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10.0 OTHER CONSIDERATIONS

10.1 National Standards

The analyses in this document are consistent with the National Standard (NS) guidelines set forth in the 50 CFR part 600 regulations. The following descriptions are a summary of how the preferred alternatives are consistent. More information can be found in earlier chapters.

NS 1 requires the National Marine Fisheries Service (NMFS) to prevent overfishing while achieving, on a continuing basis, the Optimum Yield (OY) from each fishery for the U.S. fishing industry. As summarized in other chapters, over the past several years, NMFS has undertaken numerous management actions, including the 1999 FMP, Amendment 1 to the 1999 FMP, and Amendment 1 to the Billfish FMP, to address overfishing and to rebuild HMS stocks. The preferred alternative suite in this Final Environmental Impact Statement (EIS) is consistent with ongoing management efforts to rebuild, manage, and conserve target species and with the NS 1 guidelines.

- The preferred alternative suite is consistent with NS1 because it implements the recommended quotas and retention limits that will greatly reduce fishing effort to allow overfished shark stocks to rebuild, stop overfishing, and provide the opportunity for the sustainable harvest of shark stocks that are healthy and not currently overfished.
- The time/area closure measures in the preferred alternative suite maintains the current closures as well as adds new closures to backstop measures being proposed by the South Atlantic Fishery Management Council. This is consistent with NS 1 because these time/area closures will support efforts aimed at achieving OY for sharks while helping to prevent overfishing of target and non-target species.
- In addition to maintaining the current reporting measures, the preferred alternative suite includes 100 percent observer coverage for those who participate in the shark research fishery. Maintaining the current dealer and logbook reporting as well as increasing observer coverage would greatly increase NMFS' ability to monitor landings, bycatch and interactions with protected resources, thereby helping to prevent overfishing and maintain consistency with the Standardized Bycatch Reporting Methodology.
- Under the preferred alternative suite, the seasons for sandbar sharks and non-sandbar large coastal sharks (LCS) would open on January 1 and would close within five days notice of each quota being 80 percent filled. This management measure is consistent with NS 1 because it assists NMFS in preventing further overfishing of overfished shark stocks.
- The preferred recreational management measures would only allow HMS recreational anglers to possess easily identifiable shark species that are less likely to be confused with dusky or sandbar sharks. This management measure is consistent with NS 1 because it helps to prevent overfishing of currently overfished shark stocks while still allowing possession of certain shark species in the recreational fishing sector.

NS 2 requires that conservation and management measures be based on the best scientific information available. The preferred alternatives in this Final EIS are consistent with NS 2

guidelines.

- The preferred alternative suite is consistent with NS 2 because the analyses of the management measures in the preferred alternatives are based on the 2005/2006 LCS stock assessment, the 2006 dusky stock assessment, the 2005 Canadian porbeagle stock assessment, as well as up-to-date logbook and observer data which constitute the best available scientific information.
- One of the goals of the preferred alternative suite and the development of the shark research fishery is to maximize scientific data acquisition by continuing a limited shark research fishery for sandbar sharks with 100 percent observer coverage which should ensure the best scientific information is maintained.
- Changing the stock assessment frequency from every 2-3 years to at least every five years would continue to ensure that stock assessments are conducted using the best scientific information available. Currently, the frequency of stock assessments makes it difficult to discern whether or not management measures that are implemented as a result of past stock assessments have been effective prior to subsequent assessments. This makes it difficult to ascertain the impacts that management measures from the prior assessment may be having on the stock. Further, the Agency has adopted the Southeast Data and Review (SEDAR) process for completing stock assessments, which includes three separate workshops, and generally requires more time to complete a stock assessment than past stock assessment methods. For example, the most recent stock assessment for LCS was started in 2005 and completed in 2006, employing fisheries data through 2004. Management measures based on this assessment will be implemented in 2008. However, based on existing stock assessment frequency guidelines, the next scheduled assessment will occur 2009, allowing only one year of management measures based on the 2005-2006 assessment. Thus, results from a 2009 stock assessment may not be representative of the effectiveness of management measures in the past. A 2009 stock assessment may provide the most up-to-date stock data, yet this assessment may not be representative of the best available science. By changing the stock assessment frequency to at least every five years, current management measures would have more time to take effect and this may increase the likelihood that the results management measures would be detected in the following stock assessment.

NS 3 requires that, to the extent practicable, an individual stock of fish be managed as a unit throughout its range, and interrelated stocks of fish be managed as a unit or in close coordination. The preferred alternative suite in this Final EIS is consistent with this NS.

- The preferred alternative suite would to remove sandbar sharks from the LCS complex. The 2005/2006 LCS assessment assessed sandbars separately and recommended a sandbar specific total allowable catch (TAC) of 158.3 mt dw. Based on this recommendation, NMFS would remove sandbar sharks from the LCS complex. This allows sandbars to be managed separately and gives NMFS the ability to track this separate quota more efficiently, which is critical given the overfished and overfishing status of sandbar sharks.
- The 2005/2006 LCS assessment assessed blacktip sharks as having two separate stocks in

the Atlantic and Gulf of Mexico. This delineation was based on tag and recapture data, which indicated a lack of mixing between these populations. The status of blacktip sharks in the Gulf of Mexico was found to be healthy, while their status in the Atlantic was unknown. The assessment recommended that landings in the Gulf of Mexico should not be increased, and recommended that landings in Atlantic remain the same. The Agency is maintaining consistency with stock assessment recommendations by basing the quota for non-sandbar LCS (including blacktips) on average landings reported by Federal and state shark dealers from 2003 to 2005. As such, fishing effort and subsequent landings would not be increased in either region for blacktip sharks. Furthermore, the Agency would manage blacktip sharks as a unit throughout their range which is consistent with NS 3.

NS 4 requires that conservation and management measures do not discriminate between residents of different states. Furthermore, if it becomes necessary to allocate or assign fishing privileges among various U.S. fishermen, such allocation should be fair and equitable to all fishermen; be reasonably calculated to promote conservation; and, should be carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges. The preferred alternative suite in this Final EIS is consistent with this NS.

- The preferred alternative suite and the shark research fishery apply to residents of all states. This alternative would establish a program where vessels with directed shark permits could participate in a research fishery for sandbar sharks. Only vessels participating in this program could land sandbar sharks. Participation in this fishery would be subject to vessels meeting specific criteria designed to meet research objectives while allowing fishermen to earn revenue from selling sharks. These criteria may include, but are not limited to: possession of a commercial shark permit, past involvement in the HMS observer programs, seasonal flexibility with regard to trips targeting sandbar sharks, willingness to take an observer on 100 percent of fishing trips and collect biological samples from landed and released sharks, and past involvement in the Atlantic shark fishery. Vessels not participating in the research program would still be able to land non-sandbar LCS, SCS, and pelagic sharks subject to the respective retention limits. The preferred alternative suite is consistent with NS 4 because current permit holders could apply to participate in the shark research fishery, and shark fishermen not participating in the shark research fishery could still land other shark species in the non-sandbar LCS, SCS and pelagic shark species groups subject to the same regulations. The selection criteria for the shark research fishery would be announced in the Federal Register each year and NMFS would select participants consistent with the research objectives, and the selection criteria.
- While maintaining the mid-Atlantic shark closed area may disadvantage shark fishermen living in adjacent areas because they would have to travel to an open area, it is not a direct allocation of fishing privileges nor does it discriminate between residents of different states. The closure is applicable to individuals from any state. Furthermore, maintaining this closure is warranted under NS4 as a conservation measure to reduce bycatch of neonate and juvenile dusky and sandbar sharks in a known nursery area with no discriminatory intent. Both of these species are overfished and experiencing overfishing, so maintaining this closed area is warranted in light of recent stock assessments.
- Adding new time-area closures consistent with the closures preferred in the South Atlantic Fishery Management Council's (SAFMC) Amendment 14 will ensure that regulations

pertaining to participants fishing with bottom longline gear are consistent between the snapper/grouper and shark fisheries.

- Quotas and retention limits for non-sandbar LCS are based on average effort reported in Coastal Fisheries and HMS Logbooks between 2003 to 2005 and average landings reported in Federal and state shark dealer reports from 2003 to 2005. These landings include trips and landings made by vessels in all regions. Thus, past effort from all regions has been accounted for when NMFS established quotas and retention limits. Removing the regions is not expected to discriminate against participants in the North Atlantic region since fishermen from the North Atlantic region would still have the opportunity to travel to areas where there are more sharks present during the winter months, consistent with how the fishery is currently managed. However, if North Atlantic fishermen traveled to other areas they could incur increased costs. In addition, fishermen in the North Atlantic would be able to land their sharks in any region, since all regions would open and close on the same time schedule. Reduced retention limits for all participants are expected to result in seasons that stay open throughout the year, resulting in fishing opportunities for participants in the North Atlantic region in the summer months when sharks migrate north.
- The authorized recreational species list has been modified from the originally proposed list in the Draft Environmental Impact Statement (DEIS). This amended list more closely aligns with the authorized species in the commercial fishery. NMFS would continue to prohibit sandbar and silky sharks in the recreational fishery due to concerns of misidentification with dusky sharks and because of the overfished status of sandbar sharks. However, most of the commercial shark fishing sector would not be able to retain sandbar sharks unless fishermen are participating in the shark research fishery.

NS 5 requires that conservation and management measures should, where practicable, consider efficiency in the utilization of fishery resources with the exception that no such measure shall have economic allocation as its sole purpose. The preferred alternative suite in this Final EIS is consistent with this NS.

- The preferred alternative suite would not impact the efficiency in the utilization of the fishery resource. The purpose of the shark research fishery in the preferred alternative suite is to implement quotas and retention limits necessary to allow rebuilding and prevent overfishing of shark species while maximizing scientific data acquisition by continuing a limited research fishery for sandbar sharks. By allowing a limited number of historical participants to continue to land sandbar and other species of sharks in a manner resembling how the fishery has traditionally been executed, NMFS can ensure that data for stock assessments and life history samples continue to be collected while allowing a small pool of individuals to continue to collect revenue from sharks.
- NMFS considered shark catch efficiency when calculating retention limits for non-sandbar LCS in the preferred alternative suite by using catch ratios of sandbar to non-sandbar LCS in the Gulf of Mexico and South Atlantic regions.
- NMFS considered the efficiency of the rod and reel recreational fishery because participants can practice catch and release of sharks therefore minimizing mortality of overfished species such as sandbar and dusky sharks.
- Implementing the Marine Protected Areas preferred by the SAFMC is not expected to affect efficiency in the utilization of fishery resources due to the low levels of shark fishing

effort that has occurred in these small areas in the past. Furthermore, enforcement problems could result if fishermen, who use the same gear, have different regulations apply depending on whether they were targeting sharks or participating in Council-managed fisheries.

NS 6 states that conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches. The preferred alternative suite for this Final EIS is consistent with this NS.

- The preferred alternative suite for the management of the shark fishing season allows NMFS to account for variations in the fishery and catches because NMFS would close the sandbar and non-sandbar LCS shark fisheries individually within five days when the respective quota is at 80 percent, thus helping to prevent overfishing.
- The preferred alternative suite would allow vessels in the shark research program to fish under existing trip limits with 100 percent observer coverage, however NMFS would maintain some control over when these trips take place to ensure continuity of the program throughout the year and to encompass regional and seasonal variability among biological samples collected.
- NMFS also provides framework methods, which allows the Agency to change quotas based on over and under harvests, retention limits, and trip limits depending on how the fishery operates as a result of changes and by considering all the different variations between fisheries and regions.
- Modifying the assessment frequency from 2-3 years to at least every five years would still provide NMFS the flexibility to incorporate additional stock assessment methodologies or data while balancing the need to discern whether past management measures have been effective at achieving rebuilding target thresholds and preventing overfishing.

NS 7 states that conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication. The preferred alternative suite in this Final EIS is consistent with this NS.

- The costs associated with the preferred alternative suite are minimal as there would be no fee to participate in the shark research fishery. When analyzing the ecological and socioeconomic benefits in Chapter 4, NMFS determined that the preferred alternatives maximizes scientific data acquisition while mitigating significant economic impacts that are necessary to reduce fishing mortality and effort as recommended by the recent stock assessments. The severity of the negative economic impacts are minimized in the preferred alternatives compared to alternative suites 2, 3, and 5 since the preferred alternatives allow a small pool of individuals to continue to collect revenue from sharks. The preferred alternative suite would also avoid unnecessary duplication because reporting requirements will not change significantly.

NS 8 states that conservation and management measures shall, consistent with the conservation requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to

provide for the sustained participation of such communities, and to the extent practicable, minimize adverse economic impacts on such communities. The preferred alternative suite for this Final EIS is consistent with this NS.

- The preferred alternative suite implements quotas and retention limits necessary to allow rebuilding and prevent overfishing of shark species consistent with NS 1, and maximizes scientific data acquisition by continuing a limited research fishery for sandbar sharks to continue with 100 percent observer coverage. There are significant economic impacts associated with all alternative suites, as a result of the management measures needed to reduce fishing mortality and effort as prescribed by recent stock assessments. NMFS considered a range of alternatives with varying environmental, economic, and social impacts but only certain alternatives would accomplish the goals to rebuild overfished shark species and prevent overfishing. This alternative suite strikes an appropriate balance between positive ecological impacts that must be achieved to rebuild and prevent overfishing on depleted stocks while minimizing; to the extent practicable, the severity of negative economic impacts that will occur as a result. By allowing a limited number of historical participants to continue to land sandbar and other species of sharks in a manner resembling how the fishery has traditionally been executed, the Agency ensures that data for stock assessments and life history samples continue to be collected while allowing a small pool of individuals to continue to collect revenues from sharks. Directed permit holders not selected to participate in the shark research program could still land SCS, pelagic sharks and 33 non-sandbar LCS/vessel/trip which would limit the number of trips targeting non-sandbar LCS sharks, however, would still afford the opportunity to keep some sharks that are landed incidentally, preventing excessive discards.
- Communities may be negatively affected by the need to reduce quotas and retention limits consistent with NS1; however the management measures in the preferred alternative suite would ensure that certain communities would not be disproportionately affected.
- NMFS considered the importance of the recreational fishery to communities and has modified the authorized recreational species list from the originally proposed list in the DEIS. This amended list more closely aligns with the authorized species in the commercial fishery. NMFS would continue to prohibit sandbar and silky sharks in the recreational fishery due to concerns of misidentification with dusky sharks and because of the overfished status of sandbar sharks. However, most of the commercial shark fishing sector would not be able to retain sandbar sharks unless fishermen are participating in the shark research fishery

NS 9 states that conservation and management measures shall, to the extent practicable, minimize bycatch, and to the extent that bycatch cannot be avoided, minimize the mortality of such bycatch. The preferred alternative suite for this Final EIS is consistent with this NS.

- The preferred alternative suite would minimize bycatch as it is expected to reduce overall fishing effort targeting sharks with gillnets and BLL gear while increasing the level of observer coverage on a limited number of vessels participating in the shark research fishery.
- The time/area closure measures in the preferred alternative suite would maintain current

closures as well as add new time/area closures consistent with SAFMC Amendment 14. The time/area closures that have been implemented in recent years have been effective in reducing the bycatch of prohibited, protected and non-target HMS species.

- In addition, the current gillnet gear restrictions that limit gillnet fishing in the Atlantic Ocean during certain times of the year to prevent endangered right whales from entanglement in gillnet gear in core right whale calving areas would not change as a result of this amendment.
- The requirement for longline and gillnet fishermen to attend the protected species safe handling, release, and identification workshops which will educate them on safe handling and release of entangled and/or hooked sea turtles, marine mammals and smalltooth sawfish in order to reduce the post release mortality of bycatch will not change as a result of this amendment.
- Limiting the species of shark that can be possessed by recreational anglers to those that are non-ridgeback species plus tiger sharks that are easy to identify is expected to reduce bycatch of prohibited shark species by reducing the number of prohibited sharks that are mis-identified or mistaken for species that can be legally landed. The Agency is especially concerned about reducing landings of dusky sharks. Thus, landings of silky and sandbar sharks, which look very similar to dusky sharks, would be prohibited in order to reduce bycatch due to misidentification.

NS 10 states that conservation and management measures shall, to the extent practicable, promote the safety of human life at sea. The preferred alternative suite in the Final EIS is consistent with this NS.

- No impact to safety of life at sea is anticipated to result from the preferred alternative suite. The management measures in the preferred alternative suite would not require fishermen to travel greater distances, fish in bad weather, or otherwise fish in an unsafe manner.

10.2 Consideration of Magnuson-Stevens Section 304(g) Measures

Section 304(g) of the Magnuson-Stevens Act sets forth requirements specific to the preparation and implementation of an FMP or FMP amendment for Highly Migratory Species (HMS). See 16 U.S.C. 1854(g) for full text. The summary of the requirements of Section 304(g) and an explanation of how NMFS is consistent with these requirements are below. The impacts of the preferred alternatives and how it meets these requirements are described in more detail in Chapters 2 and 4 of the draft EIS. This section provides only a summary of how each of the requirements is met.

1. Consult with and consider the views of affected Councils, Commissioners, and advisory groups

NMFS published a Notice of Intent on November 7, 2006 (71 FR 65086) announcing the intent to initiate an amendment to the Consolidated HMS FMP. On January 3, 2007 (72 FR 123), NMFS published a Notice of Availability to inform the public of the issues and options presentation that was available on the HMS website. This Notice also announced NMFS intent to hold seven public scoping meetings to discuss and collect comments on issues described in the presentation. A Predraft of the amendment to the Consolidated HMS FMP was developed and

released to consulting parties and HMS Advisory panel (AP) members in March 2007. NMFS presented the Predraft to the HMS AP members at the March 2007 AP meeting to discuss and receive comments. Written comments received on the issues and options presentation, during the scoping meetings, and at the HMS AP meeting were considered at all stages when preparing this draft EIS. NMFS would send the draft EIS to consulting parties including all five of the Atlantic Regional Fishery Management Councils, both the Atlantic and Gulf States Marine Fisheries Commissions, and the HMS AP. NMFS also presented the draft EIS, during the public comment period, at the meetings of the Atlantic Regional Fishery Management Councils, and the Atlantic and Gulf States Marine Fisheries Commissions.

2. Establish an advisory panel for each FMP

As part of the Final Consolidated HMS FMP, NMFS combined the Atlantic Billfish and HMS APs into one panel. This combined HMS AP provided representation from the commercial and recreational fishing industry, academia, non-governmental organizations, state representatives, representatives from the Regional Fishery Management Councils, and the Atlantic and Gulf States Marine Fisheries Commissions. This amendment will not change the HMS AP and NMFS convened a meeting of the HMS AP during the public comment period of the proposed rule to discuss and collect comments on the draft EIS and proposed shark management measures.

3. Evaluate the likely effects, if any, of conservation and management measures on participants in the affected fisheries and minimize, to the extent practicable, any disadvantage to U. S. fishermen in relation to foreign competitors.

Throughout this document, NMFS has described the effects of the management measures and any impacts on U. S. fishermen. The preferred alternative suite in the Final EIS is necessary to meet Magnuson-Stevens Act mandates to rebuild overfished stocks and prevent overfishing which in the long-term is not expected to disadvantage U.S. fishermen in relation to foreign competitors. NMFS acknowledges that the LCS that are caught by U.S. fishermen are also caught by Mexican and Bahamian fishermen and incorporates this information into stock assessments. Canada has a porbeagle shark fishery and conducts stock assessments for this species. The United States has minimal landings of porbeagle sharks and provides the landings information to Canada so that they can incorporate this information into their stock assessments. NMFS also uses results from the Canadian stock assessments to manage porbeagle sharks in the U.S. Exclusive Economic Zone (EEZ).

4. With respect to HMS for which the United States is authorized to harvest an allocation, quota, of fishing mortality level under a relevant international fishery agreement, provide fishing vessels with a reasonable opportunity to harvest such allocation, quota, or at such fishing mortality level.

There is currently no international agreement on shark quotas, allocations, or fishing mortality levels. Therefore, this requirement is not applicable.

5. Review on a continuing basis, and revise as appropriate, the conservation and management measures included in the FMP.

NMFS continues to review the need for any revisions to the existing regulations for HMS. The Amendment 2 to the Consolidated HMS FMP is the culmination of one of those reviews.

6. *Diligently pursue, through international entities, comparable international fishery management measures with respect to HMS.*

NMFS continues to work with the International Commission for the Conservation of Atlantic Tunas (ICCAT) and other international entities such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), to implement comparable international fishery management measures. To the extent that some of the management measures in this Amendment are exportable, NMFS works to provide foreign nations with the techniques and scientific knowledge to implement similar management measures.

7. *Ensure that conservation and management measures under this subsection:*

- a. *Promote international conservation of the affected fishery;*
- b. *Take into consideration traditional fishing patterns of fishing vessels of the United States and the operating requirements of the fisheries;*
- c. *Are fair and equitable in allocating fishing privileges among United States fishermen and do not have economic allocation as the sole purpose; and*
- d. *Promote, to the extent practicable, implementation of scientific research programs that include the tagging and release of Atlantic HMS.*

All of the objectives of the Final EIS indicate how NMFS promotes the international conservation of the affected fisheries in order to obtain optimum yield while maintaining traditional fisheries and fishing gear and minimizing economic impacts on U.S. fishermen. The management measures in the preferred alternative suite in this Final EIS are expected to meet these goals.