

the re-aggregating the LCS complex; however, NMFS should not abandon the goal of species-specific management. Because fishermen can actively target sandbar and blacktip sharks, we prefer the alternative that allows for species-specific shark groupings or, alternatively, the ridgeback/non-ridgeback species groupings. The stock assessment recommended that every effort be made to manage the LCS fishery on a species by species basis; thus, we support LCS groupings with different closure dates possible.

Response: NMFS considered five different LCS classifications in developing the proposed and final rule. The aggregate LCS classification with one closure date is preferred because, in combination with the other preferred alternatives, it is (1) expected to maintain historic fishing practices (since 1993) and food availability in the market place, (2) expected to reduce burden on fishermen for sorting, (3) expected to decrease, or at least not increase, the number of protected resource interactions; and (4) not expected to increase regulatory discards. During this rulemaking process NMFS heard that many fishery participants cannot accurately identify or effectively target individual shark species. As such, NMFS does not believe that a species-based classification is warranted at this time, but will reconsider this issue when the ability to identify and target shark species improves.

Comment 2: The preferred alternative is the same classification that was in place from 1993 through 2002 but is not consistent with the rebuilt status of sandbar and blacktip shark or the economic needs of shark fishermen.

Response: The final action for LCS classification (*i.e.*, aggregate LCS, one closure date) seeks to minimize bycatch (*i.e.*, regulatory discards) of both rebuilt and overfished species of LCS, which would otherwise occur under separate closure dates or partial closures of a mixed fishery. While sandbar and blacktip sharks are no longer overfished and, in the case of blacktip sharks, may be able to withstand an increase in harvest, NMFS also needs to rebuild overfished LCS. As noted above, species-specific management is not feasible at this time. This final action allows fishermen the opportunity to catch the entire quota without decreasing efficiency (*i.e.*, increased time to sort catch, increased time at sea to make up for lost catch resulting from regulatory discards, etc.), thus, maximizing economic benefits as compared with the other classification alternatives considered.

Comment 3: NMFS should increase research, survey, and monitoring efforts to acquire the critical information on individual life histories, ecological requirements, and stock conditions to enable more species-specific management. NMFS should develop a plan of action for moving towards species-specific management in the future.

Response: NMFS is supportive of increasing scientific research, surveys, and monitoring efforts of shark populations, provided that funding is available to do so. Currently, NMFS funds a number of shark focused research programs including, but not limited to: (1) Cooperative shark research (*i.e.*, between Southeast Fisheries Science Center and Mote Marine Laboratory), (2) reducing blue shark bycatch in pelagic longline fisheries, (3) delineation of winter nursery grounds, migratory patterns, and critical habitat of juvenile sandbar sharks in the western Atlantic Ocean, and (4) various observer programs in the shark fishery. NMFS will review species-specific information and incorporate such information into stock assessments, as appropriate, as it becomes available and intends to pursue workshops to improve species identification by fishermen and dealers in the future. As such, NMFS may consider implementation of species-based LCS classifications when the ability to accurately identify and effectively target shark species improves.

Comment 4: National Standard 1 requires NMFS to adopt alternatives that result in the lowest quotas for vulnerable and overfished species and minimize bycatch to the greatest extent possible. Therefore, NMFS should adopt the alternative that aggregates LCS and closes the fishery when the quota for the most vulnerable species is met.

Response: Of the LCS classification alternatives considered, the LCS classification final action best complies with National Standard 1 because it, in combination with the final action for the quota basis, prevents overfishing and facilitates rebuilding of LCS while achieving optimum yield on a continuous basis from the fishery. Additionally, the selected alternative is expected to decrease, or at least not increase, the number of protected resource interactions and not expected to increase regulatory discards, which is consistent with National Standard 9. Closing the fishery when the quota for the most vulnerable species is met is not a viable alternative at this time because to date there is limited data available on individual LCS species beyond that of

sandbar and blacktip. Without species-specific assessments, it is difficult to say which LCS species have highest vulnerability or even what the quota should be for any individual species. NMFS may consider this alternative as more information becomes available in the future.

B. Shark Quota Administration

Comment 1: NMFS received a range of comments regarding the combination of regional quotas and trimester seasons (*i.e.*, three four-month periods). Comments included: We support the proposed administration of regional and trimester seasons. We cannot support the proposed administration of regional and trimester seasons. Regional and trimester seasons will provide for more flexible management and improve quotas as a management tool. The regional quotas and trimester seasons will force vessels down to Florida for the January opening and will force them to fish for a shorter amount of time.

Response: NMFS considered three separate alternatives regarding seasons and two alternatives pertaining to regional quotas. NMFS is implementing trimester seasons with regional quotas because this combination will (1) aggregate the majority of shark pupping into one fishing season (*i.e.*, second trimester) as opposed to divide it into two or more seasons, which is possible with either the semi-annual or quarterly season approaches, (2) provide managers with flexibility to adjust regional quotas, where necessary, to prevent mortality on juveniles and reproductive female sharks, (3) provide a higher degree of resolution on which to manage seasonal fisheries, (4) minimize the social and economic costs associated with switching gear more often (*i.e.*, only three times as opposed to four per year), (5) give a higher percentage of the quota to each open season than would occur under a quarterly season approach, and (6) will increase the number of open seasons (*i.e.*, three as opposed to two) and spread them across the calendar year, thereby promoting greater economic stability of fishery participants.

Comment 2: NMFS received a range of comments regarding the proposed trimester approach. Comments included: The entire season, from January through November, should be closed to protect fish. The second semi-annual season closes too early. The trimester seasons will spread out the landings and avoid current price drops. The trimester approach will allow fishermen to catch sharks when grouper prices are lower and helps sharks be available year-round. Trimester seasons