

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke  
Executive Director



ESTIMATED TIME

1 HOUR

DATE: November 26, 1996

SUBJECT: Forage Fish Amendment

**ACTION REQUIRED**

Initial review of amendment to create and manage a forage fish species category.

**BACKGROUND**

In January 1995, the Council directed staff to prepare an EA/RIR to examine potential impacts of prohibiting a directed fishery on forage fish. Forage fish are an important ecosystem component, and are prey for marine mammals, seabirds, and commercially important fish species. Recent changes in predator abundance have raised concerns that forage fish may require additional protection. Although an analysis was distributed for review in September, the Council did not address the issue due to time constraints. However, the SSC reviewed the EA/RIR and recommended revisions before sending it out for public review. Their comments were as follows:

"The SSC regards forage fish as a group of great importance and potentially an indicator of ecosystems health and a source of socio-economic interest. In discussing the draft plan the SSC suggested a number of modifications: (a) Reframe the plan to manage the forage fish, rather than provide a blanket prohibition on taking, (b) Clarify the relationship of the plan to ongoing and potential artisanal fisheries, and (c) Consider the species covered in the plan to eliminate those that are exclusively in State waters and those (such as sandfish) that may not be true forage fish."

In the November 27, 1996 Council mailing you received a revised EA/RIR for initial review. An executive summary is attached as Item D-3(a). NMFS staff will be on hand to review the analysis. Two alternatives were examined, along with several options for Alternative 2. The alternatives are as follows:

Alternative 1: Status quo. Catch of forage fish could be retained under either the "other species" category TAC or as a "non-specified species".

Alternative 2: A "forage fish species" category would be established for both the BSAI and GOA groundfish FMPs. There are three options for this alternative.

Option 1: Manage the forage fish species category as for other groundfish with a TAC, ABC, and OFL.

Option 2: Restrict the forage fish species category to a bycatch only fishery.

Option 3: Manage the forage fish species category as a prohibited species with no retention allowed.

## EXECUTIVE SUMMARY

Forage fish species (FFS) are abundant schooling fishes that are preyed upon by marine mammals, seabirds and other commercially important groundfish species. Forage fish perform a critical role in the complex ecosystem functions of the Bering Sea and Aleutian Islands management area (BSAI) and the Gulf of Alaska (GOA) by providing the transfer of energy from the primary or secondary producers to higher trophic levels.

Significant declines in marine mammals and seabirds in the GOA and the BSAI have raised concerns that changes in the FFS biomass may contribute to the further decline of marine mammal, seabird and commercially important fish populations. Members of the fishing industry have expressed concern that the current FMP structure with respect to FFS may allow unrestricted commercial harvest to occur on one or more of these species.

For purposes of this analysis forage fish species have been defined to include Osmeridae (which includes capelin and eulachon), Myctophidae, Bathylagidae, Amodytes spp. (sandlance), and Pacific sandfish. These species have been grouped together because they are considered to be primary food resources for other marine animals and they have the potential to be the targets of a commercial fishery. These forage fish species are currently managed under the BSAI and GOA FMPs under either the "other species" or "non-specified species" categories.

This analysis examines two alternatives:

**Alternative 1: Status quo.** Catch of forage fish could be retained as groundfish under either the "other species" category TAC or as a "nonspecified species". Under this alternative a relatively unrestricted commercial fishery could develop for these species. Catch of those forage fish in the "other species" category are restrained by an overall TAC limit set for the whole category but any one of the forage fish species could be harvested in relatively large and unconstrained amounts within the "other species" TAC. The non-specified species would not be subject to any catch restrictions or reporting requirements.

**Alternative 2: A Forage Fish Species (FFS) category** would be established for both the BSAI and GOA FMPs. Three options for management of the FFS category are presented.

Option 1: Manage the FFS category as for other groundfish species with an ABC, TAC and overfishing limit.

Option 2: Restrict the FFS category to a bycatch only fishery. A directed fishery for the FFS would not be allowed but these species could be harvested as bycatch in other directed fisheries. A suggested 1 percent maximum retainable bycatch amount could be established for the forage fish species category in aggregate.

Option 3: Manage the FFS category as prohibited species. Under this option the incidental catch of these species would not be retained and any incidental catch would need to be returned to the sea with a minimum of injury, as is currently done with other prohibited species.

Under Alternative 2, Option 1 entails the setting of an ABC and TAC amount for the FFS category. This may be difficult given the lack of information on the abundance of the forage fish species and the limited catch history. In addition, an overfishing limit (OFL) would be established based on historical catch, which, when reached, could potentially result in the closure of other target species groups that incidentally harvest forage fishes. Option 2 would establish the FFS category as a bycatch only category with the harvest limited to 1 percent of the harvest of those species for which a directed fishery occurs. Option 2 would allow incidental harvest amounts of the FFS category while preventing a directed fishery from occurring and would not have the constraints of establishing an ABC, TAC or OFL. Management under Option 3 would treat the FFS category as prohibited species to be

discarded at sea with a minimum of injury. This management strategy is typically reserved for economically important species other than federally managed groundfish. Option 3 could result in unnecessary discards and cause an unnecessary burden to catcher vessels that do not sort at sea and to processors who must handle these prohibited species. Option 2 would accomplish the objective of preventing the establishment of a directed fishery on forage fish, while minimizing any unnecessary discards and avoiding the problems associated with establishing an ABC, TAC and OFL amount.

Based on historical information, the total burden to the Alaska fishing industry resulting from restricting a fishery on the FFS species would be minimal because a total of only 6 vessels have reported targeting any species in this proposed category from 1984-1994, no annual commercial fishery has been established, and market availability for capelin varies.

# Alaska Groundfish Data Bank

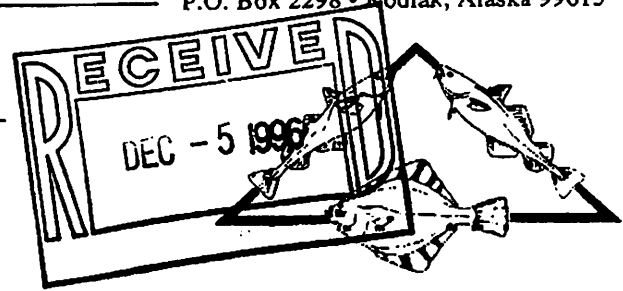
P.O. Box 2298 • Kodiak, Alaska 99615

TO: RICK LAUBER, CHAIRMAN  
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

RE: COMMENTS ON FORAGE FISH AMENDMENT

DATE: DEC. 4, 1996

SENT BY FAX: 1 PP



## AGDB COMMENTS REGARDING PROHIBITING COMMERCIAL FISHING ON FORAGE FISH (AGENDA ITEM D-3(a))

Alaska Groundfish Data Bank members made the original proposal to ban commercial fishing on forage fish species not currently being commercially exploited based on data from the East Coast which indicated commercial takes of forage fish may reduce the abundance of sea birds, marine mammals and higher trophic level commercial fish species.

We feel this is an important step to take for both conservation of the many resources which feed on forage fish and for the long term health of the ecosystem in Alaska.

However, the proposed options of declaring forage fish a bycatch only species or a prohibited species introduce a level of enforcement and potential sanctions for vessels and processing plants which we feel may be unnecessary.

We suggest a third option be added to the EA/RIR to read along the following lines:

"The sale, barter, trade and other commercial commerce of forage fish as defined in this amendment is prohibited. Also the processing forage fish, as defined in this amendment, in a commercial processing facility is also prohibited."

It seems that this approach stops any commercial fishery from developing while avoiding the necessity for NMFS to try to set a reasonable bycatch retention limit, for enforcement to have to spend time on enforcement of overages. should the bycatch limit be exceeded and, if the PSC approach is used, the potential for enforcement actions against a vessel or plant for the appearance of a few forage fish which may have been disgorged by fish in the target catch.

Thank you for consideration of our suggestion.

Sincerely,

A handwritten signature in black ink that reads "Chris Blackburn". The signature is fluid and cursive.

Chris Blackburn, Director  
Alaska Groundfish Data Bank