

**FINAL**  
**SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT,**  
**REGULATORY IMPACT REVIEW, AND**  
**FINAL REGULATORY FLEXIBILITY ANALYSIS**  
**FOR A**  
**FINAL 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

December 2009

## **Final 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 Final Regulatory Flexibility Analysis

**Lead Agency:** National Marine Fisheries Service

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### **Abstract:**

The 2010 Atlantic Commercial Shark Season Specifications would adjust the commercial quotas for the 2010 fishing season for sandbar sharks, non-sandbar large coastal sharks (LCS), small coastal sharks (SCS), and pelagic sharks based on 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 action, NMFS is delaying the start of the non-sandbar LCS fishery in the Atlantic region and SCS fishing seasons to ensure equitable shark fishing opportunities in all states. Background information on the issues and a description of the alternatives considered for this rulemaking are described in detail in this supplemental environmental assessment.

**FINDING OF NO SIGNIFICANT ENVIRONMENTAL IMPACT FOR A FINAL 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;
- 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 fishing seasons in the Atlantic region to ensure equitable shark fishing opportunities in all states.

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 Impact statement are supported by the analyses in the SEA, as well as in the other NEPA documents referenced. The final rule would not change the impacts on the natural and physical environment when compared to previous analyses, but would make changes in the way interrelated social and economic factors are affected.

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 CEQ's 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 are not expected to jeopardize the sustainability of these species because the quotas specifically 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 planning to open the non-sandbar LCS fishery in the Atlantic region on July 15, 2010. Delaying the start of the 2010 non-sandbar LCS fishery in the Atlantic region would provide equitable fishing opportunities among shark fishery participants in all states to catch the non-sandbar LCS quota. In addition, NMFS is delaying the opening of the 2010 SCS fishing season to foreclose the loss of any alternative being considered for implementation through Amendment 3 which, when finalized, could implement new blacknose and non-blacknose SCS annual catch limits (ACLs) and 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 in the Atlantic region and SCS fishery in all regions would decrease non-target species interaction rates because there would be no directed non-sandbar LCS in the Atlantic region 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 a 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 the Atlantic region during the start of the 2010 season and the SCS fishery until the effective date of draft Amendment 3. Therefore, the 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 as 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 in the Atlantic region 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 in Amendment 2 and would result in a delay of the 2010 non-sandbar LCS commercial fishery in the Atlantic region until 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 to avoid foreclosing selection of any alternative being considered for implementation through that amendment. 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 marine mammal or endangered species 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 at the beginning of 2010 as a result of the delay in the non-sandbar LCS in the Atlantic region and SCS commercial fishing seasons. 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. NMFS found no significant natural or physical environmental impacts and the interrelated social and economic impacts are not significant. The management measures would delay the opening of the 2010 non-sandbar LCS in the Atlantic region 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. It would protect pupping female sharks from fishing mortality, and keeping the SCS fishery closed would ensure that excessive fishing pressure does not occur for blacknose sharks. However, there would be potential adverse economic impacts for participants in the non-sandbar LCS fisheries in the Atlantic region since delaying the opening of the non-sandbar LCS fisheries in the Atlantic region until July 15, 2010, would mean that the non-sandbar LCS commercial fishery in the Atlantic region would have been closed for more than a year. The non-sandbar LCS fishermen in the Gulf of Mexico would have potential economic impacts with the fishery opening at the end of January. 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 to the Consolidated HMS FMP, which may implement reduced non-blacknose SCS and blacknose quotas as well as prohibit harvesting all Atlantic sharks with gillnets.

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 may be controversial, but tries to mitigate the effects on the quality of the human environment by delaying the opening of the non-sandbar LCS in the Atlantic region until July 15 and the SCS commercial fishery until Amendment 3 is effective. The impacts to the natural or physical environment have been previously analyzed in the FEIS of Amendment 2 to the Consolidated HMS FMP. The delay for non-sandbar LCS in the Atlantic region is a timeframe that some constituents and States have requested. In addition, such a delay would allow permit holders more equitable access to the non-sandbar LCS and SCS quotas to the North Atlantic. The non-sandbar LCS closure in the Atlantic region may be controversial because the fishery will have been closed for a more than a year in the Atlantic region as of July 1, 2009 and because non-sandbar LCS are available in waters of the southeastern United States early in the year. Such a 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, no controversy is anticipated for the non-sandbar LCS in the Gulf of Mexico region, 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?

No. The effects of the commercial shark fishery on the human environment have been analyzed in a previous final environmental impacts statement (i.e. FEIS for Amendment 2 to the 2006 Consolidated HMS FMP) and adequately identified such that they 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. This action is related to Amendment 2, which established quotas for the commercial shark fishery, and Amendment 3, which would establish quotas for the SCS fishery. 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 Draft Environmental Impact Statement

(DEIS) for draft Amendment 3 to the Consolidated HMS FMP, while this EA considers the synergistic impacts with other cumulative actions such as Amendment 3 to the Consolidated HMS FMP. The final action is not anticipated to have additional impacts resulting from this action beyond impacts that have already been analyzed in these documents. The 2010 shark season rule does not change the annual base and adjusted base annual commercial quotas as established under Amendment 2 and its June 24, 2008 final rule (73 FR 35778, corrected at 73 FR 40658, July 15, 2008). Rather this rule adjusts the commercial quotas based on overharvests and would affect the commercial SCS and non-sandbar LCS fisheries during the start of the 2010 commercial fishing season. The SCS fishery would be delayed until alternatives considered under draft Amendment 3 related to quotas and ACLs for blacknose sharks are selected and implemented in the final Amendment 3. The non-sandbar LCS fishery would provide equitable fishing opportunities among shark fishery participants in all states to catch the non-sandbar LCS quota in the Atlantic region.

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 any 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 so the vessels will not be transiting between water bodies. 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 action. Thus, the measures finalized in this rule will not set a precedent or represent a decision in principle about any future actions because the final measures implemented would be consistent with the established protocol in the FEIS for Amendment 2 to the Consolidated HMS FMP.

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?

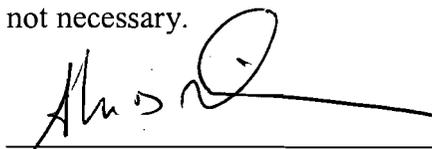
No. This action is consistent with the Magnuson-Stevens Act and the regulations at 50 CFR 635. The final action is also consistent with the Coastal Zone Management Plans of the 20 coastal states of the Atlantic, Gulf of Mexico and Caribbean Oceans, the Endangered Species Act, the Marine Mammal Protect Act, and any other applicable law. Therefore, the final 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 fishery and the non-sandbar LCS fishery in the Atlantic region. The impacts of this action on the natural and physical environment would be the same as those identified for the FEIS for Amendment 2 to the Consolidated HMS FMP and based on the attached SEA will not result in substantial cumulative effects, adverse or otherwise, when considered with other cumulative actions including Amendment 3 to the Consolidated HMS FMP. This action would predominantly change socio-economic impacts for shark fishery participants, which have been analyzed in the RIR and FRFA in the attached SEA. The overall Atlantic shark fishing seasons have previously been analyzed in Amendment 2 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 rule 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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Director, Office of Sustainable Fisheries, NOAA

DEC 18 2009

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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 the commercial 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 final action, NMFS considers delaying the start of the non-sandbar LCS and SCS fishing seasons to ensure equitable shark fishing opportunities in all states.

#### **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 a single season. This season opens upon the effective date of the shark fishing season specifications' final rule, which is typically 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 an 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. It could also provide for a year-round shark product market that could improve the stability of the fishery. The purpose of this rule is to make access to the fishery equitable to all shark fishermen, while continuing to ensure that the harvest of sharks is consistent with the regulations established under Amendment 2.

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, the fishery participants in the mid- and north Atlantic areas did not have a non-sandbar LCS fishing season in 2009 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

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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.

Atlantic waters at the beginning of the year (due to migratory patterns). In the GOM region, it was initially appeared that fishery participants in the GOM did not have the full opportunity to harvest the 2009 GOM non-sandbar LCS quota due to the June 6, 2009, closure of the non-sandbar LCS fishery and the Louisiana state water closure from April 1 – June 30. As such, after the closures, NMFS received requests from constituents to consider a 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 usually 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 to establish a mechanism for implementing annual catch limits (ACLs) and accountability measures (AMs). For stocks that were determined to be overfished before July 12, 2009, a mechanism for establishing ACLs and actual specification of ACLs must be effective for the 2010 fishing year. A delay in the 2010 SCS fishing season would allow ACLs and revised quotas, if selected after completion of the Final Environmental Impact Statement (FEIS), to be established under Amendment 3 for implementation before the start of the fishing season.

After reviewing this 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 the natural and physical environmental 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. However, the socioeconomic impacts to commercial non-sandbar LCS and SCS fishery participants (see Table 1.1) interrelated with these natural and physical environmental impacts 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. This Supplemental Environmental Assessment (SEA) incorporates by reference the applicable analyses and conclusions of the prior NEPA documents regarding natural and physical environmental impacts and evaluates potential new effects to commercial non-sandbar LCS and SCS shark fishery participants and means for mitigating those effects. Pursuant to 50 CFR §1502.20, this SEA tiers to and incorporates by reference the pre-existing FEIS.

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

Impacts	No additional effect	Potential effect
Ecological	X	
Essential Fish Habitat	X	
Protected Resources	X	

Costal Zone Management	X	
Social		X
Economic		X

## Section 2 Preferred Alternatives: Description of Final Action

### Small Coastal Sharks

NMFS considered 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 avoid foreclosing the selection of any of the range of reasonable alternatives being considered for the SCS fishery including those establishing new quotas which would help in the rebuilding of blacknose sharks that are currently overfished and experiencing overfishing consistent with ACLs which must be effective by the 2010 fishing season. 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. Furthermore, under the Atlantic Large Whale Take Reduction Plan (ALWTRP), gillnet fishermen off the east coast of Florida have additional restrictions from November through April to prevent right whale interactions (see 50 CFR part 229). These restrictions are relaxed in April. The majority of fishermen who harvest SCS are affected by the ALWTRP. A delay in the SCS opening until Amendment 3 is implemented would correspond in large part to the annual relaxation of the ALWTRP regulations.

### Non-Sandbar Large Coastal Sharks

NMFS considered 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, 2010; 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 – Preferred Alternative*
- Alternative B3 Open the 2010 non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions on July 15, 2010

The preferred alternative would open the non-sandbar LCS fishery in the Atlantic region on July 15, 2010, and open the 2010 non-sandbar LCS fishery in the GOM region upon the effective date of the final rule for the 2010 Atlantic shark specifications. In the Atlantic, in 2009, the non-sandbar LCS fishery was open for approximately five and a half months, which did not allow

fishery participants in the mid- and north Atlantic areas to have a fishing season as the quota was taken before these sharks migrated northward. In addition, fishermen in the North Atlantic were also limited in their fishing opportunities due to new 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, but the state water closures in the area during this time frame did not limit the ability of state fishermen from catching the GOM non-sandbar LCS quota. The state opens and closes its fishing season with federal waters and the federal quota is established for sharks caught in both state and federal waters. Some Florida fishermen were not sympathetic to delaying the season opening due to state water closures since Florida has minimal catch limits for commercial shark fishing in state waters and has closed state waters to both gillnet and longline gear, which are the primary gears for harvesting sharks. Other states have regulations that mirror federal catch limits. As described below in Section 4, NMFS believes that delaying the start of the 2010 non-sandbar LCS fishery in the Atlantic region would provide equitable fishing opportunities among shark fishery participants in all states to catch the non-sandbar LCS quota because non-sandbar LCS are available to all fishermen from Florida through the northern extent of their range between July 15 and December. Similarly, NMFS believes that not delaying the start of the 2010 fishing season for non-sandbar LCS in the GOM region provides equitable fishing opportunities among all participants because non-sandbar LCS are available throughout the GOM region at that time.

### **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, if selected, 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 action are described in Chapter 3 of the FEIS for Amendment 2 and the DEIS of draft Amendment 3. Since the DEIS for draft Amendment 3 to Amendment 3 has not yet been finalized and may be subject to change based on public comment, it is not incorporated by reference. It is, however, relied on as a reference document for best available scientific information for the environmental baseline of the SCS complex and related environmental resources. Chapter 3 of the EIS in both documents describe 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 goals of these documents were to implement measures that will reduce fishing mortality and reduce effort in order to rebuild overfished Atlantic shark species while ensuring that a limited shark fishery can be maintained. The affected environment in the documents included 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 prior NEPA documents identified and described the target and non-target species affected by the shark fishery. The 2010 Atlantic Commercial Shark Season

Specifications would affect the same species; thus Chapter 3 of Amendment 2 is hereby incorporated by reference regarding affected biological resources. The prior NEPA documents identified the essential fish habitats (EFH) that would be affected by the shark fishery. At this time, there is no evidence to suggest that implementing any of the preferred alternatives suites or alternatives in this amendment would adversely affect EFH to the extent that detrimental effects could be identified on the on the habitat or fisheries. The 2010 Atlantic Commercial Shark Season Specifications would not change the manner in which the shark fishery may impact the physical environment; thus, section 4.10 of Amendment 2 is incorporated by reference regarding affected physical environmental resources. Those prior NEPA documents identified commercial shark fishery participants as a user group likely to be affected by regulation of the shark fishery. The 2010 Atlantic Commercial Shark Season Specifications would affect the same commercial shark fishery participants; thus Chapter 6 and 9 of Amendment 2 are hereby incorporated by reference regarding affected fishery participants.

#### **Section 4      Impacts of the Alternatives**

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

The No Action Alternative for this SEA would maintain the status quo for fishing activities that were established in Amendment 2. The No Action alternatives would affect the 223 directed and 279 incidental federal shark permit holders. The natural and physical impacts of the no action alternative were previously analyzed in Amendment 2. 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, if selected, for these species considered under Amendment 3.

This would have direct negative social and economic impacts to fishermen that fish for SCS as they would likely need 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 likely need to diversify to make up for lost SCS gross revenues later in the year. Additionally, because the proposed quotas for certain alternatives in Amendment 3 are so low, if they are implemented, it is likely that those quotas would be exceeded before Amendment 3 is finalized and effective.

Any such overharvests of the proposed reduced blacknose and non-blacknose SCS quotas implemented under Amendment 3, based on 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, opening the SCS fishery before Amendment 3 is implemented could allow excessive fishing pressure on blacknose sharks, which may affect the rebuilding time for this species.

Due to the availability of SCS and non-sandbar LCS later in the year in northern Atlantic waters, under the no action alternatives federal and state fishermen in the North Atlantic would most likely not have a SCS or non-sandbar LCS fishing season in 2010 because the quotas would

likely be taken before the fish have migrated northward. In addition, under the no action alternative, B1, parts of the GOM may also have a limited non-sandbar LCS fishery in 2010. The GOM non-sandbar LCS fishery closed on June 6, 2009. Louisiana state waters were closed to LCS fishing from April 1 – June 30, 2009. Thus, it was initially appeared that many state fishery participants in the GOM region did not have the full opportunity to harvest the 2009 GOM non-sandbar LCS federal quota which was established for state and federal fishermen. Louisiana fishermen believed that they got equitable fishing opportunities in 2009. The same scenario for the GOM non-sandbar LCS fishery could occur again under both the no Action alternative B1, and the preferred alternative B2.

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

The prior environmental analyses and conclusions from Amendment 2 and those proposed for Amendment 3 are not changed in this final rule. This final rule would not change the impacts on the natural and physical environment when compared to previous analyses, but would make changes in the way interrelated social and economic factors are affected. Amendment 2 revised management measures for commercial and recreational fishermen and established a shark research fishery with 100 percent observer coverage. The 2010 shark season rule does not change the annual base and adjusted base annual commercial quotas as established under Amendment 2. This rule does adjust the commercial quotas based on overharvests and would affect the commercial SCS and non-sandbar LCS fisheries during the start of the 2010 commercial fishing season. The preferred alternatives A2 and B2, which would delay the SCS fishing season and non-sandbar LCS fishing season in the Atlantic region, could potentially affect the 85 directed and 31 incidental federal shark permit holders that landed SCS and 143 directed and 155 incidental federal shark permit holders that landed LCS. The federal and state permit holders in the Atlantic region who land both LCS and SCS would be the most affected. NMFS changed the preferred alternative from alternative B3 in the proposed rule, which proposed to open the non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions on July 15, to alternative B2 in the final rule. NMFS heard at public hearings and in written comments from fishermen and dealers in all regions indicating that delaying the start of the shark fishing season in the Gulf of Mexico would be detrimental to fishermen. Comments stated that fishermen in the Gulf of Mexico would not be able to fish for anything else in the region, since other fisheries are closed in January. Also, comments were received that shark dealers ideally prefer shipping shark products in January, along with any other fish products, to other markets for economic reasons. Comments also noted that a split opening for the Gulf of Mexico and Atlantic regions would not cause a market glut of shark products and the fishermen might receive better prices for the products in 2010. Initially, at the proposed rule stage, NMFS believed that the state water closure in Louisiana would affect the distribution of the non-sandbar LCS quota in the region. Additional information received by NMFS later in the year showed that this was not the case in 2009. Louisiana reported significant landings for the 2009 non-sandbar LCS fishery from January until April. As a result of the comments received by the agency and the factors discussed below, NMFS chose to change the preferred alternative from B3 to B2 because equitable distribution of the fishing opportunities was no a concern as initially believed.

NMFS received mixed comments regarding the proposed non-sandbar LCS delay in the Atlantic. Some commenters felt that such a delay would cause them to lose fishing

opportunities, as LCS are available in January in their area. These commenters also felt that fishermen in the mid- and North Atlantic had other opportunities to fish for other species while they did not. Other commenters, including ASMFC, supported the delay as a method of providing all fishermen in the Atlantic an equal opportunity to fish for non-sandbar LCS.

The delay in initiating the 2010 SCS and Atlantic non-sandbar LCS fishing seasons could result in direct negative social impacts. Fishermen would likely need to fish in other fisheries to make up for lost SCS and non-sandbar LCS revenues during the beginning of the 2010 fishing season. Indirect negative social impacts may also occur for 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 likely be most prevalent in areas of the southeast Atlantic where both 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 may have to either switch to other gillnet fisheries, leave the gillnet fisheries and switch gear types, or leave fishing altogether. However, as noted above, these fishermen are affected by the ALWTRP during that time and are usually limited in fishing opportunities as a result. Thus, a delay in opening may not have a substantial impact on gillnet fishermen.

The preferred alternatives would likely have direct positive social impacts on fishermen in the mid- and North Atlantic, as these fishermen 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 may 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 non-sandbar LCS products in 2010, where they did not have access or had limited access in 2009. Also, the market prices for shark products could remain steady and improve in 2010 with the separate opening dates for the Gulf of Mexico and Atlantic regions because of the possible steady supply of products on the market.

The proposed delay in the non-sandbar LCS in the Atlantic region and SCS fishing seasons could cause changes in ex-vessel prices received. From 2004 through 2008, the average ex-vessel price of LCS meat in January was approximately \$0.57 per lb dw, while the average ex-vessel price in July was \$0.48. From 2004 through 2008, the average ex-vessel price of SCS meat in January was approximately \$0.58, whereas the average ex-vessel price in mid- to late-Spring was \$0.69. Fin prices are not reported by species. As such, the average ex-vessel price from 2004 through 2008 for shark fins is the same for LCS and SCS. The average price for fins in January is \$16.36 per lb. When the LCS fishery opens in July, the average price for fins has been \$19.06, while the average price in mid- to late-Spring has been \$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

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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.

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 initially analyzed in the DEIS for draft Amendment 3. In addition, there could be negative economic impacts to SCS fishermen associated with the reduced quotas if selected and implemented under Amendment 3 to rebuild blacknose sharks and end overfishing of this species. However, the negative impacts as a result of the potential for reduced quotas and the prohibition of gillnet gear under such circumstances would be experienced by SCS fishermen independently as a result of draft Amendment 3.

For the reasons described above, NMFS believes delaying the SCS and non-sandbar LCS in the Atlantic region fisheries under the preferred alternatives A2 and B3 would allow for a more equitable distribution of the quotas among constituents, 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. Fishermen in the North Atlantic and GOM could experience positive economic impacts as a result of these alternatives since they would have access to the non-sandbar LCS fishery under the preferred alternatives. Fishermen in the South Atlantic would realize smaller benefits for non-sandbar LCS relative to the no action alternative, but no action would result in significant negative impacts to the North Atlantic fishermen. Fishermen in the SCS fishery could experience positive economic impacts in the long-term as a result of alternative A2. If the SCS stocks rebuild, then non-blacknose SCS and blacknose quotas could be increased to sustainable levels and allow for increased harvests and associated revenues. SCS fishermen would likely experience negative economic impacts as a result of the delayed opening since some fishermen depend on SCS revenues early in the shark fishing season.

### **Mitigation**

NMFS is taking an adaptive management approach in this 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 all 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 in the Atlantic region and SCS quotas. By delaying the 2010 SCS fishing season and non-sandbar LCS in the Atlantic region fishing season, there may be negative 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. 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 in this document, the interaction of the No Action alternative A1, and the implementation of Amendment 3 could have additional social and economic impacts as discussed above, 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. Alternative B3 would allow for a more equitable distribution of the non-sandbar LCS quota in the Atlantic and Gulf of Mexico regions. 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 the Gulf of Mexico region to have full access to the non-sandbar LCS quota in the Gulf of Mexico region in the early part of the 2010 fishing season. In addition, preferred alternative A2, would delay the 2010 SCS fishing season until the implementation of Amendment 3, which could implement reduced non-blacknose SCS and blacknose shark quotas to help rebuild blacknose sharks and end overfishing of this species and meet the 2010 ACL requirement. By delaying the 2010 SCS fishing season, NMFS would reduce excessive fishing pressure on blacknose sharks that could affect the rebuilding time for this species.

## **Section 6 Cumulative Impacts**

Cumulative impacts are the impacts on the environment that result 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 this document 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.

The primary goals of the 1993 Shark FMP and the 1999 FMP for Atlantic Tunas, Swordfish and Sharks were to establish management measures to reduce overfishing, rebuild U.S. Atlantic shark populations, and prevent overfishing of fully fished stocks. In 2003, Amendment 1 to the 1999 FMP for Atlantic Tunas, Swordfish, and Sharks (68 FR 74746; December 24, 2003) amended the measures based on the 2002 LCS and SCS stock assessments, litigation, and public comments. In 2008, Amendment 2 to the 2006 Consolidated HMS FMP (73 FR 35778, June 24, 2008; corrected at 73 FR 40658, July 15, 2008), revised management measures for commercial and recreational fishermen and established a shark research fishery with 100 percent observer coverage. This current action, the 2010 shark season specifications, adjusts the quotas, which were established in Amendment 2, based on overharvests in 2008 and 2009 and delays the opening for the SCS and Atlantic non-sandbar LCS fisheries. In addition, NMFS is currently reviewing comments on the proposed rule of Amendment 3, which includes proposed

alternatives that could implement measures that significantly reduce the non-blacknose SCS and blacknose shark quotas in order to rebuild blacknose sharks stocks and establishes ACLs. NMFS is also considering a rule, which would be implemented in the next 6 months to a year, that would consider alternatives to ensure the commercial shark season can better meet the intent of Amendment 2. Future stock assessments could also reasonably be expected to modifications the management measures implemented in Amendment 2. Additionally, NMFS is considering an amendment to the 2006 Consolidated HMS FMP that would address specific issues in the Caribbean, some of which concern Atlantic sharks. In general, the preferred alternatives in the past and present actions, while they may have significant impacts when considered in total, were chosen to mitigate, to the extent practicable, significant social and economic impacts while meeting the requirements to rebuild overfished stock and prevent overfishing of the Magnuson-Stevens Act and other domestic laws. Additional detail on the cumulative impacts of the quotas and other shark management actions can be found in Chapter 4 of Amendment 2.

Table 2 describes the anticipated cumulative impacts of this action when considered with other past, present, and reasonably foreseeable future actions. This final action (preferred alternatives A2 and B2) are expected to result in both positive and negative impacts to fishermen, depending on the areas in which they target their catch. When these impacts are considered in the context of the other regulatory regimes being considered or implemented, the overall positive or negative impacts are balanced by the overall regulatory environment in which the fishermen operate. Thus, the impacts anticipated from the final action considered in this SEA are not expected to significantly impact social or economic factors when considered together with other past, present or reasonably foreseeable future actions.

**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 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	+/-	+/-

Alternative	Alternative Description	Social Impacts	Economic Impacts
Alternative B2	Open the 2010 non-sandbar LCS fishery in the Atlantic region on July 15, 2010; 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 – Preferred Alternative	+/-	+/-
Alternative B3	Open the 2010 non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions on July 15, 2010 – Preferred Alternative	+/-	+/-

## 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 the FEIS for Amendment 2 to the Consolidated HMS FMP and the DEIS for draft Amendment 3 to the Consolidated HMS FMP, 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 final 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 final rule and SEA for the 2010 Atlantic shark specifications. The management goals and objectives of the 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 Atlantic HMS to prevent overfishing of species, while providing for their optimum yield (OY) on a continuing basis and to rebuild fish stocks that are considered overfished. The management objectives of the 2010 Atlantic shark specifications final 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 of this SEA, Chapters 3 of the FEIS for Amendment 2, and the DEIS for draft Amendment 3 to the Consolidated HMS FMP for a description of the fisheries that could be affected by these 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 management measures are designed to address the problems discussed below. 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 LCS while fishermen targeted other species and encountered LCS, thus reducing unnecessary bycatch and discards of LCS. 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 initiate 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 delaying the 2010 non-sandbar LCS shark fishery seasons in the Atlantic region to allow for a more equitable distribution of the available quotas among constituents. NMFS is also delaying 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 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.*</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. Also, there may be opportunity costs associated with the delayed revenue.</p>

\*The total economic impacts are dependent upon the final measures implemented in Amendment 3.

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 quota of 169.7 (374,121 lb dw) in 2010, estimated to be worth \$410,597 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 \$485,509.</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><i>Alternative B2</i>  <i>Open the 2010 non-sandbar LCS fishery in the Atlantic region on July 15, 2010; 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 – Preferred Alternative</i></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>There would be no flood of shark products on the market to cause the prices to drop.</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 \$410,597 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 LCS 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><i>Alternative B3</i>  <i>Open the 2010 non-sandbar LCS fishery in the Atlantic and Gulf of Mexico regions on July 15, 2010</i></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 \$410,597 would be more equitably distributed among different states of the Atlantic.</p> <p>States waters off Louisiana are closed to LCS 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 \$944,834 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 Final Regulatory Flexibility Analysis**

The Final Regulatory Flexibility Analysis (FRFA) is conducted to comply with the Regulatory Flexibility Act (5 USC 601 et. seq.) and provides analysis of the economic impacts of the various alternatives on small entities. Certain elements required in a FRFA are also required as part of an EIS. Therefore, the FRFA incorporates the economic impacts identified in the EA. To that end, the RFA directs federal agencies to assess whether the 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 final rule that accomplish the objectives of applicable statutes and minimize any significant effects on small entities.

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

Please see Section 1 for a description of the need for action for these management measures. The management goals and objectives of the 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 as it pertains to Atlantic HMS is for the Secretary to provide for the conservation and management of Atlantic HMS through development of an FMP and to implement the FMP with necessary regulations. In addition, the Magnuson-Stevens Act directs the Secretary in managing Atlantic 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 final rule for the 2010 Atlantic shark specifications would be to implement the opening of the 2010 shark fishing season for non-sandbar LCS in the Atlantic region and SCS in a manner that would ensure equitable shark fishing opportunities in all states. Delaying the GOM non-sandbar LCS fishing season would be detrimental to the fishermen.

### **A Summary of the Significant Issues Raised by the Public Comments in Response to the Initial Regulatory Flexibility Analysis, 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 several comments on the proposed rule during the public comment period. A summary of these comments and the Agency's responses will be included in the final rule. Many comments received on the SCS alternatives were similar to the comments received on the Draft Amendment 3 to the HMS FMP (e.g., NMFS should not take any action on blacknose sharks until after the next stock assessment). Many non-sandbar LCS fishermen supported the no action alternative and alternative B2, which could increase the market price of shark products and improve food quality. NMFS also received comments from environmental constituents regarding the quotas of certain overfished species. NMFS did not receive any comments specific to the Initial Regulatory Flexibility Analysis (IRFA).

## **Description and Estimate of the Number of Small Entities to Which the Final 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 final 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 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 final 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 Final Rule, Including an Estimate of the Classes of Small Entities Which Would Be Subject to the Requirements of the Report or Record**

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

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

One of the requirements of an FRFA is to describe any alternatives to the final 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 final 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 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 considered 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, 2010, 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, 2010.

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 B2. 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 for SCS fishermen. 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 potentially reduced quota considered under Amendment 3. In addition, any overharvests of reduced quotas that may be 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 of 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 start of the fishing 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. Depending on the quotas implemented under Amendment 3 for blacknose shark and non-blacknose SCS, the economic losses for SCS fishermen 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 this action and were fully analyzed in the DEIS for draft Amendment 3. In addition, shark dealers and other entities that deal with shark products could experience negative economic impacts as SCS 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 SCS are available early in the fishing season.

Delaying the 2010 SCS fishing season until the implementation of Amendment 3 would allow the blacknose shark stock to rebuild as quickly as possible, and would 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 some 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. 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 state water 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, 2010, and 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 result in additional negative economic impacts relative to those analyzed in Amendment 2 for fishermen in the southeast Atlantic, since these fishermen would not be able to land non-sandbar LCS when non-sandbar LCS would be present in their waters off the southeast Atlantic. In addition, alternative B2 could result in additional negative economic impacts relative to those 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. In the Atlantic region, the non-sandbar LCS quota and its associated gross revenues of an estimated \$485,509 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, 2010, 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. 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 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. However, delaying the start of the shark fishing season in the Gulf of Mexico would be detrimental to the fishermen. Many fishermen in the Gulf of Mexico would not be able to fish for other species, since other Gulf of Mexico fisheries are closed in January. Also, shark dealers would need shark products in January to ship to other markets. Comments noted that if NMFS implemented alternative B3 and opened both the Gulf of Mexico

and Atlantic regions in July, then a market glut of shark products would cause prices to fall. In addition, the state water closure in Louisiana did not affect the distribution of the non-sandbar LCS quota in the region. Louisiana reported significant landings for the 2009 non-sandbar LCS fishery from January until April. Therefore, NMFS prefers 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, 2010. Alternative B3 could result in additional negative economic impacts relative to those analyzed in Amendment 2 for fishermen in the southeast Atlantic and Gulf of Mexico. These fishermen may 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 relative to those 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 conducted 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 fishing opportunities for non-sandbar LCS in 2010 as was the intent of Amendment 2. In the Atlantic region, the non-sandbar LCS quota and its associated gross revenues of an estimated \$485,509 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, 2010. 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 \$944,834 based on 2008 ex-vessel prices. Under alternative B3, there would be a negative economic impact for fishermen. When both regions open for the non-sandbar fishery, the market could be flooded with shark products and may cause the price to fall. Given that alternative B3 helps to match the original intent of Amendment 2, but would adversely affect the market price for sharks, NMFS does not prefer alternative B3 at this time.