation of Amendment 3, which may prohibit the landing of sharks with gillnet gear.</p> <p>Fishermen in the North Atlantic would be able to have a fishing opportunity for non-sandbar LCS in 2010. The non-sandbar LCS quota in the Atlantic region and its associated gross revenues of an estimated \$381,525 would be more equitably distributed among different states of the Atlantic.</p>	<p>Fishermen in the southeast Atlantic would not be able to land non-sandbar LCS when non-sandbar LCS would be present in waters off the southeast Atlantic. Could result in economic costs if southeast Atlantic shark fishermen depend on shark revenues early in the shark fishing season.</p> <p>States waters off Louisiana are closed to large coastal shark fishing from April 1 through June 30 of each year. Allowing the federal non-sandbar LCS fishery in the Gulf of Mexico to be open at the beginning of the year in 2010 may result in economic costs for Louisiana state fishermen who cannot fish in state waters from April 1 through June 30 of each year given the 2009 non-sandbar LCS fishery closed on June 6, 2009.</p> <p>Could result in economic costs to gillnet fishermen in the Atlantic region who would not be able to harvest non-sandbar LCS with gillnets during 2010, depending on final management measures implemented under Amendment 3.</p> <p>May result in economic costs of discards of non-sandbar LCS in the Atlantic region as fishermen fish in other fisheries that interact with non-sandbar LCS before July 15.</p> <p>Could result in economic costs due to discards of SCS if there is a delayed opening of the 2010 SCS fishing season but not the non-sandbar LCS fishing season in the Gulf of Mexico region.</p>
<p>Alternative B3 Open the 2010 non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions on July 15, 2009 – Preferred Alternative</p>	<p>Fishermen in the North Atlantic would be able to have fishing opportunities for non-sandbar LCS in 2010. The non-sandbar LCS quota in the Atlantic region and its associated gross revenues of an estimated \$381,525 would be more equitably distributed among different states of the Atlantic.</p> <p>States waters off Louisiana are closed to large coastal shark fishing from April 1 through June 30 of each year; allowing the federal non-sandbar LCS fishery in the Gulf of Mexico to be open on July 15, 2010, may allow for a more equitable distribution of the non-sandbar LCS quota in the Gulf of Mexico region, estimated to be worth \$839,376 based on 2008 ex-vessel prices.</p>	<p>Fishermen in the southeast Atlantic and Gulf of Mexico would not be able to land non-sandbar LCS when non-sandbar LCS would be present. Could result in economic costs if southeast Atlantic and Gulf of Mexico shark fishermen depend on shark revenues early in the shark fishing season.</p> <p>Could result in economic costs to gillnet fishermen in the Atlantic and Gulf of Mexico regions who would not be able to harvest non-sandbar LCS with gillnets during 2010, depending on final management measures implemented under Amendment 3. This could result in estimated losses of non-sandbar LCS of \$106,479 to \$109,479 for gillnet fishermen.</p> <p>May result in economic costs of discards of non-sandbar LCS as fishermen fish in other fisheries that interact with non-sandbar LCS before July 15.</p>

## **Section 8 Initial Regulatory Flexibility Analysis**

The Initial Regulatory Flexibility Analysis (IRFA) is conducted to comply with the Regulatory Flexibility Act (5 USC 601 et. seq.) (RFA). The goal of the RFA is to minimize the economic burden of federal regulations on small entities. To that end, the RFA directs federal agencies to assess whether the proposed regulation is likely to result in significant economic impacts to a substantial number of small entities, and identify and analyze any significant alternatives to the proposed rule that accomplish the objectives of applicable statutes and minimize any significant effects on small entities.

### **Description of the Reasons Why Action is Being Considered**

Please see Section 1 for a description of the need for action for these management actions. The proposed regulations are designed to address the following problems. One of the main objectives of Amendment 2 was to allow for a year-round shark fishery in the Atlantic and Gulf of Mexico regions. Reduced trip limits under Amendment 2 were developed to allow for incidental landings of sharks while fishermen targeted other species and encountered sharks, thus reducing unnecessary bycatch and discards of sharks. However, the 2009 shark fishing season did not last year-round and the non-sandbar LCS quota in the Gulf of Mexico reached near 80 percent and was closed on June 6, 2009 (74 FR 26803, June 4, 2009), and the Atlantic non-sandbar LCS quota exceeded 80 percent and was closed on July 1, 2009 (74 FR 30479, June 26, 2009). NMFS is currently exploring reasons for the early closures of the non-sandbar LCS fisheries and may take an adaptive management approach in a future rulemaking to adjust management measures implemented under Amendment 2 to help ensure the non-sandbar LCS shark seasons last year-round. In the meantime, NMFS is considering a delay of the 2010 non-sandbar LCS shark fishery seasons in the Gulf of Mexico and Atlantic regions to allow for a more equitable distribution of the available quotas among constituents as well as a delay to the opening of the 2010 SCS fishing season to allow for the implementation of Amendment 3, which would implement new blacknose and non-blacknose SCS quotas to rebuild the blacknose shark stock and end overfishing of this species.

### **Statement of the Objectives of, and Legal Basis for, the Proposed Rule**

Please see Section 1 for a full description of the objective of the proposed rule and SEA for the 2010 Atlantic shark specifications. The management goals and objectives of the proposed fishery management actions are to provide for the sustainable management of shark species under authority of the Secretary consistent with the requirements of the Magnuson-Stevens Act and other statutes which may apply to such management, including the ESA, MMPA and ATCA. The primary mandate of the Magnuson-Stevens Act is for the Secretary to provide for the conservation and management of HMS through development of an FMP for species identified for management and to implement the FMP with necessary regulations. In addition, the Magnuson-Stevens Act directs the Secretary in managing HMS to prevent overfishing of species while providing for their OY on a continuing basis and to rebuild fish stocks that are considered overfished. The management objectives of the proposed rule for the 2010 Atlantic shark specifications would be to implement the opening of the 2010 shark fishing season for non-

sandbar LCS and SCS in a manner that would ensure equitable shark fishing opportunities in all states in regions of the Atlantic, Gulf of Mexico, and Caribbean Sea.

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

NMFS considers all HMS permit holders to be small entities because they either had average annual receipts less than \$4.0 million for fish-harvesting, average annual receipts less than \$6.5 million for charter/party vessels, 100 or fewer employees for wholesale dealers, or 500 or fewer employees for seafood processors. These are the Small Business Administration (SBA) size standards for defining a small versus large business entity in this industry.

The proposed rule would apply to the 502 commercial shark permit holders in the Atlantic shark fishery based on an analysis of permit holders on March 18, 2009. Of these permit holders, 223 have directed shark permits and 279 hold incidental shark permits. Not all permit holders are active in the fishery in any given year. Based on Amendment 2, NMFS estimated that there are 143 directed and 155 incidental permit holders that could be considered actively engaged in LCS fishing, since they reported landing of at least one shark in the Coastal Fisheries Logbook from 2003 to 2005. Based on draft Amendment 3, NMFS estimated that between 2004 and 2007, approximately 85 directed and 31 incidental shark permit holders that landed SCS. A further breakdown of these permit holders is provided in Table 3.32 of the FEIS for Amendment 2 and the DEIS for draft Amendment 3.

NMFS has determined that the proposed rule would not likely affect any small governmental jurisdictions. More information regarding the description of the fisheries affected, and the categories and number of permit holders can be found in Section 3 and Chapters 3 of FEIS for Amendment 2 and the DEIS for draft Amendment 3.

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

The proposed management measures for the opening of the non-sandbar LCS and SCS fishing seasons would not introduce any new reporting and record-keeping requirements.

### **Identification of All Relevant Federal Rules Which May Duplicate, Overlap, or Conflict with the Proposed Rule**

Fishermen, dealers, and managers in these fisheries must comply with a number of international agreements, domestic laws, and other FMPs. These include, but are not limited to, the Magnuson-Stevens Act, ATCA, the High Seas Fishing Compliance Act, MMPA, ESA, the National Environmental Policy Act, the Paperwork Reduction Act, and the Coastal Zone Management Act. NMFS does not believe that the new regulations proposed to be implemented would conflict with any relevant regulations, federal or otherwise.

## **Description of Any Significant Alternatives to the Proposed Rule That Accomplish the Stated Objectives of Applicable Statutes and That Minimize Any Significant Economic Impact of the Proposed Rule on Small Entities**

One of the requirements of an IRFA is to describe any alternatives to the proposed rule which accomplish the stated objectives and which minimize any significant economic impacts. These impacts are discussed below and in Sections 4 and 5 of this document. Additionally, the Regulatory Flexibility Act (5 U.S.C. § 603 (c) (1)-(4)) lists four general categories of “significant” alternatives that would assist an agency in the development of significant alternatives. These categories of alternatives are:

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

In order to meet the objectives of this proposed rule, consistent with Magnuson-Stevens Act and ESA, NMFS cannot exempt small entities or change the reporting requirements only for small entities because all the entities affected are considered small entities. Thus, 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 proposed rulemaking and provides rationale for identifying the preferred alternative to achieve the desired objective.

The alternatives considered and analyzed have been grouped into two major categories. These categories include alternatives for the SCS and non-sandbar LCS fishing seasons. For the SCS fishing season, NMFS is considering the following alternatives: (A1) No Action - Allow the 2010 SCS fishing season to open upon the effective date of the final rule for the 2010 Atlantic shark specifications; and, (A2) open the 2010 SCS fishing season on the effective date of the final rule for Amendment 3 to the Consolidated HMS FMP. For the non-sandbar LCS fishing season, NMFS considered the following alternatives: (B1) No Action - Allow the 2010 non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions to open upon the effective date of the final rule for the 2010 Atlantic shark specifications; (B2) open the 2010 non-sandbar LCS fishery in the Atlantic region on July 15, 2009, and open the 2010 non-sandbar LCS fishery in the Gulf of Mexico region upon the effective date of the final rule for the 2010 Atlantic shark specifications; and (B3) open the 2010 non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions on July 15, 2009.

The potential economic impacts these alternatives may have on small entities have been analyzed and are discussed in the following sections. The preferred alternatives include A2 and B3. The economic impacts that would occur under these preferred alternatives were compared with the other alternatives to determine if economic impacts to small entities could be minimized while still accomplishing the stated objectives of this rule.

## SCS Fishing Season

Under the No Action alternative, A1, NMFS would not delay the opening of the 2010 SCS fishing season and there would be no additional economic impacts to directed and incidental shark permit holders that were not analyzed under Amendment 2 until the implementation of Amendment 3. In addition, gillnet fishermen would be able to harvest SCS with gillnets until the implementation of Amendment 3, depending on what management measures are finalized in Amendment 3. The annual quota for SCS of 454 mt dw (1,000,888 lb dw) would be available upon the effective date of the final rule for the 2010 Atlantic shark specifications to fishermen in all regions of the Atlantic, Gulf of Mexico, and Caribbean Sea. Based on the analysis in the DEIS for draft Amendment 3, the average annual gross revenues from 2004 through 2007 from all SCS meat and fins was \$833,634. However, fishermen would most likely not harvest the entire SCS quota and realize these gross revenues by the time the final rule for Amendment 3 is implemented in 2010.

In addition, depending on the level of harvest in 2010 prior to the implementation of Amendment 3, once Amendment 3 is implemented, there may be no non-blacknose SCS and blacknose shark quota available for the rest of 2010 due to the reduced quotas considered under Amendment 3. In addition, any overharvests of the reduced quotas implemented under Amendment 3 due to the level of harvest of blacknose and non-blacknose SCS in 2010 prior to the implementation of Amendment 3 would lower the quotas for the 2011 fishing season and create more severe economic losses in 2011. Finally, due to the availability of SCS later in the year in the waters off the North Atlantic, fishermen in the North Atlantic would most likely not have a SCS fishing season in 2010. Given this, NMFS does not prefer alternative A1 at this time.

Under alternative A2, NMFS would delay the start of the 2010 SCS fishing season until implementation of the final rule for Amendment 3. There may be economic losses associated with the delay in the season, especially for fishermen in the southeast Atlantic and Gulf of Mexico that would have access to SCS at the beginning of 2010 and rely on SCS gross revenues at the beginning of the season. In addition, depending on the quotas implemented under Amendment 3 for blacknose shark and non-blacknose SCS, economic losses could range from \$126,174 to \$172,197 for blacknose sharks and \$502,145 to \$661,513 for non-blacknose SCS. In addition, depending on the final measures implemented under Amendment 3, gillnet fishermen could lose gross revenues from lost SCS fishing opportunities in 2010. Estimated losses for shark gillnet fishermen could be between \$90,059 to \$90,501 for blacknose sharks and \$275,008 to \$287,427 for non-blacknose SCS. However, these losses are independent of the proposed action and were fully analyzed in the DEIS for draft Amendment 3.

However, delaying the 2010 SCS fishing season until the implementation of Amendment 3 would ensure that excessive fishing pressure does not occur for blacknose sharks; quotas and the potential prohibition of gillnet gear implemented under Amendment 3 would rebuild the blacknose shark stock and end overfishing of this species as required under the Magnuson-Stevens Act. This would allow the blacknose shark stock to rebuild as quickly as possible, and could translate into higher SCS quotas with higher associated gross revenues in the shortest time period possible. In addition, since both blacknose sharks and non-blacknose SCS are present in waters off the North Atlantic later in the year, delaying the opening of the 2010 SCS fishing season could help ensure that North Atlantic fishermen have access to the non-blacknose SCS

and blacknose shark quotas implemented under Amendment 3, allowing for more equitable access to the quotas by all constituents. Thus, while there are direct negative economic impacts associated with alternative A2, NMFS prefers this alternative at this time.

### **Non-Sandbar LCS Fishing Seasons**

Under the No Action alternative, B1, NMFS would not delay the opening of the 2010 non-sandbar LCS fishing seasons and there would be no additional economic impacts to directed and incidental shark permit holders that were not already analyzed under Amendment 2. However, one of the main objectives of Amendment 2 was to allow for a year-round shark fishery in the Atlantic and Gulf of Mexico regions to help reduce discards of sharks and allow an opportunity to fishermen in all regions to be able to harvest the available quota. During 2009 in the Atlantic region, the non-sandbar LCS fishery closed on July 1, 2009. Due to this closure and the mid-Atlantic BLL closure in federal waters from January 1 – July 31, the state water closure in Virginia, Maryland, Delaware and New Jersey from May 15 – July 15, and the limited availability of non-sandbar LCS in northern Atlantic waters at the beginning of the year, the fishery participants from North Carolina north did not have a non-sandbar LCS fishing season in 2009. In the Gulf of Mexico region, the non-sandbar LCS fishery closed on June 6, 2009. However, Louisiana state waters were closed to LCS fishing from April 1 – June 30, thus many fishery participants in the Gulf of Mexico region did not have the full opportunity to harvest the 2009 Gulf of Mexico non-sandbar LCS quota. NMFS is currently exploring reasons for the early closures of the non-sandbar LCS fisheries and may take an adaptive management approach in a future rulemaking to adjust management measures implemented under Amendment 2 to help ensure the non-sandbar LCS shark seasons last year-round. However, in order to allow for a more equitable distribution of the available non-sandbar LCS quota in the short term, NMFS does not prefer this alternative at this time.

Under alternative B2, NMFS would delay the opening of the non-sandbar LCS fishery in the Atlantic region until July 15, 2009, but would open the non-sandbar LCS fishery in the Gulf of Mexico region upon the effective date of the final rule for the 2010 Atlantic shark specifications. Alternative B2 could also result in additional negative economic impacts than what was analyzed in Amendment 2 for fishermen in the southeast Atlantic if those fishermen depend on shark revenues early in the shark fishing season as they would not be able to land non-sandbar LCS when non-sandbar LCS would be present in waters off the southeast Atlantic. In addition, alternative B2 could result in additional negative economic impacts than what was analyzed in Amendment 2 for gillnet fishermen in the Atlantic region who would not be able to harvest non-sandbar LCS with gillnets during 2010, depending on final management measures implemented under Amendment 3. However, under alternative B2, fishermen in the North Atlantic would be able to have a fishing opportunity for non-sandbar LCS in 2010 as was the intent of Amendment 2. The non-sandbar LCS quota in the Atlantic region and its associated gross revenues of an estimated \$381,525 based on 2008 ex-vessel prices would be more equitably distributed among different states of the Atlantic by delaying the opening of the non-sandbar LCS fishery until July 15, 2009, under alternative B2.

The economic impacts of alternative B2 in the Gulf of Mexico region would be the same as analyzed under Amendment 2. In addition, gillnet fishermen in the Gulf of Mexico region could harvest non-sandbar LCS with gillnets prior to the implementation of Amendment 3, which may

prohibit the landing of sharks with gillnet gear. However, state waters off Louisiana are closed to large coastal shark fishing from April 1 through June 30 of each year. During 2009, the non-sandbar LCS fishery closed on June 6, 2009. Thus, allowing the federal non-sandbar LCS fishery in the Gulf of Mexico to be open at the beginning of the year in 2010 may result in negative economic impacts for Louisiana state fishermen if the non-sandbar LCS quota is harvested before the re-opening of Louisiana state waters in 2010. Therefore, NMFS does not prefer alternative B2 at this time.

Under alternative B3, NMFS would delay the opening of the non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions until July 15, 2009. Alternative B3 could result in additional negative economic impacts than what was analyzed in Amendment 2 for fishermen in the southeast Atlantic and Gulf of Mexico if those fishermen depend on shark revenues early in the shark fishing season as they would not be able to land non-sandbar LCS when non-sandbar LCS would be present in waters off these regions. In addition, alternative B3 could result in additional negative economic impacts than what was analyzed in Amendment 2 for gillnet fishermen in the Atlantic region who would not be able to harvest non-sandbar LCS with gillnets during 2010, depending on final management measures implemented under Amendment 3. Based on the analysis done in the DEIS for draft Amendment 3, this could result in lost non-sandbar LCS revenues of \$106,479 to \$109,479 for gillnet fishermen.

However, under alternative B3, fishermen in the North Atlantic would be able to have a fishing opportunity for non-sandbar LCS in 2010 as was the intent of Amendment 2. The non-sandbar LCS quota in the Atlantic region and its associated gross revenues of an estimated \$381,525 based on 2008 ex-vessel prices would be more equitably distributed among different states of the Atlantic by delaying the opening of the non-sandbar LCS fishery until July 15, 2009, under alternative B3. In addition, state waters off Louisiana are closed to LCS fishing from April 1 through June 30 of each year. Therefore, allowing the federal non-sandbar LCS fishery in the Gulf of Mexico to be open on July 15, 2010, may allow for a more equitable distribution of the non-sandbar LCS quota in the Gulf of Mexico region, estimated to be worth \$839,376 based on 2008 ex-vessel prices. Given alternative B3 helps to match the original intent of Amendment 2 and would allow fishermen in all regions to have more reasonable access to the available non-sandbar LCS quotas, NMFS prefers alternative B3 at this time.