

11.0 OTHER CONSIDERATIONS

11.1 NATIONAL STANDARDS

The analyses in this document are consistent with the NS guidelines set forth in the 50 CFR part 600 regulations. The preferred alternatives facilitate rebuilding of shark species by closing a known nursery and pupping area, by creating regional quotas based on MSY and recent participation, by establishing a trimester fishing year, by implementing gear restrictions, and by providing for the thorough and accurate identification of EFH. This is consistent with NS 1, which provides that conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the OY from each fishery. NOAA Fisheries continues to work to protect highly migratory species in the Atlantic Ocean throughout their range, while also implementing domestic measures that are consistent with domestic legislation. The analyses are based on the best scientific information available (NS 2), including a peer reviewed LCS stock assessment, a SCS stock assessment, observer data, and fishery dependent and independent data, which provide for management of these stocks, throughout their ranges (NS 3). The HMS FMP requires periodic stock assessments for species or species-groups. Thus, while this Amendment is based on the best available science at this time, NOAA Fisheries will, as new information becomes available, make appropriate adjustments to the rebuilding plan through rulemakings to ensure that rebuilding occurs within the time frame established.

With regard to NS 4, the preferred time/area closure and VMS requirement are not direct allocations of fishing privileges nor do they discriminate between residents of different states. The time/area closure may disadvantage shark fishermen living in the areas adjacent to the closed area because they would have to travel to an open area, but a closure is justified under NS 4 as a conservation measure to eliminate bycatch of neonate and juvenile dusky and sandbar sharks in a known pupping and nursery area with no discriminatory intent. Furthermore, the closure and VMS requirement apply to all directed shark bottom longline fishermen, so fishermen from all states would be subject to the same restrictions. The establishment of regional quotas is not a direct allocation nor does it discriminate between shark fishermen in different regions. The quota allocations are based on average historical landings and are intended to enhance equity. Even if the establishment of regional quotas might be considered an allocation, the regional quota system is consistent with NS 4. It is fair and equitable because it is based on historical landings, and NOAA Fisheries will be able to monitor how quotas are used and adjust them over time to promote achievement of OY. Regional quotas are also consistent with the FMP objectives of (1) better coordinating domestic conservation and management of shark fisheries considering the multispecies nature of many HMS fisheries, overlapping regional and individual participation, international management concerns, historical fishing patterns and participation, and other relevant factors as well as (2) minimizing, to the extent practicable, the economic displacement and other adverse impacts on fishing communities during the transition from overfished fisheries to healthy ones. In addition, it will not impose any hardships because the quotas are based on average historical landings (over the past three years) expressed as a percentage of average landings across all regions. The regional quotas promote conservation, and because they are

based on historical information, they will not result in any person or entity acquiring excessive shares of fishing privileges.

The LCS complex is overfished and overfishing is occurring. The FMP objectives, consistent with NS 1, include preventing overfishing, rebuilding overfished stocks, and reducing bycatch. Given these responsibilities, the preferred alternatives consider efficiency where practicable (NS 5). Specifically, preferred alternative D2 promotes efficiency by not implementing a minimum size for commercially caught LCS, SCS, or pelagic sharks. The preferred time/area closure (alternative K2) combined with the VMS requirements (alternative J4) will allow the fishery to operate at the lowest possible cost (e.g., fishing effort, administration, and enforcement) (NS 5). With regard to NS 6, the preferred alternatives are flexible enough to be changed under the FMP framework to accommodate biological, social, and economic variability. Specifically, the mechanism for adding and removing species from the prohibited species group could allow for more rapid and adaptive management. NOAA Fisheries will continue data collection programs with respect to this fishery in order to assess the effectiveness of the program. NOAA Fisheries considered the costs and benefits of the alternatives using social and economic inputs in Chapters 4, 6, and 9 of this document, as required by NS 7 and NS 8. As reflected in those chapters, in analyzing and comparing the ecological, economic, and social impacts of various alternatives, including no action alternatives, NOAA Fisheries has concluded that the benefits of the preferred alternatives are real and substantial relative to administrative, research, and enforcement costs, and costs to the industry (NS 7).

Consistent with NS 8, NOAA Fisheries has considered the impacts of these alternatives, to the extent practicable, on fishing communities in Chapter 9. As described in Chapters 4, 6, and 9, certain measures, such as preferred alternative K2, may impact particular communities, however, these measures are needed in order to ensure that the overfished/overfishing problem is addressed in the LCS fishery. Given the need to address overfishing, the preferred alternatives minimize adverse impacts to the extent practicable. This document specifically addresses NS 9 by preferring alternatives that minimize bycatch and bycatch mortality, to the extent practicable, in the Atlantic shark fisheries. As reflected in Chapters 4, 6, and 9, NOAA Fisheries has analyzed the ecological impacts of various bycatch alternatives on the bycatch species and protected species and related economic and social impacts, as well as administrative, enforcement, and management considerations. Based on these analyses and in consideration of the other national standards, NOAA Fisheries has concluded that the preferred bycatch alternatives minimize bycatch and minimize the mortality of such bycatch to the extent practicable. In terms of NS 10, the preferred alternatives described in Chapters 2 and 4 will not require fishermen to fish in an unsafe manner. Specifically, preferred alternative J4 requires the use VMS which promotes the safety of life at sea. NOAA Fisheries urges fishermen to use caution, but cannot control what individual fishermen do in response to the preferred time/area closure or other preferred alternatives.

11.2 PAPERWORK REDUCTION ACT

In addition to existing bycatch reduction measures (alternative J1), alternative J4 (preferred) would require VMS on shark gillnet vessels during right whale calving season and would require VMS on directed bottom longline shark fishing vessels operating near the time/area closure off of North Carolina (alternative K2).

In response to preferred alternatives J4 (VMS requirements) and K2 (implementation of a time/area closure off North Carolina) a Paperwork Reduction Act (PRA) package was completed and submitted to the Office of Management and Budget for data collection with VMS in Atlantic shark fisheries. This new information collection (OMB NO.: 0648 - 0483) was approved on 09/28/2003 and expires on 09/30/2006.

The VMS program would be used by NOAA Fisheries to reduce observer program costs and improve enforcement of existing and proposed time/area closures, to monitor the fleet during closed periods, to deter illegal fishing, to increase efficiency of surveillance patrols, to facilitate enforcement investigations, and to support enforcement of other regulations, such as closed seasons, once a quota has been reached.

The VMS program would aid NOAA Fisheries' Office of Law Enforcement in monitoring and enforcing the existing and preferred time/area closures effecting commercial shark fisheries. Currently, shark gillnet fishermen must comply with specific requirements in the Southeast U.S. Observer Area (from 32°00' N to 26°46.5' N and extending from the shore eastward to 80°00' W) and specific gear prohibitions in the Southeast U.S. Restricted Area (from 32°00' N to 27°51' N and extending from the shore eastward to 80°00' W), from November 15 - March 31. This time/area closure was implemented to minimize right whale interactions as part of the Atlantic Large Whale Take Reduction Plan and authorized under the Marine Mammal Protection Act.

Additionally, an area from Oregon Inlet, North Carolina at 35°41' North offshore to 74°51' West, then following the 60 fathom contour to 35°30' North and 74°46' West and continuing along the 60 fathom contour south to 33°51' North and 76°24' West will be closed to directed shark fishing vessels with bottom longline gear on board from January 1 - July 31 (Figures 2.2 and 4.1). This time/area closure is designed to reduce bycatch and mortality of neonate and juvenile dusky and sandbar sharks in compliance with National Standard 9 of the Magnuson-Stevens Act.

Approximately 14 directed bottom longline shark fishing vessels will be required to install VMS units and activate them during the January 1 - July 31 time/area closure period. However, NOAA Fisheries estimates that only seven of these vessels will need to purchase new VMS units (see analysis in Appendix 4). The five currently active shark gillnet vessels will be required to install VMS units and activate them during the November 15 - March 31 right whale calving period. Since there is no limit on the number of limited access permit holders that can use shark gillnet gear (the total number of vessels is limited, not the gear), it is possible that the number of vessels required to install VMS units during the right whale calving period could increase,

although NOAA Fisheries does not believe that this fishery will expand. Traditional methods of surveillance by ships and planes would be ineffective in patrolling these large areas. VMS is designed to automatically provide periodic position reports on all vessels with transmitting units installed.

Using VMS to verify the location of a vessel is passive and automatic, requiring no reporting time on the part of the vessel operator. More specifically, possible benefits for management include increased compliance with time/area restrictions, enhanced enforcement effectiveness, and improved catch/effort data collection. Other possible benefits of the VMS include increased vessel safety and dependable and confidential communications, which may improve fleet management.

Monitoring and enforcement are essential components of fisheries management. Monitoring fishing vessels facilitates enforcement of NOAA Fisheries' conservation and management regulations by enabling detection of violations. Monitoring also promotes compliance by having a general deterrent effect. Lack of proper monitoring and enforcement makes it difficult to gauge the effectiveness of conservation and management measures and may compromise their success. In the case of overfished stocks, success is necessary to prevent further overfishing and subsequent decline to dangerously low stock levels. As a practical matter it is very difficult for enforcement personnel to effectively monitor the full operational range of the U.S. directed shark fishing fleet without having some method of detecting a vessel's location. With respect to shark gillnet and shark bottom longline time/area closures in particular, the size of the closed areas significantly diminishes the likelihood of detection through conventional surveillance methods.

VMS is the best technology available at this time for monitoring vessel locations to aid enforcement efforts. The integrated Global Positioning System (GPS) provides a near real-time mechanism for submitting accurate position reports. VMS is considered much more accurate than the existing system (i.e., self-reported logbooks) for reporting geographical distribution of fishing effort for each trip. Fishing vessel logbook records (NOAA FORM 88-186) are submitted by fishermen no later than seven days after offloading and provide limited information regarding the distribution of fishing effort. NOAA Fisheries is aware of problems with the accuracy of self-reported logbooks. Logbooks provide essentially one statistical grid location per species per trip and that information is not reported until after the trip is complete. VMS, on the other hand, provides 24 position reports each day for the duration of the trip. This also allows enforcement to react immediately if a vessel is found fishing in a closed area.

Some vessel owners, in other fisheries, have taken advantage of this technology by linking personal computers to the VMS units so that improved communications with other vessels and port facilities can be made. This has personal, business, and safety advantages for fishermen and may provide a platform for future electronic logbook reporting of both target and non-target species.

The preferred regulations will require shark fishing vessels to install VMS units at an initial average cost of approximately \$1,300-3,250 (\$1,000-2,500 per unit and \$300-750 installation fee), an average annual maintenance cost of approximately \$500/year, and approximately \$1.44/day for position reports. In an attempt to provide vessel owners with flexibility and help minimize costs, NOAA Fisheries has type-approved four VMS units from two manufacturers for use in the pelagic longline fisheries. No VMS units have been type-approved specifically for use in the Atlantic shark fisheries as of this date. Based on the range of VMS units commercially available, NOAA Fisheries expects any VMS unit type-approved for Atlantic shark fisheries to be similar or identical to those type-approved for the pelagic longline fisheries. NOAA Fisheries Office of Law Enforcement will publish in the Federal Register a type-approval list for units and service providers before the requirement is fully implemented/effective

Once the VMS is installed, no action is required on the part of the vessel operator except to verify that the system is on. While at sea, position reports will be automatically sent from the VMS on an hourly basis.

There would be no significant costs to the Federal government. NOAA Fisheries is developing an integrated hardware and tracking system to manage the various VMS programs being developed for many other U.S. fisheries. Those costs are already covered by current programs of the Office of Law Enforcement and are extraneous to this collection. Given the current capacity of these systems, incremental costs specifically attributable to the Atlantic shark fisheries VMS program are negligible.

11.3 ONGOING MANAGEMENT AND THE PROCEDURE FOR ADJUSTING THE MANAGEMENT MEASURES

Section 3.10 of the HMS FMP outlined the process for amending or modifying regulations via framework or FMP amendment action. In the HMS FMP, NOAA Fisheries stated that:

Based on the annual SAFE report, deliberations of the AP, and other relevant factors, [NOAA Fisheries] will determine whether any adjustments to the regulations are necessary to implement the FMP's management measures and to achieve the management objectives and rebuilding programs stated in this FMP. Adjustments made through the framework to meet the objectives of the FMP may include changes in:

- actions to implement ICCAT recommendations, as appropriate;
- domestic quotas;
- Atlantic tunas Purse Seine category cap on bluefin tuna quota;
- commercial retention limits;
- recreational retention limits;
- maximum sustainable yield or optimum yield levels based on the latest stock assessment or updates in the SAFE report;

- species size limits;
- permitting and reporting requirements;
- composition of the species groups;
- fishing year or season;
- time/area restrictions;
- target catch requirements;
- gear prohibitions, modifications, or use restrictions;
- effort restrictions; and
- essential fish habitat.

Based on this FMP Amendment, NOAA Fisheries is adding the following items to the list of regulations that could be adjusted through a framework action to meet the objectives of the FMP:

- any shark species management group based on additions to or removals from the prohibited species list;
- classification system within shark species groups;
- shark management regions and the regional quotas; and,
- quota allocations between shark fishing seasons.

References for Section 11.0

No references cited.

References for Section 11.1

No references cited.

References for Section 11.2

No references cited.

References for Section 11.3

No references cited.

