

PART 5: MANAGEMENT OBJECTIVES

§510 Introduction

Before committing Federal resources to the development and implementation of a fishery management program for sea scallops, the existing institutional frameworks were reviewed to determine whether the management problems (see §120) could be satisfactorily addressed by other management authorities. Thus, the first major alternative considered by the Council in the development of the FMP was the "no action" alternative. This alternative would mean not developing and implementing a federal plan to manage the sea scallop fishery in the Fishery Conservation Zone (FCZ), but rather leaving management of sea scallops to state authorities. The scope of current state management programs is described in Part 4. All other alternatives to "no action" reflect a commitment by the Council to embark on a federal management program with objectives and measures developed according to the criteria and national standards of the FCMA.

The Council determined that the management problems identified (see §120) could not be satisfactorily addressed through state regulation and industry practice alone, particularly in recognition of the fact that over 90% of the commercially exploited resource is located in waters not subject to state authority. Therefore, the Council concluded that it would exercise its authority under the FCMA to develop a management program for the sea scallop resource which may be generally found from the inshore waters of New England to the Northern Edge of Georges Bank and southward along the mid-Atlantic shelf to North Carolina.

Before the Council could identify reasonable alternative specifications of a management program for sea scallops, a fundamental management policy, leading to the adoption of management objectives, needed to be articulated. Three basic management policies were available to the Council, each implying different underlying management objectives and supporting management strategies:

- 1) to address the long-term productivity of the sea scallop resource,
- 2) to address the quality and volume of landed sea scallops, independent of long-term supply, or
- 3) to address the overall long-term benefits derivable from harvesting and use of the sea scallop resource.

The first policy alternative reflects a biological approach which does not take specific account of economic impacts, although economic benefits may in fact accrue in the long-run. The second alternative looks principally at the short-term economic aspects of the fishery without accounting for the future viability of the resource. The third alternative recognizes that the long-term economics of the fishery depend upon biological considerations for the long-term productivity of the resource. In view of the important bio-economic relationships that exist in the sea scallop fishery, and the long-term economic significance of the sea scallop fishery in New England and

the Mid-Atlantic, the Council selected a policy based on the third alternative, which called for the design of a management program that meaningfully addresses the achievement of long-term benefits to the region from the continued prosecution of the sea scallop fishery.

§520 Statement of Management Objective

Consistent with the policy discussed in §510, the Council adopted the following overall management objective:

to maximize over time the joint social and economic benefits from the harvesting and use of the sea scallop resource.

In support of this broad objective the following factors shall be considered:

- a) Restoration of the adult stocks in terms of their abundances and age distribution can be expected to reduce the year to year fluctuations in stock abundance caused by variation in recruitment.

In order to achieve the maximum long-term average harvest from the scallop resource, while minimizing fluctuations in annual catch, it is necessary to increase both the abundance of sea scallops as well as achieve a broad distribution of year classes supporting harvests. When the stock is reasonably abundant and a number of age classes are present, removals will not be solely dependent upon those scallops which are just entering the fishery. As such, the annual variability in recruiting year class strength will impact less on the relative stability of annual catches.

- b) Enhancement of the yield per recruit for each stock.

Independent of the total sea scallop abundance, the average yield that may be derived from each individual within the fishable stock (yield per recruit) is generally greater as the size at first capture is increased. Where a scallop stock is heavily exploited, increasing age at entry by as little as one year may increase yield per recruit by over 20%. Moreover, increasing age at entry can be expected to increase the probability of good recruitment by allowing scallops to reach maturity and spawn before becoming subject to harvest.

- c) Evaluation of the impact of the plan provisions on research, plan development, and enforcement costs.

An important consideration is unfavorable impact on the net benefits from scallop management that is associated with costs of enforcement of regulations. From another view point, it becomes necessary to evaluate the costs of additional biological research in relation to the expected benefits from improved management facilitated by such research.

- d) Minimization of adverse environmental impacts on stock levels and utilization.

It is recognized that the most effective way of achieving this objective may be through management of the exploitation of competing ocean activities, i.e., ocean dumping.