

fleet? VMS should be expanded to all vessels all-year round.

Response: VMS is required for all pelagic longline vessels to aid in the enforcement of multiple large scale closed areas in a highly mobile fishery. In addition to approximately five shark gillnet vessels, the VMS requirement analyzed in this rule would require vessels located near the time/area closure (approximately 14 vessels) to install and activate a VMS unit.

Analyses indicate that while vessels in the pelagic longline fleet are highly mobile, vessels in the bottom longline fleet rarely fish far from their reported homeport. Thus, NMFS believes that requiring VMS for only that sub-population of the shark fishing fleet that fishes in the vicinity of the time/area closures is appropriate because the intent of the measure is to monitor vessel activity to ensure that time/area closures are effective.

Comment 7: If gillnet gear remains authorized for use in the shark fishery, VMS must be mandatory to ensure compliance during right whale calving season and to facilitate cooperative state/Federal enforcement efforts to monitor this fishery.

Response: The final action requires shark gillnet vessels to install and activate VMS units during the right whale calving season (November 15–March 31). This measure is expected to facilitate enforcement efforts.

iii. Other Gear Restrictions.

Comment 1: We support all of the alternatives being considered including limited soak times, reducing the length of the gear, and, especially requiring circle hooks. Reducing soak time and requiring the use of circle hooks could be an effective means of protecting juvenile sharks. These measures could reduce discard mortality of dusky sharks, which remains a candidate for listing under ESA, and other bycatch species.

Response: NMFS considered multiple gear restriction alternatives in Amendment 1. The preferred alternatives that require VMS on a sub population of commercial shark fishing vessels as well as require shark bottom longline vessels to use corrodible hooks, possess release equipment, and move one nautical mile after an interaction with a protected species.

Comment 2: It is unclear from the analyses presented in the draft amendment whether the most effective measure to reduce mortality of small sharks would be a series of time/area closures, a minimum size combined with measures to reduce bycatch, or some other plan. Therefore, we express support for measures that seem likely to

reduce juvenile shark mortality, especially area closures. However, we encourage NMFS to do a more thorough analysis of the effectiveness of each bycatch reduction measure and to develop a comprehensive bycatch reduction plan.

Response: NMFS believes that a combination of measures will be most effective in reducing bycatch and bycatch mortality of protected species and small sharks in the shark fishery. Thus, NMFS is implementing a time/area closure, a requirement to possess and use release equipment, and a minimum size in the recreational fishery. NMFS has also issued an implementation plan to enhance current bycatch reduction efforts in HMS fisheries under the guidance of the 1998 NMFS Report, Managing the Nation's Bycatch. This report, which is posted on the NMFS website, contains the Agency's national bycatch goal, which is "to implement conservation and management measures for living marine resources that will minimize, the extent practicable, bycatch and the mortality of bycatch that cannot be avoided." The NMFS National Bycatch Strategy and the HMS Bycatch Implementation Plan are discussed in Amendment 1.

Comment 3: The requirement of non-stainless steel corrodible hooks should be readily accepted by the industry and, because most vessels already use these hooks, there will be little or no economic hardships or changes in fishing practices. These hooks corrode in a much shorter period of time and would decrease impairment of feeding and wounding of sea turtles and thus, increase post-release survival.

Response: NMFS agrees and is implementing a requirement for their use on shark bottom longline vessels.

Comment 4: NMFS received several comments regarding the requirement for shark bottom longline vessels to move one nautical mile after an interaction with a marine mammal or sea turtle. The comments include: Requiring vessels to move one nautical mile after an interaction with a sea turtle or marine mammal should not significantly affect normal fishing operations because most vessels already move more than one mile after hauling their gear particularly if the set caught sea turtles or a lot of juvenile sharks. Some vessels travel substantially further to dump carcasses from dressed fish in order to prevent contamination of the fishing grounds. Requiring a vessel to move after an interaction with a protected species can be difficult to enforce unless enforcement personnel are on the scene when the gear is retrieved. If sea turtles are caught in

gear, the vessel should move 20 nautical miles away, not one.

Response: NMFS believes that the requirement for shark bottom longline vessels to move one nautical mile after an interaction with a protected species is appropriate for the shark bottom longline fishery. This requirement would reduce the probability of another interaction with a protected species because marine mammals, sawfish, and sea turtles often aggregate in clusters. By requiring vessels to move after an interaction, the vessel would increase the likelihood of avoiding additional animals in a cluster when setting subsequent gear. This requirement could increase fuel costs due to increased the time transiting to another fishing area and increase time needed to fish if alternate fishing grounds are not as productive for target species. However, because few marine mammals, sawfish, or sea turtles have been observed caught, NMFS does not believe that this requirement would affect more than a few trips for all vessels combined, each year. Moreover, NMFS expects that vessels will comply with the requirement because, during normal fishing practices, vessels may already move more than one mile after hauling their gear. Moving more than one mile increases the chance of a vessel encountering another cluster of protected species.

Comment 5: NMFS received several comments regarding the possession of release equipment on shark bottom longline vessels. The comments include: The safe removal of hooks and line before release can dramatically increase the chances of survival of the released bycatch and has been endorsed by the U.S. pelagic longline fleet, ICCAT, Inter-American Tropical Tuna Commission (IATTC), and various non-governmental organizations (NGOs). The Southeast Fisheries Science Center has developed a line cutter that is safe and effective in removing line from entangled marine mammals and sea turtles in the pelagic longline fishery. Vessels that can boat smaller sea turtles should boat them in order to better control their gear removal procedures. Dehooking devices, line cutters, and dip nets are relatively simple to use and techniques can easily be transferred from fishery to fishery and nation to nation.

Response: NMFS agrees that there are benefits of using release equipment and is implementing an alternative that will require the possession of release equipment on shark bottom longline vessels.

Comment 6: Requiring workshops to certify that a permit holder has passed a training course on the proper use of