

MEMORANDUM

TO: Council, SSC, and AP Members

FROM: Clarence G. Pautzke  
Executive Director

ESTIMATED TIME  
2 HOURS

DATE: June 1, 1998

SUBJECT: Scallop Overfishing Definitions

**ACTION REQUIRED**

Final review of an amendment to revise definitions of overfishing, MSY, and OY for the Alaska Scallop FMP.

**BACKGROUND**

National Standard 1 states that conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry. NMFS published final National Standard guidelines in the Federal Register on May 1 to assist the Councils with amending FMPs.

An EA/RIR was drafted to examine alternative definitions of overfishing, maximum sustainable yield (MSY), and optimum yield (OY) for the Alaska scallop fishery. Two alternatives were considered:

Alternative 1: Status Quo. The current MSY, OY, and overfishing definitions would not be revised.

Alternative 2: Redefine overfishing, OY, and MSY, and update the FMP with additional information on bycatch data collection. The definitions proposed under Alternative 2 for weathervane scallops are more conservative than currently in the FMP. The current OY is 0 - 1.8 million pounds, and the overfishing definition is simply landings exceeding OY. The proposed amendment would reduce OY to a maximum of 1.24 million pounds, establish MSY at 1.24 million pounds, and establish overfishing based on fishing mortality rates for weathervane scallops. OY, MSY, and overfishing would not be established for pink, spiny, or rock scallops as these are undeveloped fisheries that are managed through ADF&G via special permit.

An executive summary of the analysis is included as Item D-3(a).

## Executive Summary

This Environmental Assessment/Regulatory Impact Review (EA/RIR) addresses alternatives for meeting the NMFS proposed guidelines drafted in response to the Magnuson-Stevens Act provisions for National Standard 1. National Standard 1 states that conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry. The Act did not change the standard, but did change the definition of optimum yield and overfishing.

The Magnuson-Stevens act also requires the Secretary of Commerce to establish advisory guidelines (which shall not have the force and effect of law), based on the national standards, to assist in the development of fishery management plans. Proposed guidelines were published in the Federal Register on August 4, 1997 and the Final Rule was published on May 1, 1998. This document examines alternative definitions of overfishing, maximum sustainable yield (MSY), and optimum yield (OY), in accordance with the final rule guidelines.

### Language from the Magnuson-Stevens Act 1996.

Optimum Yield: The term 'optimum', with respect to the yield from a fishery, means the amount of fish which –

- (a) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems;
- (b) is prescribed as such on the basis of maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factor; and
- (c) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

Overfishing: The terms "overfishing" and "overfished" mean a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis.

Two alternatives were considered:

Alternative 1: Status Quo. No revisions to the current MSY, OY, and overfishing definitions would be made.

Alternative 2: Redefine overfishing, OY, and MSY, and update the FMP with additional information on bycatch data collection.

Alternative 2 would improve management of the scallop fisheries by instituting the following conservation measures:

1. Requirement that OY take into account protection of marine ecosystems, that OY be no greater than MSY, and the OY for an overfished fishery allow rebuilding to the MSY level.
2. Revised definitions for MSY based on prevailing ecological and environmental conditions; and
3. Revised definitions of overfishing that include both fishing mortality and biomass thresholds.

The following definitions would be established under Alternative 2. They were estimated for weathervane scallop stocks based on life history data and observed catch history.

MSY Control Rule ( $F_{msy}$ ) =  $M = 0.13$ ; hence  $F_{msy} = 0.13$ .

MSY = the average catch 1990-1997 (excluding 1995) =  $F_{msy} B_{msy} = 1.24$  million pounds.

Overfishing Control Rule ( $F_{overfishing}$ ) =  $F_{msy} = 0.13$ .

MSY Stock Size ( $B_{msy}$ ) =  $B_{1990-1997} = \frac{1}{2} B_0 = MSY/M = 9.54$  million pounds (meats).

Minimum Stock Size Threshold =  $\frac{1}{2} B_{msy} = 4.77$  million pounds in terms of meats.

OY = 0-1.24 million pounds; the upper end is MSY.

These definitions are more conservative than currently in the FMP. The current OY is 0 - 1.8 million pounds, and the overfishing definition is simply landings exceeding OY. The proposed amendment would reduce OY to a maximum of 1.24 million pounds, establish MSY at 1.24 million pounds, and establish overfishing based on fishing mortality rates for weathervane scallops. OY, MSY, and overfishing would not be established for pink, spiny, or rock scallops as these are undeveloped fisheries that are managed through ADF&G via special permit.

None of the alternatives is expected to result in a "significant regulatory action" as defined in E.O. 12866.

None of the alternatives are likely to significantly affect the quality of the human environment, and the preparation of an environmental impact statement for the proposed action is not required by Section 102(2)(C) of the National Environmental Policy Act or its implementing regulations.