

Draft for North Pacific Fishery Management Council Review

**Executive Summary**

Environmental Assessment and Regulatory Impact Review  
for

Amendment 36 to the Fishery Management Plan for the Groundfish Fishery of the Bering Sea  
and

Aleutian Islands Area

and

Amendment 39 to the Fishery Management Plan for Groundfish of the Gulf of Alaska

*[Annotated by Pacific Fishery Management Council staff – September 2004]*

**To Create And Manage a Forage Fish Species Category**

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## 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.

*[The final list of species included in the NPFMC forage fish category include: Osmeridae (eulachon, capelin, and other smelts); Myctophidae (lanternfishes); Bathylagidae (deep-sea smelts); Ammodytidae (Pacific sand lance); Trichodontidae (Pacific sandfish); Pholidae (gunnels); Stichaeidae (pricklebacks, warbonnets, eelblennys, cockscombs and shannys); Gonostomatidae (bristlemouths, lightfishes, and anglemouths); and the Order Euphausiacea (krill). The Council would need to consider which species should be included under the proposed directed fishery ban. There are no directed fisheries for krill. However, eulachon and other smelts are actively fished along the West Coast. – Council staff]*

This analysis examines two alternatives:

*[The Council could develop similar alternatives to achieve the prohibition on directed fisheries. – Council staff]*

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.

*[Status quo for the Council would treat Euphausiids (krill) as non-FMP species. In federal waters, these species would not be subject to any catch restrictions or reporting requirements. – Council staff]*

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.

*[If the proposed action focused on directed fisheries for krill, it is likely that similar conclusions could be drawn about the anticipated impacts of the proposed action. – Council staff]*