

continuing basis. A constant supply of scallops would also dampen the adverse economic impacts on markets that could be caused by erratic or cyclic patterns of scallop abundance.

The State of Alaska opened only limited areas in State waters to fishing for scallops under quotas that will protect scallop stocks within State waters from any increase in fishing effort that may occur because of the closure of Federal waters. For the 1995 fishing season, only the State waters of the Dutch Harbor and Adak areas opened to scallop fishing as scheduled on July 1. Available fishing grounds are extremely limited and harvest amounts are not expected to be significant. The harvests in these areas from the 1993 and 1994 seasons were only 40,000 lbs (18 mt) and 2,000 lbs (0.9 mt), respectively. Furthermore, scallop harvests and crab bycatch rates will be assessed in-season to guide management decisions and inseason closures.

Comment 28. The proposed FMP states that weathervane scallops possess biological traits (e.g., longevity, low natural mortality rates, and variable recruitment) that render them vulnerable to overfishing. It is not clear why these traits would render scallops vulnerable to overfishing. In fact, the trait of variable recruitment is a trait that can result in resource restoration.

Response. Resource restoration is a factor of numerous variables, including recruitment and natural mortality (M). A number of biological reference points is widely accepted for the management of fishery resources. One of these points is fishing mortality (F) at a level that equals natural mortality (M). If a stock exhibits low M, then chances increase that an unknown F is actually greater than M. Lacking more definitive information, another basic premise of traditional fishery management is that species of large size, longevity, and low natural mortality tend to be vulnerable to overharvest (Adams 1980; Leaman 1991). Moreover, published literature (Murphy 1967) shows that species that reproduce at multiple ages with variable reproductive success are very vulnerable to overharvest when fishing alters the age structure such that the population approaches a single reproduction. In the case of scallops, fishing-induced shifts in age structure to ages 2–6, as occurred in the early 1970s, reduce the stock's ability to maintain itself under periods of poor recruitment.

Comment 29. Management alternatives exist to a closure of Federal waters to fishing for scallops. For example, NMFS could impose a quota of 1.1 million lbs (499 mt) in Federal waters and require an observer aboard

every vessel. When the quota will be reached, NMFS could close the fishery. Concerns about a derby-style fishery could be addressed through daily or weekly quotas or vessel specific quotas or allocations.

Response. NMFS disagrees with the commenter's approach. NMFS does not at this time have information to justify how the harvest of a particular quota (e.g., 1.1 million lbs) should be spread among potential management areas to prevent localized depletion of scallops. If a single harvest amount were specified and allowed to be fished without this information, scallop stocks could be adversely impacted. Requiring an observer on board every vessel would not ameliorate this situation. The Council is in the process of preparing an amendment to the FMP that would establish a Federal management regime authorizing a controlled fishery for scallops in Federal waters as soon as possible. In addition to quotas and levels of observer coverage, the Council will likely consider measures such as area closures and prohibited species bycatch allowances to protect other fish species (e.g. crabs). Also, the Council will likely consider measures necessary for inseason management of the scallop fishery (e.g., gear configurations, crew sizes, recordkeeping and reporting requirements). The Council will consider carefully each of these measures as to whether it is necessary for conservation and management of the scallop fishery. Public comments will be invited, responded to, and if necessary, adjustments to particular management measures might be developed. Once the Council recommends its preferred alternative for each particular measure, NMFS will determine whether it comports with the national standards and other applicable laws, and decide whether to approve it. This process, although lengthy, is essential to provide a rational regime that responds to NMFS's responsibilities under the Magnuson Act to conserve and manage the scallop fishery off Alaska.

Comment 30. In recent years, the catch capacity and capitalization in the Alaska scallop fishery has become excessive due to speculative entry. The result has been severe financial pressure on fishery participants. The only way to reduce this pressure is to reduce excessive capacity to a rational level. The management of this fishery must proceed as soon as possible towards a comprehensive system that will optimize the fleet at a more rational level.

Response. NMFS agrees. See response to Comment 29.

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