

70-percent probability of rebuilding the stock over the course of the 26-year rebuilding period. Additionally, as more species-specific information becomes available, NMFS will attempt to conduct species-specific assessments and evaluate possible management measures that could focus on those species that are the most vulnerable or that need the most protection.

Comment 4: In considering the management options and probability of rebuilding sharks, having an additional set of alternatives with a higher probability of success would have been useful for comparison purposes. As it stands, the most conservative alternatives are the ones chosen as the preferred alternatives and they may be insufficient to meet the management goals. As such, the preferred alternatives in the amendment should be considered the absolute minimum necessary to manage sharks consistent with the advice of the 2002 stock assessments.

Response: As required under NEPA, NMFS considered a wide range of alternatives designed to rebuild LCS. The range of alternatives included those that could be considered risk-prone (e.g., removing the retention and/or size limits in the recreational fishery) to risk-averse (e.g., allowing no retention in the recreational fishery). From all the alternatives considered, NMFS selected a group of alternatives that, consistent with the Magnuson-Stevens Act, is likely to rebuild the LCS complex within the revised rebuilding time frame while allowing for a viable shark fishery. If warranted based on the results of future stock assessments, NMFS can adjust the commercial quota or other management measures to ensure the 70-percent probability of rebuilding the stock over the course of the 26-year rebuilding period.

Comment 5: The proposed rebuilding time frame is the maximum allowed under the National Standard guidelines and is set using the entire complex rather than considering the biology of each individual species. We encourage NMFS to consider stratifying the time frame by considering the biology for individual species.

Response: NMFS would like to move toward more species-specific management in the future and will do so if fishermen can demonstrate a better ability to target and/or avoid certain species of sharks, species-identification among commercial and recreational fishermen and commercial dealers improves, and enough scientific data are collected that allows for more species-specific stock assessments. Thus, NMFS will consider revising the basis for calculating the commercial quota and

the classification scheme to consider a more species-specific approach to management when sufficient data are available to do so effectively.

Comment 6: The rebuilding time frame should be calculated from the time the fishery was declared overfished, in this case 1999. Restarting the clock based on new assessment information is not required by the Magnuson-Stevens Act.

Response: NMFS had originally finalized a rebuilding plan in the 1999 HMS FMP that was designed to rebuild ridgeback LCS in 39 years and non-ridgeback LCS in 30 years. This rebuilding plan was based on the projections from the 1998 LCS stock assessment. Based on a peer review of that stock assessment, NMFS determined that the projections from that stock assessment should not be used as the basis for management decisions. For this reason and as a result of the change in status of the two primary LCS species in the fishery, NMFS determined it was necessary to revise the rebuilding plan. Under National Standard 1, a rebuilding plan begins when the first measures to rebuild the stock are implemented. NMFS notes that under this revised rebuilding plan, the LCS complex will be rebuilt by 2030, which coincides with the time period projected for rebuilding non-ridgeback LCS sharks under the 1999 HMS FMP (2029) and is less than the 1999 HMS FMP rebuilding time period projected for ridgeback LCS sharks (2038).

Comment 7: Applying a 70-percent probability to the setting of a time frame does nothing to enhance conservation and increases risk to the sharks. Choosing the 27-year time frame over a 10-year time frame is, at best, conservation neutral because the management measures, at least for 2004, are the same regardless of the rebuilding end date. At worst, choosing the longer time frame is riskier because it allows shark stocks to linger longer at lower biomass levels and could allow for inappropriate increases in fishing effort in future years before the complex is rebuilt.

Response: The 70-percent probability of achieving the rebuilding target will enhance conservation, reduce risk, and facilitate rebuilding of LCS. NMFS disagrees that a 10-year time frame would be consistent with the same management measures applied under the revised 26-year time frame. In the HMS FMP, NMFS decided to use a higher probability standard for sharks because the biology of sharks is different than other HMS and fish in that they take a number of years to mature, have

few pups per brood, and generally only reproduce every other or every three years. This, combined with the fact that they are migratory and that some of their prey species are overfished, has led to the determination that a higher level of certainty is required when setting management actions for sharks. Under a 10-year rebuilding time frame, even with a closure of the fishery, NMFS still would not reach a 70-percent probability of rebuilding the LCS complex.

Comment 8: Probabilities of success should be applied only once a rebuilding time frame is set. The HMS FMP, other FMPs, and courts have all noted that management measures must have at least a 50-percent chance of success. The 2002 LCS stock assessment found that a 50-percent reduction in catch has a 50-percent chance of rebuilding the LCS complex within 10 years. Thus, the plan meets the minimum probability of success. Ironically, NMFS does not apply the 70-percent guide to the selected time frame, noting instead that 64 percent is close enough.

Response: By applying probabilities of success only once a rebuilding time frame is set, NMFS would have no basis for determining whether or not a stock could likely rebuild in less than 10 years or more than 10 years. This could result in unrealistic rebuilding time frames that could be so short as to leave no option other than closing the fishery or that could be so long as to never result in rebuilding the stock. Instead, NMFS uses the probability of success both in setting the rebuilding time frame and in selecting all the alternatives to ensure that, taken together, the suite of alternatives will meet the probability standard. Thus, in Amendment 1, while reducing the overall catch by 45 percent does not give a 70-percent probability of success, the combination of catch reductions with other management actions that will likely reduce mortality of released catch or protect juvenile sharks does have a 70-percent probability of success.

2. Commercial Management Measures

A. LCS Classification

Comment 1: NMFS received a range of comments regarding the proposed classification. Comments received included: It is easier to comply with one closure date; violators can take advantage of two closure dates. We support the preferred alternative because it will simplify the regulations and reduce regulatory discards. We agree that species-specific quotas are not reasonable now and therefore support