

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke  
Executive Director

DATE: September 25, 1998

SUBJECT: Groundfish Amendments



ESTIMATED TIME  
8 HOURS  
(for all D-1 Items)

**ACTION REQUIRED**

- (c) Final action on rolling closures of fishing grounds during the sablefish longline survey.
- (d) Initial review of analysis to require retention of demersal shelf rockfish in fixed gear fisheries.
- (e) Initial review of analysis to change the start of the Pacific cod longline fishery in Areas 610-640.
- (f) Initial review of analysis of four changes to the Improved Retention/Improved Utilization Program.

**BACKGROUND**

(c) Final action on sablefish rolling closures

In September 1997, the Council approved releasing to public review the analysis for rolling closures in the groundfish fisheries during the sablefish longline survey. Final action was scheduled for this meeting. The one-year delay was to determine if the reordered sablefish longline survey and industry education were sufficient to minimize fleet interactions with the survey. Item D-1(c)(1) is a report from Mike Sigler on fleet interactions with the survey. The public review version of the EA/RIR was mailed to you in October 1997. The Executive Summary is attached as Item D-1(c)(2). Alternatives for final action are:

Alternative 1: No action. Voluntary closed areas, reordered survey sequence.

Alternative 2: Regulatory closed areas, gear specific exemptions with annual review.

(d) Initial review of retention of demersal shelf rockfish in fixed gear fisheries

Alaska Department of Fish and Game submitted a groundfish proposal in the 1997 cycle to require retention of demersal shelf rockfish (DSR) in fixed gear fisheries since total bycatch mortality of DSR in other fisheries is unknown. A high level of unreported mortality of DSR is believed to be occurring in the directed and bycatch fisheries. Currently, the DSR maximum retainable bycatch limits fishermen to 10 percent by weight of DSR against their halibut longline harvest. Any poundage in excess of the 10 percent limit is discarded at sea. Amending the regulations to require all DSR bycatch to be landed would enhance efforts to increase the accuracy of the accounting of total bycatch mortality of these fish. The proposed action would reduce waste and enhance estimates of total removals of demersal shelf rockfish species for stock assessment purposes.

The alternatives in this analysis (Item D-1(d)) include:

Alternative 1: No action.

Alternative 2: Require full retention of DSR in the fixed gear fisheries in GOA Regulatory Area 650.

(e) Initial review of fair start for GOA Pacific cod fisheries

The Western/Central Gulf Committee identified a preemption issue in the GOA Pacific cod fishery at its April 1998 meeting. It recommended that a fair start opening on January 20 in Areas 610-640 in the GOA be implemented for the longline P. cod fisheries. It exempted pot and jig gear from its recommendation for a longline fair start. The committee expressed concern that: (1) freezer longliners could preempt this fishery, particularly as BSAI P. cod biomass declines and (2) gear allocations on small quotas, and effort increases under the pending LLP, may exacerbate management/biological problems, and up to half of the quota may be preempted.

At its April 1998 meeting, the Council initiated this analysis of a delayed start for the P. cod longline fishery to provide equity with the P. cod trawl fishery. This EA/RIR examines the following management alternatives for fishery starting dates for the P. cod longline fishery in Areas 610-640. It was mailed to you on September 3.

Alternative 1: No action.

Alternative 2: Start the Pacific cod longline and trawl fisheries on January 20 in Areas 610-640.

Alternative 3: Start the Pacific cod longline and trawl fisheries on another date in Areas 610-640.

(f) Initial review of changes to the Improved Retention/Improved Utilization Program

In April 1998, the Council approved recommendations for a number of changes to the IR/IU program recommended to it by the IR/IU Implementation Committee. Three of those were recordkeeping and reporting changes and have been made for 1999 on the logbook forms:

- IR/IU reporting was removed from the catcher vessel logs (reported by processor)
- separate logbook for trawlers and longliners
- created whole fish code (not products or discard) in discard categories

Industry and NMFS have suggested a number of revisions to the program to increase its effectiveness and reduce several unintended impacts to sectors of the groundfish fleet. Four actions were recommended by the committee and approved by the Council in April for analysis (Item D-1(f)(1)). The committee reviewed an earlier draft of the analysis on September 21 and its comments (Item D-1(f)(2)) were addressed by the analyst in the revised EA/RIR. Kent Lind, NMFS, will present the following action items in the analysis:

Alternative 1: Allow Discards of Adulterated Fish

Alternative 2: Increase the Maximum Allowable Roe Percentage in the Aleutian Islands

Alternative 3: Add Additional Product Forms Against Which Pollock Roe may be Retained

Alternative 4: Clarification of Retention and Utilization Requirements for IR/IU Species Used as Bait and Consumed On Board a Vessel

## Sablefish longline survey - fishery interactions, 1995-1998

NMFS has requested the assistance of the fishing fleet to avoid the annual sablefish longline survey since the inception of sablefish IFQ management. We requested that fishermen stay at least five nautical miles away from each survey station for 7 days before and 3 days after the planned sampling date (3 days allowed for survey delays). We also revised the 1998 longline survey schedule to avoid the rockfish trawl fishery opening July 1 as well as other short, but less intense fisheries.

### *History of interactions*

Publicity, the revised longline survey schedule, and fishermen cooperation were effective at reducing trawl fishery interactions. Their number fell in 1997 and was zero in 1998.

Distribution of the survey schedule to all IFQ permit holders, radio announcements from the survey vessel, and the threat of a regulatory rolling closure have been ineffective at reducing the annual number of longline fishery interactions. The numbers of fishing vessels and affected survey stations have been about 10 since 1995. However other information is more positive. The same fishing boats generally haven't fished near longline survey stations in more than one year. Some fishermen we talked to this summer, though none of those interacting with the 1998 survey, were unaware of the revised 1998 survey schedule.

Year	Longline		Trawl		Total	
	Stations	Vessels	Stations	Vessels	Stations	Vessels
1995	8	7	9	15	17	22
1996	12	18	16	17	28	35
1997	8	8	8	7	16	15
1998	10	9	0	0	10	9

### *Recommendation*

We have followed several practical measures to alleviate fishery interactions with the survey. Trawl, but not longline fishery interactions have decreased. We see no overfishing concern with continued interactions, because they tend to reduce, rather than increase, the Allowable Biological Catch. Further, we cannot verify that the current level of longline fishery interactions significantly affect survey estimates. For these reasons, we have no basis to recommend a regulatory rolling closure at this time. We will continue to work with the longline fleet to reduce fishery interactions and ensure accurate estimates of sablefish abundance.

Michael Sigler  
Jeffrey Fujioka

Alaska Fisheries Science Center

25 September 1998

## Executive Summary

The AFSC Sablefish longline survey is conducted annually in the Gulf of Alaska and, in alternate years, either the Aleutian Islands or the Bering Sea. The survey is the primary source of abundance information used for the recommendation of the annual sablefish ABC. Prior to the implementation of the IFQ Program in 1995, the sablefish quota was harvested and the fishery subsequently closed weeks before most of the sablefish survey took place. The IFQ Program extended the duration of the fishery, overlapping the survey period and increasing the potential for fishing to bias the survey results. The rockfish trawl fishery also increased the potential for interaction with the survey.

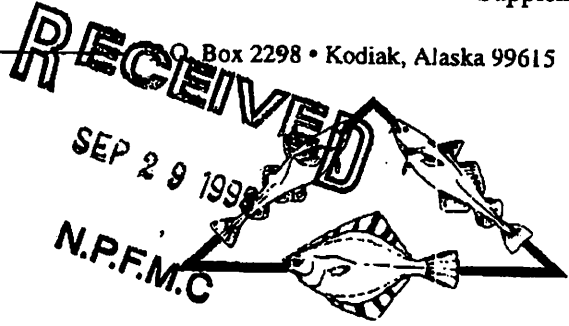
Fishing nearby survey stations may lower survey catch rates. To avoid this bias, NMFS requested that sablefish fishermen voluntarily avoid survey areas a week before and during the time an area is surveyed. Several means have been used to notify fishermen, including letters to all sablefish IFQ holders and trawl representatives, SSB radio broadcasts of the current survey area, and an article in the Alaska Fishermen's Journal.

Some members of two gear groups, trawlers and catcher longliners, fished near survey stations in 1995. In 1996, trawling at survey stations decreased due to industry cooperation and a change in the survey schedule, but some catcher longliners again fished at survey stations. In both years, this was a particular problem off Baranof and Chichagof Islands. It is not likely that encounters with catcher longliners will be reduced further without regulatory measures.

The issue was raised before the IFQ Industry Implementation Team in November, 1995, when the team recommended no action, but requested more adequate survey schedule announcements. The following October, the Team expressed concern that fishing may significantly impact survey results. Efforts to minimize fishery interactions by a two year program of voluntary compliance have not been entirely successful. Since the effects on the survey cannot be scientifically quantified and recent stock assessments indicate a continuing downward trend in sablefish abundance, the Team recommended that the Council initiate an analysis of rolling closures to longline and trawl vessels during the sablefish survey. The Team suggested that the trawl fleet also be consulted in the preparation of the analysis.

In December, 1996, the Council requested an analysis of the effects of instituting rolling closures for trawl and longline vessels during the sablefish longline survey. NMFS presented a discussion paper at the April 1997 Council meeting and the Council subsequently approved development of an EA/RIR to implement rolling closures beginning in 1998. Options for closed areas, reordering the survey schedule, leaving a nearshore open area for halibut and other fisheries, and exempting specific gear types from the closures were approved for inclusion in the analysis. The Council also requested that the use of logbook data be considered as an eventual substitute for stock surveys. NMFS staff presented a draft EA/RIR at the June Council meeting. The Council voted not to release the analysis for public review and requested additional discussion of alternative survey designs and dates, use of multiple survey vessels, and a combination of logbook/survey assessment. The Council also requested that NMFS work with longline industry to address some of the objections that have been raised and coordinate with the trawl industry, particularly with regard to the proposal submitted by the Groundfish Forum, to be sure that any new solutions are workable within both sectors.

**Alaska Groundfish Data Bank**



P.O. Box 2298 • Kodiak, Alaska 99615

TO: RICK LAUBER, CHAIRMAN, CHAIRMAN  
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

RE: SABLEFISH ROLLING CLOSURES

DATE: SEPTEMBER 29, 1998

SENT BY FAX: 1 PP

**COMMENTS ON SABLEFISH ROLLING CLOSURES - AGENDA ITEM D-1(c)**

**SUBMITTED BY ALASKA GROUND FISH DATA BANK**

The members of Alaska Groundfish Data Bank want to thank the NMFS staff in charge of the longline sablefish survey for changing the survey plan to avoid the July trawl rockfish fisheries. To our knowledge there was no interference with the survey by trawl gear this year.

We feel the new survey plan has solved the potential for trawl gear interference and no further regulatory measures are needed.

Sincerely,

Chris Blackburn, Director  
Alaska Groundfish Data Bank

RECEIVED

MAZEL LORRAINE

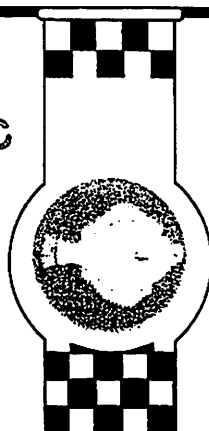
SEP 14 1998

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Albert Geiser  
202 Center St.  
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Kodiak, Ak. 99615

September 7, 1998

Re: Pacific Cod, **fair start** in Federal Waters

Dear Richard,

A glaring unfairness exists in the start up dates for the Pacific cod fisheries between the trawl fleet and the fixed gear fleet. Fixed gear vessels can set their gear after January first in state or federal waters, the trawl fleet must wait for January 21st. The State of Alaska has wrested 15% of the cod quota from the federal waters to create a inshore fishery that opens January first. It only seems fair that the federal waters fishery in the GOA "**now**" have a fair consecutive opening date for all gear types. The fixed gear fleet has a guaranteed early start date set by the state.

**The problem:**

Not having a fair start between gear types is on its face unfair to a whole class of groundfish fisherman. At the front end of the season it increases pressure for the trawl fleet to search for cod when they have not arrived in large numbers, scratch fishing, burning up by-catch in the search. There is increasing pressure from the canneries for the trawl fleet to put pots on for the first three weeks of January to take our "share". That would only increase capitalization in another fishery and increase pot lift mortality of by-catch crab. In the past few years the cod season closed in the GOA just as the cod fish reached their peak of schooling up, two things happen at the back end of the season;

1. The catch per unit of effort of cod, to by-catch of halibut ratio is at its lowest level.
2. When the cod season closes before the peak, the trawlers are forced to discard large amounts of cod beginning the **next day** when the target fishery is shallow water flats.

**Recommendation:**

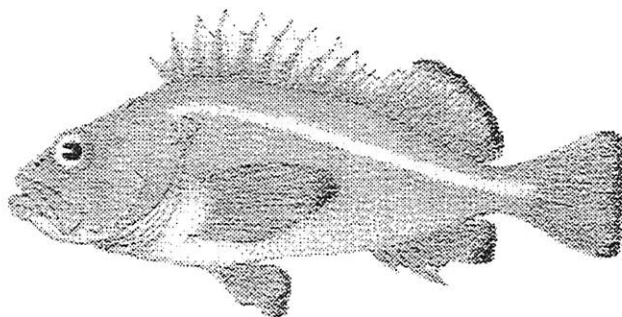
I would like to recommend a fair start date for all gear types in the federal waters portion of the Pacific cod fishery to begin after February 21st in areas 620, 630, and 640 of the GOA. This will lower by-catch and discards of two valuable species.

Sincerely,

cc: Mr. Al Burch, Alaska Draggers  
Mr. Steven Pennoyer, NMFS Juneau  
Capt. Barry Fisher, Midwater Trawlers Cooperative  
Ms. Chris Black burn, Alaska Groundfish Data bank

**DRAFT FOR COUNCIL REVIEW**

ENVIRONMENTAL ASSESSMENT/REGULATORY IMPACT REVIEW/  
INITIAL REGULATORY FLEXIBILITY ANALYSIS  
FOR A REGULATORY AMENDMENT  
TO THE FISHERY MANAGEMENT PLAN FOR  
THE GROUND FISH FISHERIES OF THE GULF OF ALASKA  
FOR FULL RETENTION OF DEMERSAL SHELF ROCKFISH IN THE  
FIXED GEAR FISHERIES



Prepared by

Staff of the  
North Pacific Fishery Management Council  
Alaska Department of Fish and Game

September 28, 1998

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## EXECUTIVE SUMMARY

Total bycatch mortality of demersal shelf rockfish (DSR) in other fisheries is unknown. State and Federal fisheries managers believe a high level of unreported mortality of DSR is occurring in the directed and bycatch fisheries. Currently, the DSR MRB limits fishermen to 10 percent by weight of DSR against their halibut longline harvest. Any poundage in excess of the 10 percent limit is discarded at sea. Amending the regulations to require all DSR bycatch to be landed would enhance efforts to increase the accuracy of the accounting of total bycatch mortality of these fish.

The action proposed by the Alaska Department of Fish and Game would reduce waste and enhance estimates of total removals of demersal shelf rockfish species for stock assessment purposes: (1) without encouraging "topping off" with bycatch species and (2) decreasing waste of the resource. Additionally, the proposed action complies with four new requirements in the Sustainable Fisheries Act of 1996.

The alternatives included in this analysis are:

Alternative 1: No Action.

Alternative 2: Require full retention of DSR in the fixed gear fisheries in GOA Regulatory Area 650.

## 1.0 INTRODUCTION

The groundfish fisheries in the Exclusive Economic Zone (EEZ) (3 to 200 miles offshore) in the Gulf of Alaska are managed under the Fishery Management Plan for the Groundfish Fisheries of the Gulf of Alaska. The Gulf of Alaska (GOA) FMP was developed by the North Pacific Fishery Management Council (Council) under the Magnuson Fishery Conservation and Management Act (Magnuson Act). It was approved by the Secretary of Commerce and become effective in 1978.

Actions taken to amend FMPs or implement other regulations governing the groundfish fisheries must meet the requirements of Federal laws and regulations. In addition to the Magnuson Act, the most important of these are the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), Executive Order (E.O.) 12866, and the Regulatory Flexibility Act (RFA).

NEPA, E.O. 12866 and the RFA require a description of the purpose and need for the proposed action as well as a description of alternative actions which may address the problem. This information is included in Section 1 of this document. Section 2 contains information on the biological and environmental impacts of the alternatives as required by NEPA. Impacts on endangered species and marine mammals are also addressed in this section. Section 3 contains a Regulatory Impact Review (RIR) which addresses the requirements of both E.O. 12866 and the RFA that economic impacts of the alternatives be considered. Section 4 contains the Initial Regulatory Flexibility Analysis (IRFA) required by the RFA which specifically addresses the impacts of the proposed action on small businesses.

This Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) addresses the need to require full retention of demersal shelf rockfish in GOA Regulatory Area 650 to reduce waste and enhance estimates of total removals of demersal shelf rockfish species for stock assessment purposes.

### 1.1 Purpose of and Need for the Action

Beginning in 1996, the GOA Groundfish Plan Team identified the high level of unreported DSR mortality associated with the halibut fishery and the uncertainty in accounting for this mortality. Anecdotal information from commercial fishermen suggested that the 10% maximum retainable bycatch (MRB) limits for DSR taken during directed halibut fishing operations is inadequate and that for some trips the bycatch level may be much higher than 10%. Many fishermen do not land or report overages because they would be in violation of directed fishing standards.

An accurate accounting system is needed to account for total bycatch mortality of demersal shelf rockfish (DSR) to require fishermen fishing east of 140° W longitude to bring in all DSR landed during fishing activities. The DSR MRB limits fishermen to 10 percent by weight of DSR against their halibut longline harvest. Any poundage in excess of the 10 percent limit is discarded at sea.

Total bycatch mortality of DSR in other fisheries is unknown. If the bycatch is significantly greater than currently estimated, the directed fishery allocation may have to be reduced. However, if the true mortality is lower than currently estimated then the directed fishery allocation may be increased.

In September 1997, the Council approved analyzing a groundfish proposal submitted by the Alaska Department of Fish and Game/Commercial Fisheries Division to require full retention of demersal shelf rockfish in GOA Regulatory Area 650 to reduce waste and enhance estimates of total removals of the species for stock assessment

purposes. The proposed action would allow for enhanced management of DSR within its total allowable catch (TAC): (1) without encouraging "topping off" with bycatch species and (2) decreasing waste of the resource.

### 1.2 Magnuson-Stevens Act Requirements

National Standard 9 states: "Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch."

The Sustainable Fisheries Act of 1996 (SFA) added many new requirements to the Magnuson-Stevens Fishery and Conservation and Management Act. Four of these requirements are pertinent to the proposed action. Section 303(a)(11) added bycatch reporting and minimization requirements to assess the amount and type of bycatch occurring in the fishery and include conservation and management measures that, to the extent practicable, minimize bycatch. Section 313(f) requires the reduction of economic discards for a period of not less than four years. Section 313(h) added a requirement to ensure total catch measurement in each fishery under Council jurisdiction that will ensure the accurate enumeration, at a minimum, of target species, economic discards, and regulatory discards. Section 313(i) full retention by fishing vessels and full utilization by fish processors of economic discards in fisheries if such discards cannot be avoided.

### 1.3 Management Background

<u>Common name</u>	<u>Scientific Name</u>
canary rockfish	<i>Sebastes pinniger</i>
China rockfish	<i>S. nebulosus</i>
copper rockfish	<i>S. caurinus</i>
quillback rockfish	<i>S. maliger</i>
rosethorn rockfish	<i>S. helvomaculatus</i>
tiger rockfish	<i>S. nigrocinctus</i>
yelloweye rockfish	<i>S. ruberrimus</i>

Prior to 1987, Demersal Shelf Rockfishes (DSR) were grouped with the "Other Rockfish" complex in the GOA Fishery Management Plan (FMP). In 1987, the "Other Rockfish" complex was split into three components for management purposes in the eastern Gulf. The DSR assemblage is now comprised of seven species of nearshore, bottom-dwelling rockfishes listed below. Yelloweye rockfish (*Sebastes ruberrimus*) is the dominant species in the fishery.

Prior to 1992, DSR was recognized as an FMP assemblage only in the waters east of 137°W. longitude. In 1992, DSR was recognized in the East Yakutat Section (EYKT) and management of DSR was extended westward to 140° W. longitude. This area is referred to as the Southeast Outside (SEO) Subdistrict and is comprised of four management sections: East Yakutat (EYKT), Northern Southeast Outside (NSEO), Central Southeast Outside (CSEO) and Southern Southeast Outside (SSEO) (Figure 1). In SEO, DSR are managed jointly by the State of Alaska and the National Marine Fisheries Service.

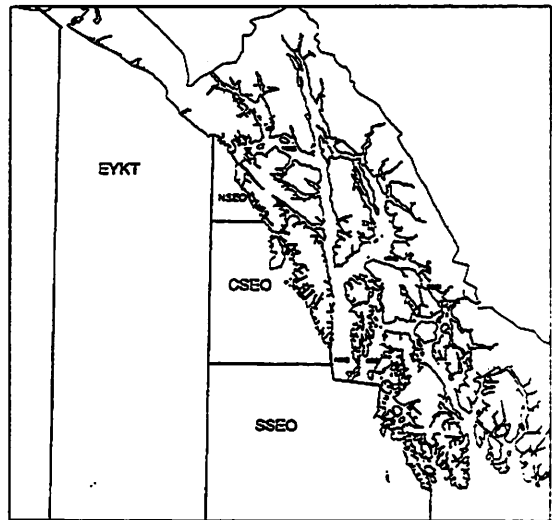


Figure 1. Eastern Gulf Regulatory Area.

The history of domestic landings of DSR from SEO is shown in Table 1. The directed DSR catch in SEO increased from 106 mt in 1982 to a peak of 803 mt in 1987. Total landings exceeded 900 mt in 1993. Directed fishery landings have been constrained by other fishery management actions. In 1991 the GOA was closed to all longlining on July 8 when the prohibited species cap of halibut was reached. Since 1992, there has been a separate PSC for the DSR fishery. In 1993 the fall directed fishery was canceled

Table 1. Reported landings of demersal shelf rockfish (mt round weight from domestic fisheries in the Southeast Outside Subdistrict (SEO), 1982-1997<sup>1</sup>.

YEAR	Directed Landings		Bycatch Landings		Total	
	AREA 65	AREA 68	AREA 65	AREA 68	SEO	ABC <sup>3</sup>
1982	106	*	14	*	120	*
1983	161	*	15	*	176	*
1984	543	*	20	*	563	*
1985	388	*	100	1	488	*
1986	449	*	41	*	491	*
1987	726	77	47	5	858	*
1988	471	44	29	8	552	660
1989	312	44	101	18	475	420
1990	190	17	100	36	379	470
1991	199	187	83	36	889	425
1992	307	57	145	44	503	550
1993	246	112	254	18	901	800
1994	178	109	128	26	441	960
1995	113	57	90	22	282	580
1996	248	103	62	23	436	945
1997	204	76	75	25	380	945
1998	159	39	65	29	292	560

<sup>1</sup> Landings from ADF&G Southeast Region fishticket database and NMFS weekly catch reports through August 31, 1998.

<sup>2</sup> Estimated unreported DSR mortality associated with halibut fishery not reflected in totals: 1993=271 mt, 1994=353 mt, 1995=130 mt, 1996=156 mt, 1997=211.

<sup>3</sup> Prior to 1993 TAC for FMP area 65 only.

due to an unanticipated increase in DSR bycatch during the fall halibut fishery. Since 1995, the halibut fishery has been managed under an individual fishing quota (IFQ) program.

DSR mortality during the halibut longline fishery continues to account for a significant portion of the total allowable catch (TAC). Estimated unreported mortality has ranged between 130 mt to 355 mt annually. Prior to the IFQ fishery, ADF&G had estimated unreported mortality of DSR during the halibut fishery based on IPHC interview data. The 1993 interview data indicates a total mortality of DSR of 13% of the June halibut landings (by weight) and 18% of the September halibut landings. Unreported mortality data has been more difficult to collect under the halibut IFQ fishery and appears to be less reliable than previous data. The allowable bycatch limit of DSR during halibut fishing is 10% of the halibut weight. Based on past landing data, it is estimated that approximately half of the 2C halibut quota and 1% of the 3A halibut quota are taken in SEO. Total bycatch is estimated using a 10% bycatch mortality for DSR in 2C and a 7% bycatch mortality in 3A. Estimated unreported mortality is the difference between the total and the reported bycatch. Based on the 1997 halibut quotas, the estimated DSR mortality for 1998 is anticipated to be 300 mt.

On a season-wide basis the total bycatch of DSR during the halibut fishery may only be 10%. However, on an individual trip basis the bycatch of DSR varies greatly. Halibut and yelloweye overlap in their distributions to

varying degrees during the IFQ season. Depth, time of year, and habitat all influence the bycatch rate of DSR. Less easy to predict is the occurrence of yelloweye associated with patchy prey distribution. Fishermen have reported high catch rates of yelloweye in sets over mud bottom where the incidence of yelloweye is expected to be minimal. Therefore, even when fishermen intend to minimize DSR bycatch, there may be significant catches taken. Recently a fisherman made a directed halibut trip off Baranof Island. He landed 24,000 pounds of halibut and 7,800 pounds of yelloweye rockfish, far in excess of the 2,400 pounds allowed under directed fishing standards. This amount of DSR also exceeds the trip limit for DSR in the Southeast subdistrict. The fisherman said he had made an effort to move to other substrate over the course of his trip and that he caught as many yelloweye in his soft bottom sets as he did on the hard bottom sets. His logbook data substantiate these remarks. He said he refuses to throw rockfish overboard and feels it is unfair to be penalized for bringing in this catch.

Rockfish have a physoclastic, or closed, swim bladder. They are not capable of quickly adjusting to depth changes and therefore suffer embolism mortality when brought to the surface from depth. Most rockfish taken in the course of longline fishing are fatally injured. Therefore release of fish in excess of bycatch allowances results in waste of this resource.

The majority of the Eastern Gulf longline fleet are under 60 ft and therefore, unobserved. Although logbooks are required, accurate weights, by species, for discards at sea are not possible. Given that most rockfish discarded are dead, the true mortality of DSR is not accurately accounted. Fishermen, worried that they will be cited for overages, often do not bring in bycatch in excess of their allowable catch and in fact, current law prohibits retention beyond the 10% level. NOAA Enforcement staff, recognizing that rockfish are unlikely to survive discard at sea, currently allows voluntary forfeiture of rockfish in excess of the overfishing definitions as long as: 1) the forfeited species is not on prohibited species status or 2) the overage does not exceed 100% over the allowable bycatch or 1,000 pounds, whichever ever is in the fisherman's favor. The processor accepting the delivery is allowed to sell the rockfish and the fish is listed on the fish ticket as a forfeiture and a check for the revenue for this sale going to either NMFS or the State of Alaska, depending on the jurisdiction of the overage. The State of Alaska fishticket system captures these forfeitures as harvest code "18."

Table 2 lists the DSR forfeitures for the directed DSR fishery, the halibut fishery, and other groundfish fisheries for the SEO district for 1996 and 1997. It must be emphasized that the reported overages in the fishticket system reflect only a small portion of the total bycatch mortality due to under-reporting of discards.

Although the current management plan for DSR attempts to account for total mortality of DSR and set directed fishing levels after accounting for this

bycatch the true bycatch mortality of DSR is unknown. In 1998 the overfishing level for DSR was 940 mt and the TAC was set at 560 mt. The directed fishery quotas were set for the 4 ADF&G management areas in Southeast Outside after subtracting the 300 mt estimated to be taken incidental to the halibut fishery. The total directed fishery quota for SEO for 1998 was 260 mt.

Year	Fishery	# lb	# Vessels	# Landings
1996	Directed DSR	3,078	13	15
1996	Directed Halibut	4,107	66	92
1996	<u>Other*</u>	<u>3,009</u>	<u>16</u>	<u>21</u>
	TOTAL	10,194	95	128
1997	Directed DSR	3,880	26	32
1997	Directed Halibut	9,182	81	119
1997	<u>Other*</u>	<u>307</u>	<u>7</u>	<u>7</u>
	TOTAL	13,369	114	158

\*miscellaneous finfish and directed lingcod fisheries.

The overfishing level for DSR is sufficiently higher than the TAC that it is unlikely that the overfishing level would be reached under full retention, even if the true total mortality was higher than estimated. In years of high halibut catch it is possible that bycatch in the halibut fishery would preempt the directed fishery. Conversely, it may be possible to increase the directed fishery TAC if it becomes apparent that we have over-allocated TAC to bycatch needs.

#### 1.4 Alternatives Considered

##### 1.4.1 Alternative 1: No Action.

The status quo alternative would allow the current wastage of DSR bycatch that exceeds the maximum retainable bycatch rates for this species complex to continue.

##### 1.4.2 Alternative 2: Require full retention of DSR in the fixed gear fisheries in GOA Regulatory Area 650.

Alternative 2 would allow full retention of DSR east of 140° W longitude. Fishermen would be required to retain all their DSR bycatch. They would be allowed to sell up to the 10% maximum retainable bycatch amount (round weight equivalent of their target species weight). The remainder of the fish would be voluntarily relinquished to NMFS or ADF&G. Proceeds of the sale of forfeited fish would accrue to fisheries management and research.

## 2.0 NEPA REQUIREMENTS: ENVIRONMENTAL IMPACTS OF THE ALTERNATIVES

An environmental assessment (EA) is required by the National Environmental Policy Act of 1969 (NEPA) to determine whether the action considered will result in significant impact on the human environment. If the action is determined not to be significant based on an analysis of relevant considerations, the EA and resulting finding of no significant impact (FONSI) would be the final environmental documents required by NEPA. An environmental impact statement (EIS) must be prepared for major Federal actions significantly affecting the human environment.

An EA must include a brief discussion of the need for the proposal, the alternatives considered, the environmental impacts of the proposed action and the alternatives, and a list of document preparers. The purpose and alternatives were discussed in Sections 1.1 and 1.2, and the list of preparers is in Section 8. This section contains the discussion of the environmental impacts of the alternatives including impacts on threatened and endangered species and marine mammals.

### 2.1 Environmental Impacts of the Alternatives

The environmental impacts generally associated with fishery management actions are effects resulting from (1) harvest of fish stocks which may result in changes in food availability to predators and scavengers, changes in the population structure of target fish stocks, and changes in the marine ecosystem community structure; (2) changes in the physical and biological structure of the marine environment as a result of fishing practices, e.g., effects of gear use and fish processing discards; and (3) entanglement/entrapment of non-target organisms in active or inactive fishing gear.

A summary of the effects of the annual groundfish harvests on the biological environment and associated impacts on marine mammals, seabirds, and other threatened or endangered species are discussed in the final environmental assessment for the annual groundfish total allowable catch specifications (NMFS 1998).

## 2.2 Impacts on Endangered or Threatened Species

Background. The ESA provides for the conservation of endangered and threatened species of fish, wildlife, and plants. The program is administered jointly by NMFS for most marine species, and the US Fish and Wildlife Service (FWS) for terrestrial and freshwater species.

The ESA procedure for identifying or listing imperiled species involves a two-tiered process, classifying species as either threatened or endangered, based on the biological health of a species. Threatened species are those likely to become endangered in the foreseeable future [16 U.S.C. §1532(20)]. Endangered species are those in danger of becoming extinct throughout all or a significant portion of their range [16 U.S.C. §1532(20)]. The Secretary of Commerce, acting through NMFS, is authorized to list marine mammal and fish species. The Secretary of the Interior, acting through the FWS, is authorized to list all other organisms.

In addition to listing species under the ESA, the critical habitat of a newly listed species must be designated concurrent with its listing to the "maximum extent prudent and determinable" [16 U.S.C. §1533(b)(1)(A)]. The ESA defines critical habitat as those specific areas that are essential to the conservation of a listed species and that may be in need of special consideration. The primary benefit of critical habitat designation is that it informs Federal agencies that listed species are dependent upon these areas for their continued existence, and that consultation with NMFS on any Federal action that may affect these areas is required. Some species, primarily the cetaceans, listed in 1969 under the Endangered Species Conservation Act and carried forward as endangered under the ESA, have not received critical habitat designations.

Listed Species. The following species are currently listed as endangered or threatened under the ESA and occur in the GOA and/or BSAI:

### Endangered

Northern Right Whale	<i>Balaena glacialis</i>
Bowhead Whale <sup>1</sup>	<i>Balaena mysticetus</i>
Sei Whale	<i>Balaenoptera borealis</i>
Blue Whale	<i>Balaenoptera musculus</i>
Fin Whale	<i>Balaenoptera physalus</i>
Humpback Whale	<i>Megaptera novaeangliae</i>
Sperm Whale	<i>Physeter macrocephalus</i>
Snake River Sockeye Salmon	<i>Oncorhynchus nerka</i>
Short-tailed Albatross	<i>Diomedea albatrus</i>
Steller Sea Lion <sup>2</sup>	<i>Eumetopias jubatus</i>

### Threatened

Snake River Fall Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Snake River Spring/Summer Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Steller Sea Lion <sup>3</sup>	<i>Eumetopias jubatus</i>
Spectacled Eider	<i>Somateria fishcheri</i>

<sup>1</sup>species is present in Bering Sea area only.

<sup>2</sup>listed as endangered west of Cape Suckling.

<sup>3</sup>listed as threatened east of Cape Suckling.

Section 7 Consultations. Because both groundfish fisheries are federally regulated activities, any negative effects of the fisheries on listed species or critical habitat and any takings<sup>4</sup> that may occur are subject to ESA section 7 consultation. NMFS initiates the consultation and the resulting biological opinions are issued to NMFS. The Council may be invited to participate in the compilation, review, and analysis of data used in the consultations. The determination of whether the action "is likely to jeopardize the continued existence of" endangered or threatened species or to result in the destruction or modification of critical habitat, however, is the responsibility of the appropriate agency (NMFS or FWS). If the action is determined to result in jeopardy, the opinion includes reasonable and prudent measures that are necessary to alter the action so that jeopardy is avoided. If an incidental take of a listed species is expected to occur under normal promulgation of the action, an incidental take statement is appended to the biological opinion.

Section 7 consultations have been done for all the above listed species, some individually and some as groups. Below are summaries of the consultations.

Endangered Cetaceans. NMFS concluded a formal section 7 consultation on the effects of the BSAI and GOA groundfish fisheries on endangered cetaceans within the BSAI and GOA on December 14, 1979, and April 19, 1991, respectively. These opinions concluded that the fisheries are unlikely to jeopardize the continued existence or recovery of endangered whales. Consideration of the bowhead whale as one of the listed species present within the area of the Bering Sea fishery was not recognized in the 1979 opinion, however, its range and status are not known to have changed. No new information exists that would cause NMFS to alter the conclusion of the 1979 or 1991 opinions. NMFS has no plan to reopen Section 7 consultations on the listed cetaceans for this action. Of note, however, are observations of Northern Right Whales during Bering Sea stock assessment cruises in the summer of 1997 (NMFS per. com). Prior to these sightings, and one observation of a group of two whales in 1996, confirmed sightings had not occurred.

Steller sea lion. The Steller sea lion range extends from California and associated waters to Alaska, including the Gulf of Alaska and Aleutian Islands, and into the Bering Sea and North Pacific and into Russian waters and territory. In 1997, based on biological information collected since the species was listed as threatened in 1990 (60 FR 51968), NMFS reclassified Steller sea lions as two distinct population segments under the ESA (62 FR 24345). The Steller sea lion population segment west of 144 W. longitude (a line near Cape Suckling, Alaska) is listed as endangered; the remainder of the U.S. Steller sea lion population remains listed as threatened.

NMFS designated critical habitat in 1993 (58 FR 45278) for the Steller sea lion based on the Recovery Team's determination of habitat sites essential to reproduction, rest, refuge, and feeding. Listed critical habitats in Alaska include all rookeries, major haul-outs, and specific aquatic foraging habitats of the BSAI and GOA. The designation does not place any additional restrictions on human activities within designated areas. No changes in critical habitat designation were made as result of the 1997 re-listing.

Beginning in 1990 when Steller sea lions were first listed under the ESA, NMFS determined that both groundfish fisheries may adversely affect Steller sea lions, and therefore conducted Section 7 consultation on the overall fisheries (NMFS 1991), and subsequent changes in the fisheries (NMFS 1992). The biological opinion on the BSAI and GOA fisheries effects on Steller sea lions issued by NMFS on January 26, 1996 concluded that these fisheries and harvest levels are unlikely to jeopardize the continued existence and recovery of the Steller sea lion or adversely modify critical habitat. NMFS conducted an informal Section 7 consultation on Steller sea lions for

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<sup>4</sup> the term "take" under the ESA means "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct" (16 U.S.C. §1538(a)(1)(B)).



this action in 1997 and concluded that the GOA groundfish fishery and the 1997 TAC amounts were not likely to affect Steller sea lions in a way or to an extent not already considered in previous Section 7 consultations (NMFS, January 17, 1997). Reinitiation of formal consultation was not required at that time. NMFS has reopened formal consultation on the 1998 fishery to evaluate new information specific to the 60 percent increase of pollock TAC in the combined W/C Regulatory Area. The 1998 biological opinion concluded that the 1998 fishery was not likely to jeopardize the continued existence and recovery of Steller sea lions or to adversely modify critical habitat.

Pacific Salmon. No species of Pacific salmon originating from freshwater habitat in Alaska are listed under the ESA. These listed species originate in freshwater habitat in the headwaters of the Columbia (Snake) River. During ocean migration to the Pacific marine waters a small (undetermined) portion of the stock extend into the Gulf of Alaska as far east as the Aleutian Islands. In that habitat they are mixed with hundreds to thousands of other stocks originating from the Columbia River, British Columbia, Alaska, and Asia. The listed fish are not visually distinguishable from the other, unlisted, stocks. Mortal take of them in the chinook salmon bycatch portion of the fisheries is assumed based on sketchy information on abundance, timing, and migration patterns.

NMFS designated critical habitat in 1992 (57 FR 57051) for the for the Snake River sockeye, Snake River spring/summer chinook, and Snake River fall chinook salmon. The designations did not include any marine waters, therefore, does not include any of the habitat where the groundfish fisheries are promulgated.

NMFS has issued two biological opinions and no-jeopardy determinations for listed Pacific salmon in the Alaska groundfish fisheries (NMFS 1994, NMFS 1995). Conservation measures were recommended to reduce salmon bycatch and improve the level of information about the salmon bycatch. The no jeopardy determination was based on the assumption that if total salmon bycatch is controlled, the impacts to listed salmon are also controlled. The incidental take statement appended to the second biological opinion allowed for take of one Snake River fall chinook and zero take of either Snake River spring/summer chinook or Snake River sockeye, per year. As explained above, it is not technically possible to know if any have been taken. Compliance with the biological opinion is stated in terms of limiting salmon bycatch per year to under 55,000 and 40,000 for chinook salmon, and 200 and 100 sockeye salmon in the BSAI and GOA fisheries, respectively.

Short-tailed albatross. The entire world population in 1995 was estimated as 800 birds; 350 adults breed on two small islands near Japan (H. Hasegawa, per. com.). The population is growing but is still critically endangered because of its small size and restricted breeding range. Past observations indicate that older short-tailed albatrosses are present in Alaska primarily during the summer and fall months along the shelf break from the Alaska Peninsula to the GOA, although 1- and 2-year old juveniles may be present at other times of the year (FWS 1993). Consequently, these albatrosses generally would be exposed to fishery interactions most often during the summer and fall--during the latter part of the second and the whole of the third fishing quarters.

Short-tailed albatrosses reported caught in the longline fishery include two in 1995, one in October 1996, and none in 1997. Both 1995 birds were caught in the vicinity of Unimak Pass and were taken outside the observers' statistical samples.

Formal consultation on the effects of the groundfish fisheries on the short-tailed albatross under the jurisdiction of the FWS concluded that BSAI and GOA groundfish fisheries would adversely affect the short-tailed albatross and would result in the incidental take of up to two birds per year, but would not jeopardize the continued existence of that species (FWS 1989). Subsequent consultations for changes to the fishery that might affect the short-tailed albatross also concluded no jeopardy (FWS 1995, FWS 1997). The US Fish and Wildlife Service does not intend to renew consultation for this action.

Spectacled Eider. These sea ducks feed on benthic mollusks and crustaceans taken in shallow marine waters or on pelagic crustaceans. The marine range for spectacled eider is not known, although Dau and Kitchinski (1977) review evidence that they winter near the pack ice in the northern Bering Sea. Spectacled eider are rarely seen in U.S. waters except in August through September when they molt in northeast Norton Sound and in migration near St. Lawrence Island. The lack of observations in U.S. waters suggests that, if not confined to sea ice polynyas, they likely winter near the Russian coast (FWS 1993). Although the species is noted as occurring in the GOA and BSAI management areas, no evidence exists that they interact with these groundfish fisheries.

Conditions for Re-initiation of Consultation. For all ESA listed species, consultation must be reinitiated if: the amount or extent of taking specified in the Incidental Take Statement is exceeded, new information reveals effects of the action that may affect listed species in a way not previously considered, the action is subsequently modified in a manner that causes an effect to listed species that was not considered in the biological opinion, or a new species is listed or critical habitat is designated that may be affected by the action.

### 2.3 Impacts on Marine Mammals Not Listed Under the ESA

Marine mammals not listed under the ESA that may be present in the GOA and BSAI include cetaceans, [minke whale (*Balaenoptera acutorostrata*), killer whale (*Orcinus orca*), Dall's porpoise (*Phocoenoides dalli*), harbor porpoise (*Phocoena phocoena*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), and the beaked whales (e.g., *Berardius bairdii* and *Mesoplodon spp.*)] as well as pinnipeds [northern fur seals (*Callorhinus ursinus*), and Pacific harbor seals (*Phoca vitulina*)] and the sea otter (*Enhydra lutris*).

None of the alternatives will affect takes of other marine mammals not listed under the ESA. Therefore, none of the alternatives are expected to have a significant impact on marine mammals not listed under the ESA.

### 2.4 Coastal Zone Management Act

Implementation of each of the alternatives would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Management Program within the meaning of Section 30(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

### 2.5 Conclusions or Finding of No Significant Impact

The alternatives address the retention of DSR in the bycatch fisheries to reduce waste and enhance assessment of the resource. Neither alternative impact total mortality of the DSR resource. Therefore, 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.

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Assistant Administrator for Fisheries, NOAA

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Date

### 3.0 REGULATORY IMPACT REVIEW: ECONOMIC AND SOCIOECONOMIC IMPACTS OF THE ALTERNATIVES

This section examines the pollock CDQ program, including discussions of the likely impacts of either continuing or discontinuing the program. It provides information about the economic and socioeconomic impacts of the alternatives including identification of the individuals or groups that may be affected by the action, the nature of these impacts, quantification of the economic impacts if possible, and discussion of the trade offs between qualitative and quantitative benefits and costs.

The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following statement from the order:

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider. Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environment, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

This section also addresses the requirements of both E.O. 12866 and the Regulatory Flexibility Act to provide adequate information to determine whether an action is "significant" under E.O. 12866 or will result in "significant" impacts on small entities under the RFA.

E. O. 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be "significant." A "significant regulatory action" is one that is likely to:

- (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
- (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- (4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

A regulatory program is "economically significant" if it is likely to result in the effects described above. The RIR is designed to provide information to determine whether the proposed regulation is likely to be "economically significant."

### 3.1 Alternatives to be considered

At its September 1997 meeting, the Council decided to initiate an analysis to require full retention of DSR when caught as bycatch in the halibut and sablefish IFQ fisheries.

#### 3.1.1 Alternative 1: Status Quo.

The status quo alternative would retain the current wastage of DSR bycatch that exceeds the maximum retainable bycatch rates for this species complex.

#### 3.1.2 Alternative 2: Require full retention of DSR in the fixed gear fisheries in GOA Regulatory Area 650.

Alternative 2 would allow full retention of DSR east of 140° W longitude. Fishermen would be required to retain all their DSR bycatch. They would be allowed to sell up to the 10% maximum retainable bycatch amount (round weight equivalent of their target species weight). The remainder of the fish would be voluntarily relinquished to NMFS or ADF&G. Proceeds of the sale of forfeited fish would accrue to fisheries management and research.

Alternative 2 would serve a conservation need to reduce waste of this resource. ADF&G managers are likely underestimating DSR mortality in the fixed gear fisheries, but the amount of underestimation is unknown. The inaccuracy of mortality estimated may or may not result in additional DSR available to the directed fishery.

Table 2 lists the number of vessels affected by the proposed action and corresponding pounds of forfeited DSR in Area 650 in 1996 and 1997. Approximately 95 vessels in DSR target, halibut bycatch, and other bycatch fisheries made 128 landings totaling a reported 10,000 lb of DSR forfeitures in 1996. In 1997, 114 vessels made 158 DSR landings of nearly 13,400 lb of forfeitures. In 1997, NMFS Enforcement did not ticket fishermen who voluntarily forfeited excess DSR. The increase in vessels and landings may be a result of NMFS Enforcement not penalizing forfeitures in 1997.

The ex-vessel price for DSR landed in the directed fishery in 1997 was \$1.34 per round weight pound. The price in the bycatch fishery was lower, at \$0.52 per pound. The ex-vessel value of the 1997 directed DSR fishery was approximately \$827,000. The DSR bycatch fishery was worth approximately \$115,000.

It is expected that under Alternative 2, where forfeitures would be permitted with no penalties by regulation, additional fishermen may comply and forfeited DSR may continue to increase. An accurate estimate of total removals is important in managing this rockfish complex. Changing the regulations under Alternative 2 would create conformity between the regulations and current enforcement practice, further encouraging accurate reporting and a decrease in wastage of the DSR resource.

### 3.2 Administrative, Enforcement and Information Costs

Additional administrative and enforcement monitoring is expected under Alternative 2 to track those rockfish landings in excess of the MRB for DSR species and which is forfeited. Some forfeitures will be made to the State of Alaska, while others will be forfeited to the NMFS. Processors will be required under this alternative to monitor and make forfeiture payments on behalf of affected fishermen. This program is currently underway under voluntary compliance. This program would be mandatory under Alternative 2 and expanded to all processors and fishermen in Area 650. Alternative 2 would remove inconsistencies in the regulations and simplify both enforcement, management and the commercial fisheries for these species.

#### 4.0 INITIAL REGULATORY FLEXIBILITY ANALYSIS

The objective of the Regulatory Flexibility Act is to require consideration of the capacity of those affected by regulations to bear the direct and indirect costs of regulation. If an action will have a significant impact on a substantial number of small entities an Initial Regulatory Flexibility Analysis (IRFA) must be prepared to identify the need for the action, alternatives, potential costs and benefits of the action, the distribution of these impacts, and a determination of net benefits.

NMFS has defined all fish-harvesting or hatchery businesses that are independently owned and operated, not dominant in their field of operation, with annual receipts not in excess of \$2,000,000 as small businesses. In addition, seafood processors with 500 employees or fewer, wholesale industry members with 100 employees or fewer, not-for-profit enterprises, and government jurisdictions with a population of 50,000 or less are considered small entities. A "substantial number" of small entities would generally be 20% of the total universe of small entities affected by the regulation. A regulation would have a "significant impact" on these small entities if it reduced annual gross revenues by more than 5 percent, increased total costs of production by more than 5 percent, or resulted in compliance costs for small entities that are at least 10 percent higher than compliance costs as a percent of sales for large entities.

If an action is determined to affect a substantial number of small entities, the analysis must include:

- (1) a description and estimate of the number of small entities and total number of entities in a particular affected sector, and total number of small entities affected; and
- (2) analysis of economic impact on small entities, including direct and indirect compliance costs, burden of completing paperwork or recordkeeping requirements, effect on the competitive position of small entities, effect on the small entity's cash flow and liquidity, and ability of small entities to remain in the market.

#### 4.1 Economic Impact on Small Entities

Approximately 100 permit owners showing landings in the DSR target fishery may be affected by the proposed action to require retention of all DSR species harvested in the halibut and sablefish IFQ fisheries in Area 650. These vessels forfeited 10,000 lb of DSR in 1996, and 14,000 lb in 1997. The 1996 and 1997 TACs for DSR in SEO were 950 mt each year (2,093,800 lb). Additionally, 459 halibut QS owners and 146 other groundfish (primarily sablefish) permittees landed DSR as bycatch.

In 1996, the most recent year for which vessel participation data is available, 1,508 vessels participated in the groundfish fisheries of the GOA; 1,254 longline vessels, 148 pot vessels, and 202 trawl vessels. There were 439 vessels operating in the BSAI in 1996; 158 longline vessels, 103 pot vessels, and 192 trawl vessels. The commercial groundfish catch off Alaska totaled 2.05 million mt in 1996, with an ex-vessel value of \$538 million. The value of the catch after primary processing was estimated at \$1.23 billion.

Because the number of vessels and size of the landings, compared with the total number of groundfish fleet and landings are not considered substantial, nor would they meet the criteria of "significant impact," none of the alternatives is expected to result in a "significant regulatory action" as defined in E.O. 12866.

The FRFA will be completed by NMFS after opportunity for public comment on the proposed rule and IRFA.

## 5.0 SUMMARY AND CONCLUSIONS

Total bycatch mortality of demersal shelf rockfish (DSR) in other fisheries is unknown. State and Federal fisheries managers believe a high level of unreported mortality of DSR is occurring in the directed and bycatch fisheries. Currently, the DSR MRB limits fishermen to 10 percent by weight of DSR against their halibut longline harvest. Any poundage in excess of the 10 percent limit is discarded at sea. Amending the regulations to require all DSR bycatch to be landed would enhance efforts to increase the accuracy of the accounting of total bycatch mortality of these fish.

The action proposed by the Alaska Department of Fish and Game would reduce waste and enhance estimates of total removals of demersal shelf rockfish species for stock assessment purposes: (1) without encouraging "topping off" with bycatch species and (2) decreasing waste of the resource. Additionally, the proposed action complies with four new requirements in the Sustainable Fisheries Act of 1996.

None of the alternatives are likely to significantly affect the quality of the human environment.

None of the alternatives is expected to result in a "significant regulatory action" as defined in E.O. 12866. However, the FRFA will be completed by NMFS after opportunity for public comment on the proposed rule and IRFA.

## 6.0 PREPARERS

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Western/Central Gulf Committee Meeting  
Minutes  
September 25, 1998

The committee convened via telephone on Friday, September 25, 1998 at approximately 1 p.m. Committee members in attendance were: Al Burch (chairman), Leroy Cossette, John Foster, Alvin Osterback, Dale Schwartzmiller, and Jonathan Spool. Steve Hughes, Jim McManus, and Corey Wilson were absent. Jane DiCosimo, Shane Capron and Tim Ragen provided staff support. Rob Wurm also attended.

The committee was updated regarding the status of the stand down program fro BSAI and GOA fisheries. The final rule for the stand down program was published on September 8 and was effective immediately. The fishery reopened in the Western area concurrent with the stand down provision on September 9 and closed on September 14. Another 24 hour fishery occurred on September 24. A separate plan amendment for the vessel registration program is under development at the NMFS Regional Office.

Tim Ragen, NMFS Protected Resources, briefed the committee regarding the status of the Council's request at the April 1998 meeting for preparation of an analysis to reapportion GOA pollock into A and B seasons. He responded that consideration of a GOA A/B season split will be examined by NMFS staff in the context of the biological opinion of the GOA pollock fishery currently in preparation. NMFS will be providing an update on the biological opinion to the Council at its October meeting.

Jane DiCosimo, Council staff, provided a brief summary of the analysis to start the Pacific cod longline fishery on January 20 in Areas 610-640 in the GOA. This EA/RIR was developed as a result of the committee's recommendation to the Council to attempt to address concern that: (1) freezer longliners could preempt this fishery, particularly as BSAI P. cod biomass declines and (2) gear allocations on small quotas, and effort increases under the pending LLP, may exacerbate management/biological problems, and up to half of the quota may be preempted. Committee discussion noted that the management alternatives and analysis addressed a change to the starting date for all longliners and not just freezer longliners. The discussion also addressed the lack of area-specific fishery information in the analysis. Ultimately, the committee approved a motion to table the EA/RIR given a general lack of support for the proposal and the potential ramifications Senate Bill 1221 on Western/Central Gulf fisheries.

The committee continued its discussion of the impacts of Senate Bill 1221 and discussed two committee recommendations. The first motion was discussed and ultimately not approved. The second motion was approved by the committee in attendance.

1. Any vessels under Section 204, subsections a, b, c, would be allowed to participate in BSAI groundfish fisheries, relative to the total amount of directed harvest in 1995, 1996, and 1997. (2 yes, 3 abstain, 3 absent)
2. Any vessel which is contracted under 206a cannot participate in GOA groundfish fisheries. (4 yes, 1 abstain, 3 absent).

The committee recommended continued examination of the remaining management alternatives for at-risk fisheries previously identified by the committee in the context of proposed Senate Bill 1221. The committee expressed strong reservations regarding potential preemption issues of GOA fisheries, as a result of the fishing cooperative its other provisions.

The committee approved a motion to recess at approximately 3 p.m. The committee planned to reconvene on Monday, September 28, if additional information regarding Senate Bill 1221 was available. The committee did not reconvene.

**Draft for Council Review**

ENVIRONMENTAL ASSESSMENT/REGULATORY IMPACT REVIEW

FOR

FMP AMENDMENT AND REGULATORY CHANGES TO IMPROVE THE EFFECTIVENESS  
OF THE IMPROVED RETENTION/IMPROVED UTILIZATION (IR/IU) PROGRAM  
FOR THE GROUND FISH FISHERIES OFF ALASKA

Prepared by

National Marine Fisheries Service  
Alaska Regional Office

*September 1998*



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## 1.0 INTRODUCTION

The groundfish fisheries in the Exclusive Economic Zone (EEZ) (3 to 200 miles offshore) off Alaska are managed under the Fishery Management Plan for Groundfish of the Gulf of Alaska and the Fishery Management Plan for the Groundfish Fisheries of the Bering Sea and Aleutian Islands Area. Both fishery management plans (FMPs) were developed by the North Pacific Fishery Management Council (Council) under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). The Gulf of Alaska (GOA) FMP was approved by the Secretary of Commerce and became effective in 1978 and the Bering Sea and Aleutian Islands Area (BSAI) FMP was approved and became effective in 1982.

Actions taken to amend FMPs or implement other regulations governing the groundfish fisheries must meet the requirements of Federal laws and regulations. In addition to the Magnuson-Stevens Act, the most important of these are the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), Executive Order (E.O.) 12866, and the Regulatory Flexibility Act (RFA).

NEPA, E.O. 12866 and the RFA require a description of the purpose and need for the proposed action as well as a description of alternative actions which may address the problem. This information is included in Section 1 of this document. Section 1 also examines implementation and enforcement issues related to the alternatives under consideration. Section 2 contains information on the biological and environmental impacts of the alternatives as required by NEPA. Impacts on endangered species and marine mammals are also addressed in this section. Section 3 contains a Regulatory Impact Review (RIR) which addresses the requirements of both E.O. 12866 and the RFA that economic impacts of the alternatives be considered including the impacts of the proposed action on small businesses.

This analysis addresses a suite of proposed changes to the Improved Retention/Improved Utilization (IR/IU) program adopted by the Council as Amendments 49/49 to the FMPs and implemented by NMFS by final rules published in the *Federal Register* on December 3, 1997 (62 FR 63880) for the BSAI and December 12, 1997 (62 FR 65379) for the GOA.

### 1.1 Purpose of and Need for the Action

Since IR/IU regulations took effect in January 1998 (See appendix 1 for full text of regulations), NMFS has noted dramatic reductions in the discards of pollock and Pacific cod in the groundfish fisheries off Alaska. Preliminary 1998 catch estimates show dramatic declines in discard rates for pollock and Pacific cod in most target fisheries in Alaska (see Appendix 2). In addition, many target fisheries appear to have increased their selectivity in terms of catching pollock when it is targeted and avoiding pollock when it is not targeted. Nevertheless, industry and NMFS have suggested a number of revisions to the program to increase its effectiveness and reduce several unintended impacts to sectors of the groundfish fleet. Four independent actions are proposed for analysis: (1) An FMP amendment to allow discarding of adulterated or unwholesome fish that are not fit for human consumption, (2) a regulatory amendment to adjust the allowable percentage of roe that may be retained in the Aleutian Islands Subarea, (3) a regulatory amendment to add additional product forms and recovery rates to the list of products against which pollock roe may be retained, and (4) a regulatory amendment to clarify retention and utilization requirements for fish used as bait, observer sampling, and consumed on board vessels. These four actions may be viewed independently and are not mutually exclusive. The Council may adopt any combination of these four actions as part of a package of revisions to the IR/IU program.

## 1.2 ACTION 1: FMP Amendment to Allow Discards of Adulterated Fish

At its February 1998 meeting, the Council received testimony regarding the problem of sand flea damaged fish on longline vessels and directed NMFS to proceed with a solution to the problem. Pollock and Pacific cod caught with longline gear are sometimes subject to severe predation by various species of amphipods (sand fleas) which can extensively devour fish carcasses in a short period of time. Fish which have been damaged due to sand flea predation may be unfit for human consumption and unsuitable for processing. Sand flea damage has also been reported by vessels using pot gear. In addition, fish may be crushed or damaged during fishing operations, and Pacific cod is reportedly subject to severe parasite infestations in some areas of the GOA. NMFS does not currently collect data on the condition of fish harvested on board commercial fishing vessels and consequently cannot quantify the extent to which these problems occur in various fisheries. However, industry representatives have indicated that, in some instances, dealing with fish that are unfit for human consumption may impose significant costs on catcher processors, especially smaller vessels that lack the capacity to process fishmeal. Industry has also noted that bringing unwholesome fish into food processing areas may be in conflict with the Hazard Assessment and Critical Control Point (HACCP) plans of some processors.

### 1.2.1 Definitions of Adulterated Food

Adulterated food is defined in various State of Alaska and Federal statutes and regulations. Definitions of "adulterated food" from Alaska State statutes, the Alaska Administrative Code, and the Federal Food, Drug, and Cosmetic Act are presented below for analysis and discussion.

#### Federal Statute: 21 USC 9--Federal Food, Drug and Cosmetic Act

Section 342 of the Federal Food, Drug and Cosmetic Act contains the following definition of "adulterated food"

##### Section 342. Adulterated Food

A food shall be deemed to be adulterated—

(a) *Poisonous, insanitary, etc., ingredients*

(1) If it bears or contains any poisonous or deleterious substance which may render it injurious to health; but in case the substance is not an added substance such food shall not be considered adulterated under this clause if the quantity of such substance in such food does not ordinarily render it injurious to health.<sup>1</sup>

(2)(A) if it bears or contains any added poisonous or added deleterious substance (other than one which is

(i) a pesticide chemical in or on a raw agricultural commodity;

(ii) a food additive;

(iii) a color additive; or

(iv) a new animal drug) which is unsafe within the meaning of section 346 of this title, or

(B) if it is a raw agricultural commodity and it bears or contains a pesticide chemical which is unsafe within the meaning of section 346a(a) of this title, or

(C) if it is, or if it bears or contains, any food additive which is unsafe within the meaning of section 348 of this title: Provided, That where a pesticide chemical has been used in or on a raw agricultural commodity in conformity with an exemption granted or a tolerance

prescribed under section 346a of this title and such raw agricultural commodity has been subjected to processing such as canning, cooking, freezing, dehydrating, or milling, the residue of such pesticide chemical remaining in or on such processed food shall, notwithstanding the provisions of sections 346 and 348 of this title, not be deemed unsafe if such residue in or on the raw agricultural commodity has been removed to the extent possible in good manufacturing practice and the concentration of such residue in the processed food when ready to eat is not greater than the tolerance prescribed for the raw agricultural commodity, or

(D) if it is, or it bears or contains, a new animal drug (or conversion product thereof) which is unsafe within the meaning of section 360b of this title;

(3) If<sup>2</sup> it consists in whole or in part of any filthy, putrid, or decomposed substance, or if it is otherwise unfit for food; or

(4) if it has been prepared, packed, or held under insanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health; or

(5) if it is, in whole or in part, the product of a diseased animal or of an animal which has died otherwise than by slaughter; or

(6) if its container is composed, in whole or in part, of any poisonous or deleterious substance which may render the contents injurious to health; or

(7) if it has been intentionally subjected to radiation, unless the use of the radiation was in conformity with a regulation or exemption in effect pursuant to section 348 of this title.

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<sup>1</sup>So in original. The period probably should be “; or”.

<sup>2</sup>So in original. Probably should be “or (3) if”.

The Federal Food Drug and Cosmetic Act also contains a number of prohibitions relating to the introduction of adulterated food into the U.S. marketplace that apply to the Alaska fishing industry.

### **Sec. 331. Prohibited acts**

The following acts and the causing thereof are prohibited:

(a) The introduction or delivery for introduction into interstate commerce of any food, drug, device, or cosmetic that is adulterated or misbranded.

(b) The adulteration or misbranding of any food, drug, device, or cosmetic in interstate commerce.

(c) The receipt in interstate commerce of any food, drug, device, or cosmetic that is adulterated or misbranded, and the delivery or proffered delivery thereof for pay or otherwise.

(d) The introduction or delivery for introduction into interstate commerce of any article in violation of section 344 or 355 of this title.

(e) The refusal to permit access to or copying of any record as required by section 350a, 354, or 373 of this title; or the failure to establish or maintain any record, or make any report, required under section 350a, 354, 355(i) or (k), 357(d) or (g), 360b(a)(4)(C), 360b(j), (l), or (m), 360e(f), or 360i of this title, or the refusal to permit access to or verification or copying of any such required record.

(f) The refusal to permit entry or inspection as authorized by section 374 of this title.

(g) The manufacture within any Territory of any food, drug, device, or cosmetic that is adulterated or misbranded.

### **Alaska Statute 12.20.020. Adulterated Food**

Adulterated food also is defined in Alaska Statute at AS 12.20.020. The definition of adulterated food set out in Alaska Statute is taken almost word for word from the Federal Food Drug and Cosmetic Act.

#### **AS 17.20.020. Adulterated food.**

*(a) Food is adulterated if*

(1) it bears or contains a poisonous or deleterious substance which may render it injurious to health; but in case the substance is not an added substance the food is not considered adulterated under this paragraph if the quantity of the substance does not ordinarily render it injurious to health;

(2) it bears or contains added poisonous or added deleterious substance which is unsafe within the meaning of AS 17.20.030 ;

(3) it consists in whole or in part of a diseased, contaminated, filthy, putrid, or decomposed substance, or if it is otherwise unfit for food;

(4) it has been produced, prepared, packed, or held under insanitary conditions in which it may have become contaminated with filth, or in which it may have been rendered diseased, unwholesome, or injurious to health;

(5) it is, in whole or in part, the product of a diseased animal or an animal which has died otherwise than by slaughter, or that has been fed upon the uncooked offal from a slaughterhouse;

(6) its container is composed, in whole or in part, of a poisonous or deleterious substance which may render the contents injurious to health.

*(b) Food is adulterated if*

(1) a valuable constituent has been omitted or abstracted in whole or part;

(2) a substance has been substituted in whole or part for a valuable constituent;

(3) damage or inferiority has been concealed;

(4) a substance has been added or mixed or packed with it to increase its bulk or weight, or reduce its quality or strength, or make it appear better or of greater value than it is.

### Alaska Administrative Code 18 AAC 34.115 Adulterated Seafood Products

The Alaska Administrative Code contains a more specific definition of “adulterated seafood products” that is not contained in Federal law that expands on the more general definition of adulterated food.

#### 18 AAC 34.115 ADULTERATED SEAFOOD PRODUCTS

The term “adulterated seafood product” has the meaning given “adulterated food” in AS 17.20.020 and AS 17.20.030 . In addition, a seafood product is adulterated if

- (1) it is contaminated with oil or another hazardous substance;
- (2) it contains a food additive that is unsafe under 21 U.S.C. 348(a), adopted by reference in 18 AAC 34.010 , or that is prohibited by the department.
- (3) it contains a color additive that is unsafe under 21 U.S.C. 379e(a), adopted by reference in 18 AAC 34.010, or that is prohibited by the department; or
- (4) it was accidentally or intentionally subjected to radiation, unless the use of radiation was in conformity with 21 C.F.R. 179.21 - 179.45, adopted by reference in 18 AAC 34.010.

From the above definitions, it is clear that the definition of adulterated food contained in Alaska statutes is modeled after language contained in the Federal Food, Drug, and Cosmetic Act. In addition, most sections of Federal regulations dealing with adulterated food reference the definition of adulterated food contained in the Federal Food, Drug, and Cosmetic Act. For example, NMFS seafood inspection regulations at 50 CFR 260.6 contain the following definition of “wholesome”:

*Wholesome.* “Wholesome” means the minimum basis of acceptability for human food purposes, of any fish or fishery product as defined in section 402 of the Federal Food, Drug, and Cosmetic Act, as amended.

#### 1.2.2 Alternatives for ACTION 1

**Definition of “adulterated.”** The most simple regulatory approach to defining “adulterated” fish is to reference the Federal Food, Drug and Cosmetic Act definition of adulterated food. Fish that meet the definition of adulterated food as defined in the Act would be allowed to be discarded at sea. Alternatively, regulations could be crafted to allow discarding for only certain types of adulteration (e.g., sand flea predation or parasite infestation) but not others (e.g., bruised fish).

**Intentional adulteration.** The intentional adulteration of fish must be prohibited to prevent undermining the intent of the IR/TU program. Otherwise, processors could evade improved retention requirements by simply holding fish on board the vessel until they begin to decay and then discard them as “adulterated.” Other forms of intentional adulteration such as chemical contamination also would be possible.

**Discard limits.** Limits could be placed on the percentage of IR/TU species allowed to be discarded as "adulterated." Such limits could vary by species, gear type and fishery. NMFS does not have adequate data to suggest reasonable limits by species, gear type and fishery. However, it is clear that adulterated fish are more prevalent in certain fisheries such as the longline fishery for Pacific cod than in other fisheries such as the midwater trawl pollock fishery.

**Recordkeeping and reporting requirements.** Current regulations simply require that the estimated tonnage of discards be logged in the vessels daily fishing logbook and reported in the processors weekly production logbook. NMFS would establish a new discard code for adulterated fish and this code would be used any time any fish are discarded due to adulteration. Alternatively, more restrictive requirements could be implemented to specifically require vessel operators to separate out and weigh IR/TU species that are destined to be discarded as adulterated. In some instances, observers could record and verify the weights of adulterated fish before discarding. However, in most instances, compliance would be the responsibility of the vessel. Observers are fully subscribed with monitoring and sampling unsorted catch as it enters the vessel and cannot generally be present at discard locations unless existing coverage levels or observer responsibilities are changed. The exception to this may be longline vessels where observers, when sampling, are generally positioned to view the roller and can count the fish that are retained and discarded.

### **1.3 ACTION 2: Increase the Maximum Allowable Roe Percentage in the Aleutian Islands**

Representatives for the offshore pollock industry have suggested that the current 7 percent maximum allowable roe percentage may be too restrictive for vessels fishing in the Aleutian Islands Subarea. An increase in the maximum allowable roe percentage to 8 percent for the Aleutian Islands has been proposed. They argue that the maximum retainable roe percentage is in conflict with the intent of the IR/TU program if vessels are required to discard pollock roe due to higher than average roe recovery rates.

The Council's IR/TU committee recommended that three alternatives be considered for Action 2:

**Alternative 1 (no action):** The maximum retainable roe percentage would remain at 7 percent for the entire BSAI.

**Alternative 2 (8 percent):** Increase the maximum retainable roe percentage to 8 percent for the Aleutian Islands Subarea

**Alternative 3 (9 percent):** Increase the maximum retainable roe percentage to 9 percent for the Aleutian Islands Subarea

An examination of NMFS weekly production data for the years 1995-1997 by area does suggest that the retained percentage of roe is significantly higher in the Aleutian Islands Subarea. Figure 1 displays the total production of pollock roe in each area of the BSAI as a percentage of the round weight equivalent of primary pollock products produced in the same area and week. In the Aleutian Islands Subarea, the aggregate roe production for the fleet sometimes reaches, but has never exceeded 8 percent during the three years analyzed. With respect to the Bering Sea Subarea, in no instance did the percentage of roe production exceed 6 percent during the same three years. NMFS does not collect production information by reporting area for onshore processors so it is not possible to provide similar data by reporting area for the onshore processors.

NMFS does not collect data on at-sea discard of product by product code. Consequently, it is impossible to distinguish roe discards from other forms of pollock discards and discern how much roe, if any, has been discarded in the Aleutian Islands to comply with existing roe stripping regulations. However, the 8 percent roe production average attained during some weeks in the Aleutian Islands Subarea does indicate that some vessels would have had to discard some roe product to comply with roe stripping regulations.



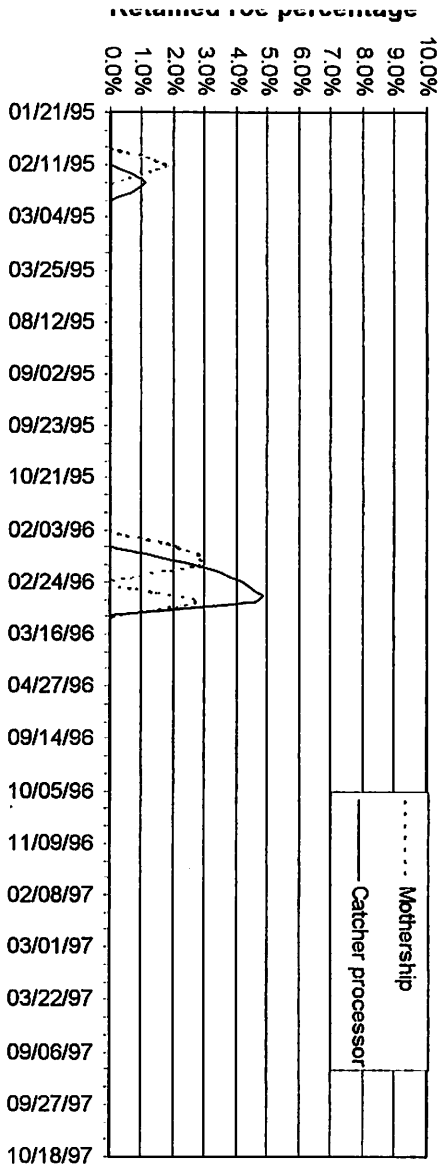
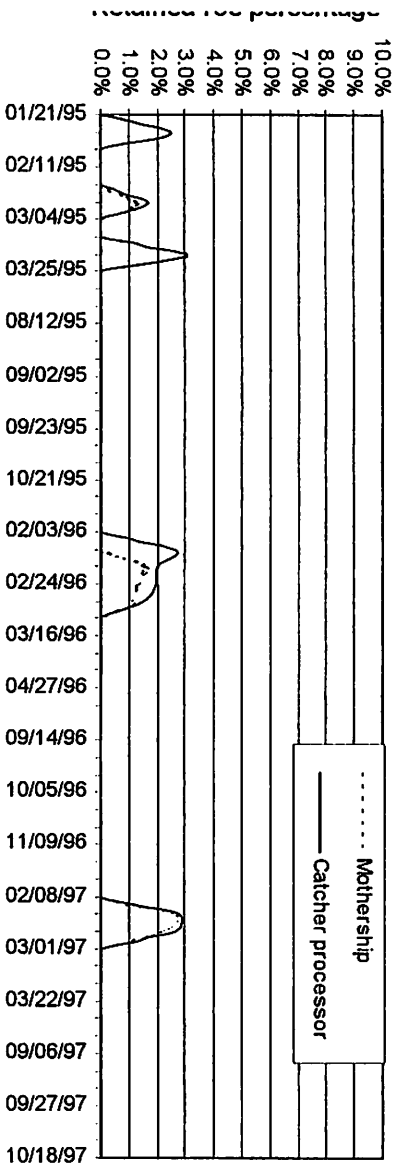
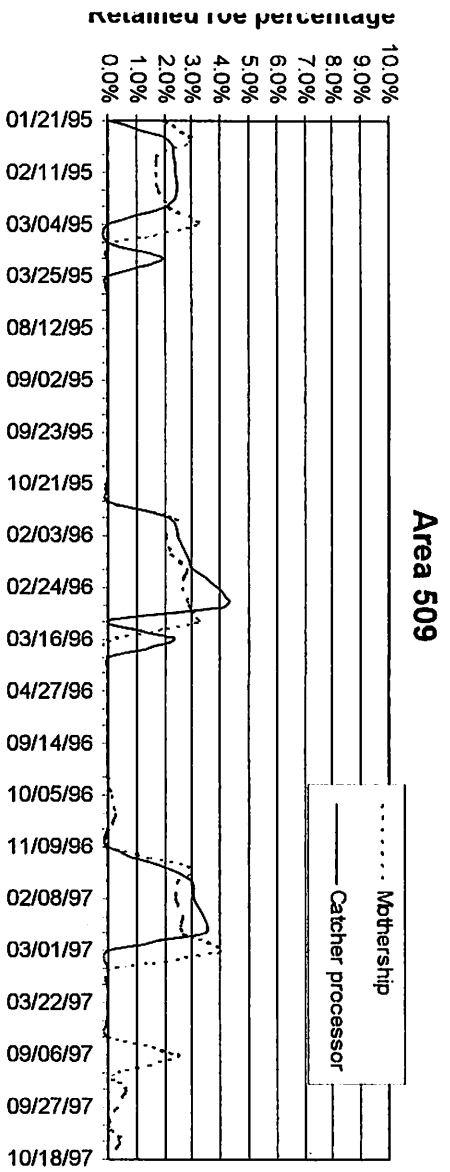


Figure 1. Pollock roe as a percentage of the round-weight equivalent of primary products produced by processor class, reporting week and area, 1995 - 1997.

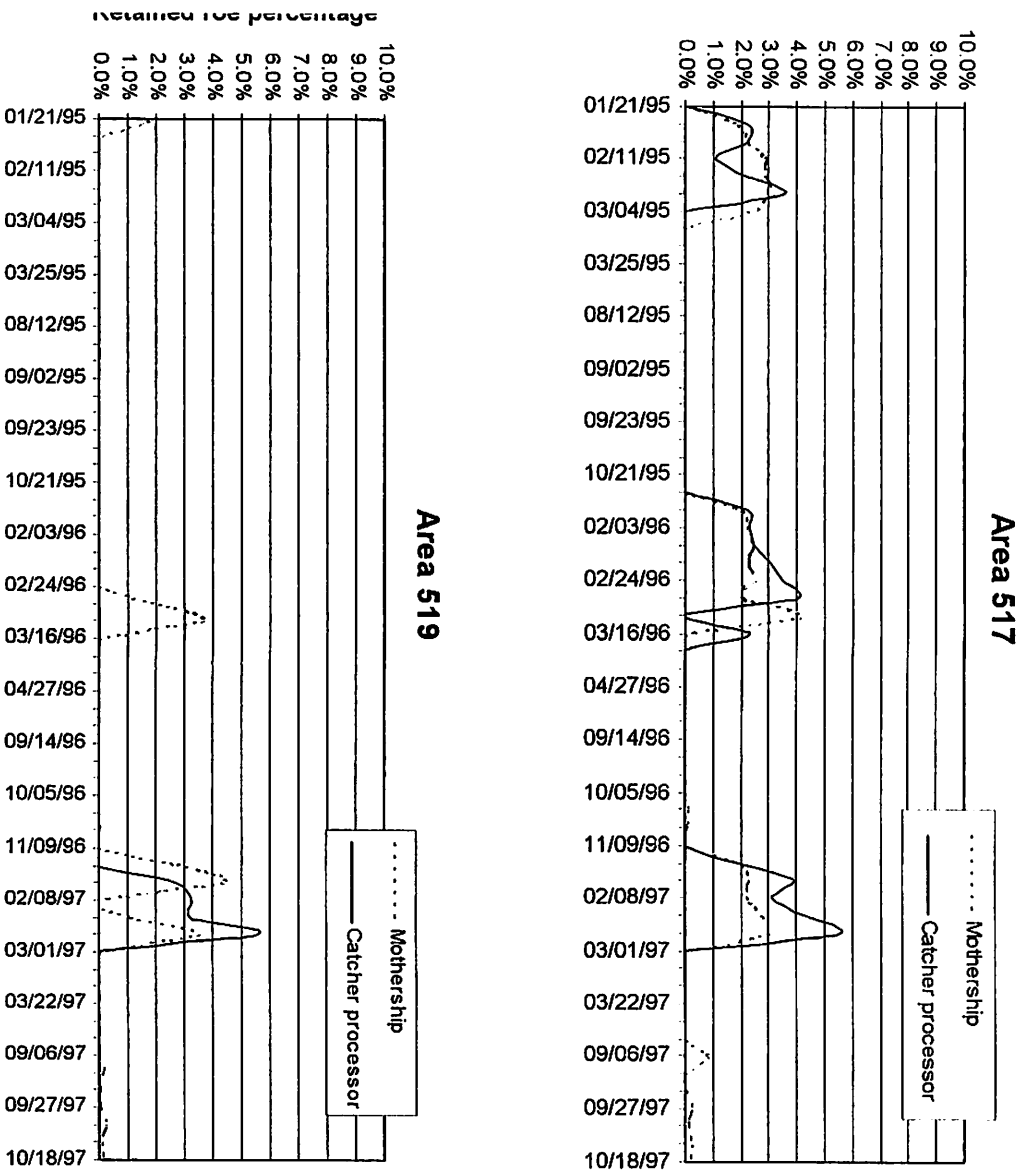


Figure 1 (Cont). Pollock roe as a percentage of the round-weight equivalent of primary products produced by processor class, reporting week and area, 1995 - 1997.

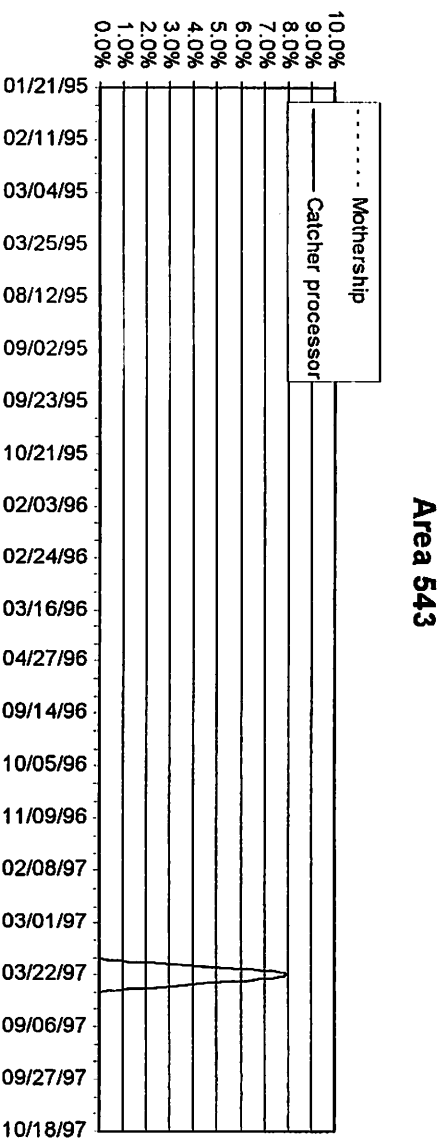
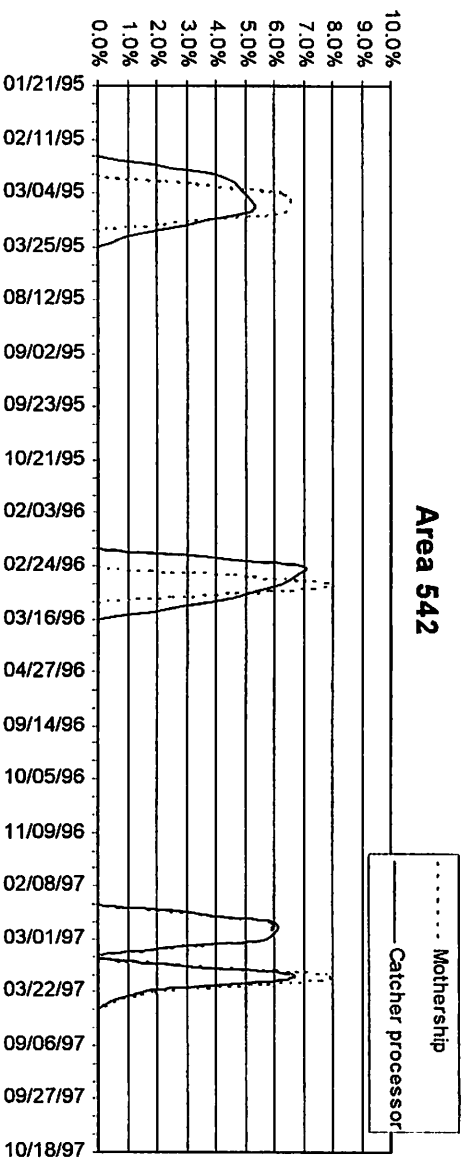
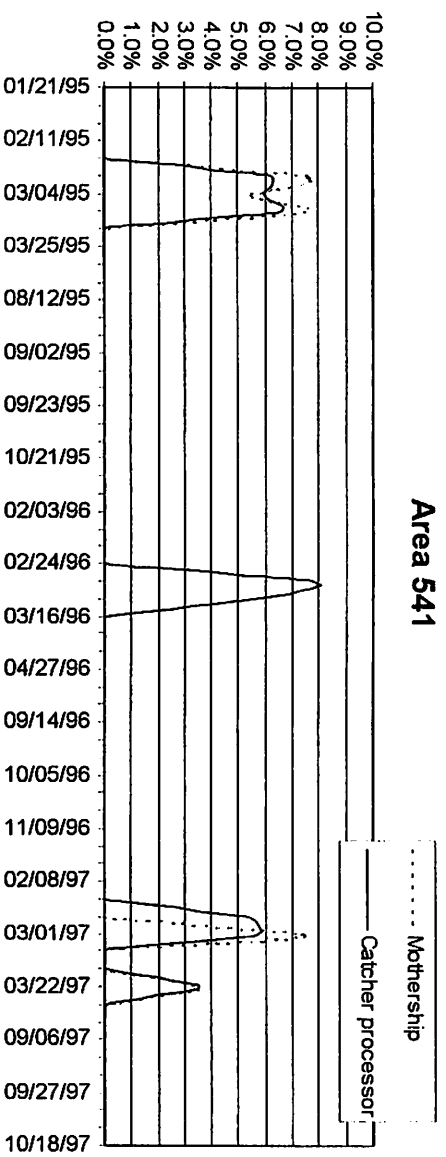


Figure 1 (Cont). Pollock roe as a percentage of the round-weight equivalent of primary products produced by processor class, reporting week and area, 1995 - 1997.

#### 1.4 ACTION 3: Add Additional Product Forms Against Which Pollock Roe may be Retained.

Industry representatives also have indicated that the current roe stripping regulations may be too restrictive for vessels that do not target pollock and do not process pollock in traditional product forms. Industry representatives indicate that some vessels that do not target pollock, such as freezer longliners and small H&G factory trawlers, would like to retain pollock roe when it is present. However, these vessel operators have indicated that they do not produce pollock products against which roe may be retained. At present, only the products and PRRs listed in Table 1 may be used to calculate the allowable percentage of roe that may be on board a vessel.

Table 1. Product types and standard PRRs that may be used to calculate round-weight equivalents for pollock for purposes of determining maximum retainable roe percentages.

<i>Product code</i>	<i>Product description</i>	<i>Standard PRR</i>
7	Headed and gutted, western cut	0.65
8	Headed and gutted, eastern cut	0.56
10	Headed and gutted, without tail	0.50
20	Fillets with skin & ribs	0.35
21	Fillets with skin on, no ribs	0.30
22	Fillets with ribs, no skin	0.30
23	Fillets, skinless, boneless	0.21
24	Deep skin fillets	0.16
30	Surimi	0.16
31	Mince	0.22
32	Meal	0.17

To verify whether non-pollock catcher processors are constrained by this list of products, Table 2 was generated to display total pollock production by non-pollock catcher processors for the year 1998 (through August 31, 1998). Non-pollock catcher processors were identified as those vessels that did not report any production of pollock surimi or pollock fillets during 1998. It is assumed that all catcher processors targeting pollock produced either surimi or fillets during 1998.

Table 2. Pollock products produced by non-pollock processors off Alaska from January 1, 1998, through August 30, 1998, in metric tons.

<i>Code</i>	<i>Product</i>	<i>Total production in mt.</i>
1	whole fish	342
7	Headed and gutted, western cut	339
8	Headed and gutted, eastern cut	5,368
10	Headed and gutted, without tail	10
11	Kirimi	75
14	Roe	132
97	Other retained product	76

As indicated in the Table 2, H&G product forms constitute the bulk of pollock production by non-pollock vessels. In fact, 75 mt of Kirimi and 76 mt of "other retained product" is the only reported production by non-pollock vessels during 1998 of products other than H&G types or roe. This suggests that the great majority of non-pollock processors are not constrained in their ability to retain pollock roe because they are producing H&G product forms against which roe may be retained. Nevertheless, no reason exists to exclude pollock kirimi from the list of products against which roe may be retained. However, at present, NMFS has not established a standard PRR for pollock kirimi.

**Alternative 1 (no action):** No additional product forms would be added to the list of products against which roe may be retained.

**Alternative 2 (add kirimi):** Establish a standard PRR for pollock kirimi and add this product form to the list of products against which pollock roe may be retained.

**1.5 ACTION 4: Clarification of Retention and Utilization Requirements for Non-Product Uses of IR/TU Species.**

Current regulations provide for a variety of non-product uses of IR/TU species including: (1) deployment of IR/TU species as bait, (2) consumption of IR/TU species on board a vessel, and (3) observer sampling and collection. However, existing utilization regulations address only product uses of IR/TU species and do not provide clear direction to fishermen on the utilization requirements for non-product uses of IR/TU species. Under existing regulations, vessels may deploy IR/TU species as bait, and NMFS is treating IR/TU species consumed on board a vessel as retained and utilized, however, the regulations are ambiguous with respect to the minimum utilization requirements for non-product fish. Current IR/TU utilization regulations at 50 CFR 679.27(i) state:

IF...	then your total weight of retained or lawfully transferred products produced from your catch or receipt of that IR/TU species during a fishing trip must...
(1) directed fishing for an IR/TU species is open,	equal or exceed 15 percent of the round-weight catch or round-weight delivery of that species during the fishing trip.
(2) directed fishing for an IR/TU species is prohibited,	equal or exceed 15 percent of the round-weight catch or round-weight delivery of that species during the fishing trip or 15 percent of the MRB amount for that species, whichever is lower.
(3) retention of an IR/TU species is prohibited,	equal zero.

However, these utilization regulations do not provide explicit instructions to fishermen on how to treat fish that are legally deployed as bait or consumed on board the vessel but do not generate a retained product. In addition, fish sampled by observers and rendered unsuitable for processing as a result of tissue sampling or other scientific procedures. These fish also may be treated in the same manner as bait and fish consumed on board the vessel for the purpose of compliance with improved utilization requirements.

Three alternatives are presented for clarifying the utilization requirements for non-product uses of IR/TU species.

**Alternative 1: No Action.** Utilization requirements for bait, fish consumed on board the vessel, and fish collected by observers would not be clarified.

**Alternative 1. Treat bait and consumed fish as whole fish product.** Under this option, vessel operators would record round weights for bait and fish consumed on board the vessel and would sum these round weights together with IR/TU product weights to determine if the vessel is in compliance with the 15 percent minimum utilization rate. This option would be the simple to implement and comply with. However, bait and fish consumed on board the vessel with a whole fish PRR of 1.0 would receive disproportionate utilization “credit” compared to other processed products that have lower PRRs. This might produce an incentive for vessels to favor these two uses of IR/TU species over production of processed products for food.

**Alternative 2. Take bait and consumed fish “off the top” before calculating utilization rates.** Under this option, vessels would reduce their round-weight catch of an IR/TU species by the weight of fish recorded

as used for bait, consumed on board the vessel, and retained or damaged by observer sampling. Processed products would then be compared against this "adjusted" round weight catch amount to determine if the vessel is in compliance with the 15 percent minimum utilization rate. Under this alternative, bait and consumed fish would not be treated as products and would not enter into any utilization rate calculations. They would, however, be considered retained fish for the purpose of the IR/IU program and NMFS recordkeeping and reporting requirements.

## 2.0 NEPA REQUIREMENTS: ENVIRONMENTAL IMPACTS OF THE ALTERNATIVES

An environmental assessment (EA) is required by the National Environmental Policy Act of 1969 (NEPA) to determine whether the action considered will result in significant impact on the human environment. If the action is determined not to be significant based on an analysis of relevant considerations, the EA and resulting finding of no significant impact (FONSI) would be the final environmental documents required by NEPA. An environmental impact statement (EIS) must be prepared for major Federal actions significantly affecting the human environment.

An EA must include a brief discussion of the need for the proposal, the alternatives considered, the environmental impacts of the proposed action and the alternatives, and a list of document preparers. The purpose and alternatives were discussed in Sections 1.1 and 1.2, and the list of preparers is in Section 6. This section contains the discussion of the environmental impacts of the alternatives including impacts on threatened and endangered species and marine mammals.

### 2.1 Environmental Impacts of the Alternatives

The environmental impacts generally associated with fishery management actions are effects resulting from (1) harvest of fish stocks which may result in changes in food availability to predators and scavengers, changes in the population structure of target fish stocks, and changes in the marine ecosystem community structure; (2) changes in the physical and biological structure of the marine environment as a result of fishing practices, e.g., effects of gear use and fish processing discards; and (3) entanglement/entrapment of non-target organisms in active or inactive fishing gear.

A summary of the effects of the annual groundfish TAC amounts on the biological environment and associated impacts on marine mammals, seabirds, and other threatened or endangered species are discussed in the final environmental assessment for the annual groundfish total allowable catch specifications (NMFS 1998).

### 2.2 Impacts on Endangered or Threatened Species

**Background.** The ESA provides for the conservation of endangered and threatened species of fish, wildlife, and plants. The program is administered jointly by NMFS for most marine species, and the US Fish and Wildlife Service (FWS) for terrestrial and freshwater species.

The ESA procedure for identifying or listing imperiled species involves a two-tiered process, classifying species as either threatened or endangered, based on the biological health of a species. Threatened species are those likely to become endangered in the foreseeable future [16 U.S.C. §1532(20)]. Endangered species are those in danger of becoming extinct throughout all or a significant portion of their range [16 U.S.C. §1532(20)]. The Secretary of Commerce, acting through NMFS, is authorized to list marine mammal and fish species. The Secretary of the Interior, acting through the FWS, is authorized to list all other organisms.

In addition to listing species under the ESA, the critical habitat of a newly listed species must be designated concurrent with its listing to the "maximum extent prudent and determinable" [16 U.S.C. §1533(b)(1)(A)]. The ESA defines critical habitat as those specific areas that are essential to the conservation of a listed species and that may be in need of special consideration. The primary benefit of critical habitat designation is that it informs Federal agencies that listed species are dependent upon these areas for their continued existence, and that consultation with NMFS on any Federal action that may affect these areas is required.



Some species, primarily the cetaceans, listed in 1969 under the Endangered Species Conservation Act and carried forward as endangered under the ESA, have not received critical habitat designations.

**Listed Species.** The following species are currently listed as endangered or threatened under the ESA and occur in the GOA and/or BSAI:

#### Endangered

Northern Right Whale	<i>Balaena glacialis</i>
Bowhead Whale <sup>1</sup>	<i>Balaena mysticetus</i>
Sei Whale	<i>Balaenoptera borealis</i>
Blue Whale	<i>Balaenoptera musculus</i>
Fin Whale	<i>Balaenoptera physalus</i>
Humpback Whale	<i>Megaptera novaeangliae</i>
Sperm Whale	<i>Physeter macrocephalus</i>
Snake River Sockeye Salmon	<i>Oncorhynchus nerka</i>
Short-tailed Albatross	<i>Diomedea albatrus</i>
Steller Sea Lion <sup>2</sup>	<i>Eumetopias jubatus</i>

#### Threatened

Snake River Fall Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Snake River Spring/Summer Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Steller Sea Lion <sup>3</sup>	<i>Eumetopias jubatus</i>
Spectacled Eider	<i>Somateria fishcheri</i>

**Section 7 Consultations.** Because both groundfish fisheries are federally regulated activities, any negative affects of the fisheries on listed species or critical habitat and any takings<sup>4</sup> that may occur are subject to ESA section 7 consultation. NMFS initiates the consultation and the resulting biological opinions are issued to NMFS. The Council may be invited to participate in the compilation, review, and analysis of data used in the consultations. The determination of whether the action “is likely to jeopardize the continued existence of” endangered or threatened species or to result in the destruction or modification of critical habitat, however, is the responsibility of the appropriate agency (NMFS or FWS). If the action is determined to result in jeopardy, the opinion includes reasonable and prudent measures that are necessary to alter the action so that jeopardy is avoided. If an incidental take of a listed species is expected to occur under normal promulgation of the action, an incidental take statement is appended to the biological opinion.

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<sup>1</sup>species is present in Bering Sea area only.

<sup>2</sup>listed as endangered west of Cape Suckling.

<sup>3</sup>listed as threatened east of Cape Suckling.

<sup>4</sup> the term “take” under the ESA means “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct” (16 U.S.C. §1538(a)(1)(B)).

Section 7 consultations have been done for all the above listed species, some individually and some as groups. Below are summaries of the consultations.

**Endangered Cetaceans.** NMFS concluded a formal section 7 consultation on the effects of the BSAI and GOA groundfish fisheries on endangered cetaceans within the BSAI and GOA on December 14, 1979, and April 19, 1991, respectively. These opinions concluded that the fisheries are unlikely to jeopardize the continued existence or recovery of endangered whales. Consideration of the bowhead whale as one of the listed species present within the area of the Bering Sea fishery was not recognized in the 1979 opinion, however, its range and status are not known to have changed. No new information exists that would cause NMFS to alter the conclusion of the 1979 or 1991 opinions. NMFS has no plan to reopen Section 7 consultations on the listed cetaceans for this action. Of note, however, are observations of Northern Right Whales during Bering Sea stock assessment cruises in the summer of 1997 (NMFS per. com). Prior to these sightings, and one observation of a group of two whales in 1996, confirmed sightings had not occurred.

**Steller sea lion.** The Steller sea lion range extends from California and associated waters to Alaska, including the Gulf of Alaska and Aleutian Islands, and into the Bering Sea and North Pacific and into Russian waters and territory. In 1997, based on biological information collected since the species was listed as threatened in 1990 (60 FR 51968), NMFS reclassified Steller sea lions as two distinct population segments under the ESA (62 FR 24345). The Steller sea lion population segment west of 144°W. longitude (a line near Cape Suckling, Alaska) is listed as endangered; the remainder of the U.S. Steller sea lion population remains listed as threatened.

NMFS designated critical habitat in 1993 (58 FR 45278) for the Steller sea lion based on the Recovery Team's determination of habitat sites essential to reproduction, rest, refuge, and feeding. Listed critical habitats in Alaska include all rookeries, major haul-outs, and specific aquatic foraging habitats of the BSAI and GOA. The designation does not place any additional restrictions on human activities within designated areas. No changes in critical habitat designation were made as result of the 1997 re-listing.

Beginning in 1990 when Steller sea lions were first listed under the ESA, NMFS determined that both groundfish fisheries may adversely affect Steller sea lions, and therefore conducted Section 7 consultation on the overall fisheries (NMFS 1991), and subsequent changes in the fisheries (NMFS 1992). The most recent biological opinion on the BSAI and GOA fisheries effects on Steller sea lions was issued by NMFS on January 26, 1996. It concluded that these fisheries and harvest levels are unlikely to jeopardize the continued existence and recovery of the Steller sea lion or adversely modify critical habitat. NMFS conducted an informal Section 7 consultation on Steller sea lions for this action in 1997 and concluded that the GOA groundfish fishery and the 1997 TAC amounts were not likely to affect Steller sea lions in a way or to an extent not already considered in previous Section 7 consultations (NMFS, January 17, 1997). Reinitiation of formal consultation was not required at that time. The proposed alternatives would not alter the fishery in a manner not already considered in these previous consultations.

**Pacific Salmon.** No species of Pacific salmon originating from freshwater habitat in Alaska are listed under the ESA. These listed species originate in freshwater habitat in the headwaters of the Columbia (Snake) River. During ocean migration to the Pacific marine waters a small (undetermined) portion of the stock extend into the Gulf of Alaska as far east as the Aleutian Islands. In that habitat they are mixed with hundreds to thousands of other stocks originating from the Columbia River, British Columbia, Alaska, and Asia. The listed fish are not visually distinguishable from the other, unlisted, stocks. Mortal take of them in the chinook salmon bycatch portion of the fisheries is assumed based on sketchy information on abundance, timing, and migration patterns.

NMFS designated critical habitat in 1992 (57 FR 57051) for the Snake River sockeye, Snake River spring/summer chinook, and Snake River fall chinook salmon. The designations did not include any marine waters, therefore, does not include any of the habitat where the groundfish fisheries are promulgated.

NMFS has issued two biological opinions and no-jeopardy determinations for listed Pacific salmon in the Alaska groundfish fisheries (NMFS 1994, NMFS 1995). Conservation measures were recommended to reduce salmon bycatch and improve the level of information about the salmon bycatch. The no jeopardy determination was based on the assumption that if total salmon bycatch is controlled, the impacts to listed salmon are also controlled. The incidental take statement appended to the second biological opinion allowed for take of one Snake River fall chinook and zero take of either Snake River spring/summer chinook or Snake River sockeye, per year. As explained above, it is not technically possible to know if any have been taken. Compliance with the biological opinion is stated in terms of limiting salmon bycatch per year to under 55,000 and 40,000 for chinook salmon, and 200 and 100 sockeye salmon in the BSAI and GOA fisheries, respectively.

**Short-tailed albatross.** The entire world population in 1995 was estimated as 800 birds; 350 adults breed on two small islands near Japan (H. Hasegawa, per. com.). The population is growing but is still critically endangered because of its small size and restricted breeding range. Past observations indicate that older short-tailed albatrosses are present in Alaska primarily during the summer and fall months along the shelf break from the Alaska Peninsula to the GOA, although 1- and 2-year old juveniles may be present at other times of the year (FWS 1993). Consequently, these albatrosses generally would be exposed to fishery interactions most often during the summer and fall--during the latter part of the second and the whole of the third fishing quarters.

Short-tailed albatrosses reported caught in the longline fishery include two in 1995, one in October 1996, and none in 1997. Both 1995 birds were caught in the vicinity of Unimak Pass and were taken outside the observers' statistical samples.

Formal consultation on the effects of the groundfish fisheries on the short-tailed albatross under the jurisdiction of the FWS concluded that BSAI and GOA groundfish fisheries would adversely affect the short-tailed albatross and would result in the incidental take of up to two birds per year, but would not jeopardize the continued existence of that species (FWS 1989). Subsequent consultations for changes to the fishery that might affect the short-tailed albatross also concluded no jeopardy (FWS 1995, FWS 1997). NMFS does not intend to renew consultation for this action.

**Spectacled Eider.** These sea ducks feed on benthic mollusks and crustaceans taken in shallow marine waters or on pelagic crustaceans. The marine range for spectacled eider is not known, although Dau and Kitchinski (1977) review evidence that they winter near the pack ice in the northern Bering Sea. Spectacled eider are rarely seen in U.S. waters except in August through September when they molt in northeast Norton Sound and in migration near St. Lawrence Island. The lack of observations in U.S. waters suggests that, if not confined to sea ice polyneas, they likely winter near the Russian coast (FWS 1993). Although the species is noted as occurring in the GOA and BSAI management areas, no evidence exists that they interact with these groundfish fisheries.

**Conditions for Re-initiation of Consultation.** For all ESA listed species, consultation must be reinitiated if: the amount or extent of taking specified in the Incidental Take Statement is exceeded, new information reveals effects of the action that may affect listed species in a way not previously considered, the action is subsequently modified in a manner that causes an effect to listed species that was not considered in the

biological opinion, or a new species is listed or critical habitat is designated that may be affected by the action. None of the alternatives would affect the above listed species in a manner not already considered under previous consultation. NMFS does not intent to reinstate any consultations for this action.

### **2.3 Impacts on Marine Mammals Not Listed Under the ESA**

Marine mammals not listed under the ESA that may be present in the GOA and BSAI include cetaceans, [minke whale (*Balaenoptera acutorostrata*), killer whale (*Orcinus orca*), Dall's porpoise (*Phocoenoides dalli*), harbor porpoise (*Phocoena phocoena*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), and the beaked whales (e.g., *Berardius bairdii* and *Mesoplodon spp.*)] as well as pinnipeds [northern fur seals (*Callorhinus ursinus*), and Pacific harbor seals (*Phoca vitulina*)] and the sea otter (*Enhydra lutris*).

The proposed alternatives are designed to reduce the regulatory impacts of some aspects of the IR/TU program. The affects of the alternatives on Steller sea lions are addressed in section 2.3 above. None of the alternatives will affect takes of other marine mammals not listed under the ESA. Therefore, none of the alternatives are expected to have a significant impact on marine mammals not listed under the ESA.

### **2.4 Coastal Zone Management Act**

Implementation of each of the alternatives would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Management Program within the meaning of Section 30(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

### **2.5 Conclusions or Finding of No Significant Impact**

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.

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Assistant Administrator for Fisheries, NOAA

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Date

### 3.0 REGULATORY IMPACT REVIEW: ECONOMIC AND SOCIOECONOMIC IMPACTS OF THE ALTERNATIVES

This section provides information about the economic and socioeconomic impacts of the alternatives including identification of the individuals or groups that may be affected by the action, the nature of these impacts, quantification of the economic impacts if possible, and discussion of the trade offs between qualitative and quantitative benefits and costs.

The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following statement from the order:

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider. Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environment, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

This section also addresses the requirements of both E.O. 12866 and the RFA to provide adequate information to determine whether an action is "significant" under E.O. 12866 or will result in "significant" impacts on small entities under the RFA.

E. O. 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be "significant". A "significant regulatory action" is one that is likely to:

1. Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
2. Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
3. Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
4. Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

A regulatory program is "economically significant" if it is likely to result in the effects described above. The Regulatory Impact Review (RIR) is designed to provide information to determine whether the proposed regulation is likely to be "economically significant." None of the alternatives is expected to result in a "significant regulatory action" as defined in E.O. 12866.

### 3.1 Costs and Benefits of the Alternatives

Action 1 would relieve a current regulatory requirement that vessels retain all IR/TU species brought on board regardless of the condition of the fish by allowing the discarding of fish that meet the statutory definition of adulterated food. This action would provide benefits to some processors, especially longline vessels that frequently encounter fish that have been damaged or destroyed by sand flea predation. Implementation of an exemption for adulterated fish would have no negative economic impacts to the fishing fleet.

Action 2 would increase the percentage of roe that may be retained in the Aleutian Islands Subarea. NMFS data suggests that some processors operating in the Aleutian Islands may achieve roe recovery rates that exceed the 7 percent maximum retainable percentage in current roe stripping regulations. Under current regulations, any roe in excess of the 7 percent maximum retainable percentage cannot be retained and must be discarded at sea. Table 3 displays the estimated annual tonnages of roe that would have had to been discarded in the Aleutian Islands from 1995-1997.

Table 3. Estimated tonnage of roe product that exceeded the 7 percent maximum roe retention percentage in the Aleutian Islands Subarea by processor type, in metric tons.

<i>Year</i>	<i>Mothership excess roe</i>	<i>Catcher processor excess roe</i>
1995	1.7	0.0
1996	2.2	0.9
1997	6.1	8.7

If the maximum retainable roe percentage for the Aleutian Islands Subarea was raised to 8 percent, none of the tonnages listed in Table 3 would have been required to be discarded.

Action 3 would add kirimi to the list of products against which pollock roe can be retained. In 1998, only 75 mt of pollock kirimi was produced by non-pollock processors compared with nearly 6,000 mt of H&G product. Given the 1998 mix of pollock products produced by vessels non targeting on pollock, adding kirimi to the list of products against which roe may be retained would have little or no effect on the amount of roe that these vessels could retain. However, adding kirimi to the list of products against which roe may be retained would impose no costs on the fleet and would provide additional flexibility for vessels who may wish to process more kirimi product in the future.

Action 4 would simply provide a technical clarification to existing regulations and would not impose costs or benefits to the groundfish fleet.

### 3.1 Impacts to Small Entities

The objective of the Regulatory Flexibility Act is to require consideration of the capacity of those affected by regulations to bear the direct and indirect costs of regulation. If an action will have a significant impact on a substantial number of small entities an Initial Regulatory Flexibility Analysis (IRFA) must be prepared to identify the need for the action, alternatives, potential costs and benefits of the action, the distribution of these impacts, and a determination of net benefits.

The Small Business Administration has defined all fish-harvesting or hatchery businesses that are independently owned and operated, not dominant in their field of operation, with annual receipts not in excess of \$3,000,000 as small businesses. In addition, seafood processors with 500 employees or fewer, wholesale industry members with 100 employees or fewer, not-for-profit enterprises, and government jurisdictions with a population of 50,000 or less are considered small entities. NMFS has determined that a "substantial number" of small entities would generally be 20 percent of the total universe of small entities affected by the regulation. A regulation would have a "significant impact" on these small entities if it changed annual gross revenues by more than 5 percent, total costs of production by more than 5 percent, or compliance costs for small entities by at least 10 percent compared with compliance costs as a percent of sales for large entities.

If an action is determined to affect a substantial number of small entities, the analysis must include:

4. a description and estimate of the number of small entities and total number of entities in a particular affected sector, and total number of small entities affected; and
2. analysis of economic impact on small entities, including direct and indirect compliance costs, burden of completing paperwork or recordkeeping requirements, effect on the competitive position of small entities, effect on the small entity's cashflow and liquidity, and ability of small entities to remain in the market.

Actions 1, 3, and 4 would impact the entire BSAI and GOA commercial fishing fleet. In 1996, the most recent year for which vessel participation data is available, 1,508 vessels participated in the groundfish fisheries of the GOA; 1,254 longline vessels, 148 pot vessels, and 202 trawl vessels. There were 439 vessels operating in the BSAI in 1996; 158 longline vessels, 103 pot vessels, and 192 trawl vessels. The commercial groundfish catch off Alaska totaled 2.05 million mt in 1996, with an ex-vessel value of \$538 million. The value of the catch after primary processing was estimated at \$1.23 billion. However, as noted in Section 3.1, all of these actions are designed to relieve restrictions or clarify existing regulations. None of the actions would significant impact on a substantial number of small entities. Therefore an initial regulatory flexibility analysis was not prepared.

#### 4.0 SUMMARY AND CONCLUSIONS

Since IR/IU regulations took effect in January 1998, NMFS has noted dramatic reductions in the discards of pollock and Pacific cod in the groundfish fisheries off Alaska. Preliminary 1998 catch estimates show dramatic declines in discard rates for pollock and Pacific cod in most target fisheries in Alaska. In addition, many target fisheries appear to have increased their selectivity in terms of catching pollock when it is targeted and avoiding pollock when it is not targeted. Nevertheless, industry and NMFS have suggested a number of revisions to the program to increase its effectiveness and reduce several unintended impacts to sectors of the groundfish fleet. Four independent actions are proposed for analysis: (1) An FMP amendment to allow discarding of adulterated or unwholesome fish that are not fit for human consumption, (2) a regulatory amendment to adjust the allowable percentage of roe that may be retained in the Aleutian Islands Subarea, (3) a regulatory amendment to add additional product forms and recovery rates to the list of products against which pollock roe may be retained, and (4) a regulatory amendment to clarify retention and utilization requirements for fish used as bait, observer sampling, and consumed on board vessels. These four actions may be viewed independently and are not mutually exclusive. The Council may adopt any combination of these four actions as part of a package of revisions to the IR/IU program. All of these actions are designed to relieve current regulatory restrictions on the groundfish fleet. They may generate some economic benefits to the groundfish fleet by reducing the cost of dealing with adulterated fish that are not fit for human

consumption and preventing potential regulatory discards of pollock roe. None of these actions are expected to impose any additional costs on the groundfish fleet.



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## **6.0 LIST OF PREPARERS**

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**APPENDIX 1. Current IR/IU and Roe Stripping Regulations**

**§ 679.27 Improved Retention/Improved Utilization Program.**

(a) *Applicability.* The owner or operator of a vessel that is required to obtain a Federal fisheries or processor permit under § 679.4 must comply with the IR/IU program set out in this section while fishing for groundfish in the GOA or BSAI, fishing for groundfish in waters of the State of Alaska that are shoreward of the GOA or BSAI, or when processing groundfish harvested in the GOA or BSAI.

(b) *IR/IU species.* The following species are defined as "IR/IU species" for the purposes of this section:

- (1) Pollock.
- (2) Pacific cod.

(3) Rock sole in the BSAI (beginning January 1, 2003).

(4) Yellowfin sole in the BSAI (beginning January 1, 2003).

(5) Shallow-water flatfish species complex in the GOA as defined in the annual harvest specifications for the GOA (beginning January 1, 2003).

(c) *Minimum retention requirements--(1) Definition of retain on board.* Notwithstanding the definition at 50 CFR 600.10, for the purpose of this section, to retain on board means to be in possession of on board a vessel.

(2) The following table displays minimum retention requirements by vessel category and directed fishing status:

IF YOU OWN OR OPERATE A	AND	YOU MUST RETAIN ON BOARD UNTIL LAWFUL TRANSFER
(i) Catcher vessel	(A) Directed fishing for an IR/IU species is open	all fish of that species brought on board the vessel.
	(B) Directed fishing for an IR/IU species is prohibited	all fish of that species brought on board the vessel up to the MRB amount for that species.
	(C) Retention of an IR/ IU species is prohibited	no fish of that species.
(ii) Catcher/ processor	(A) Directed fishing for an IR/IU species is open	a primary product from all fish of that species brought on board the vessel.
	(B) Directed fishing for an IR/IU species is prohibited	a primary product from all fish of that species brought on board the vessel up to the point that the round-weight equivalent of primary products on board equals the MRB amount for that species.
	(C) Retention of an IR/IU species is prohibited	no fish or product of that species.
(iii) Mothership	(A) Directed fishing for an IR/IU species is open	a primary product from all fish of that species brought on board the vessel.
	(B) Directed fishing for an IR/IU species is prohibited	a primary product from all fish of that species brought on board the vessel up to the point that the round-weight equivalent of primary products on board equals the MRB amount for that species.
	(C) Retention of an IR/IU species is prohibited	no fish or product of that species.

(d) *Bleeding codends and shaking longline gear.* Any action intended to discard or release an IR/TU species prior to being brought on board the vessel is prohibited. This includes, but is not limited to bleeding codends and shaking or otherwise removing fish from longline gear.

(e) *At-sea discard of product.* Any product from an IR/TU species may not be discarded at sea, unless such discarding is necessary to meet other requirements of this part.

(f) *Discard of fish or product transferred from other vessels.* The retention requirements of this section apply to all IR/TU species brought on board a vessel, whether harvested by that vessel or transferred from another vessel. At-sea discard of IR/TU species or products that were transferred from another vessel is prohibited.

(g) *IR/TU species as bait.* IR/TU species may be used as bait provided that the deployed bait is physically secured to authorized fishing gear. Dumping of unsecured IR/TU species as bait (chumming) is prohibited.

(h) *Previously caught fish.* The retention and utilization requirements of this section do not apply to incidental catch of dead or decomposing fish or fish parts that were previously caught and discarded at sea.

(i) *Minimum utilization requirements.* If you own or operate a catcher/processor or mothership, the minimum utilization requirement for an IR/TU species harvested in the BSAI is determined by the directed fishing status for that species according to the following table:

IF...	then your total weight of retained or lawfully transferred products produced from your catch or receipt of that IR/TU species during a fishing trip must...
(1) directed fishing for an IR/TU species is open,	equal or exceed 15 percent of the round-weight catch or round-weight delivery of that species during the fishing trip.
(2) directed fishing for an IR/TU species is prohibited,	equal or exceed 15 percent of the round-weight catch or round-weight delivery of that species during the fishing trip or 15 percent of the MRB amount for that species, whichever is lower.
(3) retention of an IR/TU species is prohibited,	equal zero.

**Section 679.20(g)**  
**Allowable retention of pollock roe**

(1) *Percentage of pollock roe*--(i) Pollock roe retained on board a vessel at any time during a fishing trip must not exceed 7 percent of the total round-weight equivalent of pollock, as calculated from the primary pollock product on board the vessel during the same fishing trip.

(ii) Determinations of allowable retention of pollock roe will be based on amounts of pollock harvested, received, or processed during a single fishing trip.

(iii) Pollock or pollock products from previous fishing trips that are retained on board a vessel may not be used to determine the allowable retention of pollock roe for that vessel.

(2) *Primary product*-- (i) For purposes of this paragraph (g), only one primary pollock product per fish, other than roe, may be used to calculate the round-weight equivalent.

(ii) A primary pollock product that contains roe (such as headed and gutted pollock with roe) may not be used to calculate the round-weight equivalent of pollock.

(iii) The primary pollock product must be distinguished from ancillary pollock products in the DCPL required under § 679.5. Ancillary products are those such as meal, heads, internal organs, pectoral girdles, or any other product that may be made from the same fish as the primary product.

(3) *Pollock product recovery rates (PRRs)*. Only the following product types and standard PRRs may be used to calculate round-weight equivalents for pollock for purposes of this paragraph (g):

<i>Product code</i>	<i>Product description</i>	<i>Standard PRR</i>
7	Headed and gutted, western cut	0.65
8	Headed and gutted, eastern cut	0.56
10	Headed and gutted, without tail	0.50
20	Fillets with skin & ribs	0.35
21	Fillets with skin on, no ribs	0.30
22	Fillets with ribs, no skin	0.30
23	Fillets, skinless, boneless	0.21
24	Deep skin fillets	0.16
30	Surimi	0.16
31	Mince	0.22
32	Meal	0.17

(4) *Calculation of retainable pollock roe*--  
(i) *Round-weight equivalent*. (A) To calculate the amount of pollock roe that can be retained on board during a fishing trip, first calculate the round-weight equivalent by dividing the total amount of primary product on board by the appropriate PRR.

(B) To determine the maximum amount of pollock roe that can be retained on board a vessel during the same fishing trip, multiply the round-weight equivalent by 0.07.

(C) Pollock roe retained on board from previous fishing trips will not be counted.

(ii) *Two or more products from different fish*.

(A) If two or more products, other than roe, are made from different fish, round-weight equivalents are calculated separately for each product.

(B) To determine the maximum amount of pollock roe that can be retained on board a vessel during a fishing trip, add the round-weight equivalents together; then, multiply the sum by 0.07.

(iii) *Two or more products from same fish*. If two or more products, other than roe, are made from the same fish, the maximum amount of pollock roe that can be retained during a fishing trip is determined from the primary product.

(5) *Primary pollock product*

(i) *Process prior to transfer*. Any primary pollock product used to calculate retainable amounts of pollock roe must be frozen, canned, or

reduced to meal by the vessel retaining the pollock roe prior to any transfer of the product to another vessel.

(ii) *No discard of processed product.* Any pollock product that has been processed may not be discarded at sea unless such discarding is necessary to meet other requirements of this part.

**APPENDIX 2: Catch and Discards of IRIU Species, 1995-1998**

BSAI pollock catch and bycatch expressed by pollock discard rate and the percentage of pollock contained in the total groundfish catch.

<b>VESSEL TYPE</b>	<b>GEAR</b>	<b>TARGET</b>	<b>POLLOCK CATCH</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998*</b>
Catcher processor	Longline	Greenland turbot	Plock disc. rate	100.0%	17.4%	100.0%	87.0%
			% of total catch	0.0%	0.2%	0.1%	0.1%
		Pacific cod	Plock disc. rate	86.5%	90.3%	82.4%	19.8%
			% of total catch	2.6%	2.6%	3.1%	2.8%
	Rockfish	Plock disc. rate	100.0%	0.0%	100.0%	0.0%	
		% of total catch	0.3%	0.0%	0.1%	0.0%	
	Sablefish	Plock disc. rate	100.0%	100.0%	83.6%	28.6%	
		% of total catch	0.3%	0.1%	0.0%	0.0%	
	Pot	Pacific cod	Plock disc. rate	100.0%	96.9%	35.8%	81.3%
			% of total catch	0.0%	0.1%	0.7%	0.0%
	Trawl	Atka mackerel	Plock disc. rate	100.0%	99.5%	90.4%	13.4%
			% of total catch	0.4%	0.4%	0.2%	0.3%
		Flathead sole	Plock disc. rate	91.5%	97.4%	99.2%	45.5%
			% of total catch	17.5%	16.6%	14.5%	6.5%
		Other flatfish	Plock disc. rate	90.5%	97.5%	72.7%	40.6%
			% of total catch	17.9%	15.8%	9.4%	4.6%
		Pacific cod	Plock disc. rate	83.5%	96.3%	93.9%	64.5%
% of total catch			18.2%	14.1%	15.4%	10.0%	
Pollock (bottom)		Plock disc. rate	4.2%	2.3%	6.1%	11.0%	
		% of total catch	87.4%	87.7%	88.7%	57.4%	
Pollock (pelagic)	Plock disc. rate	4.5%	2.4%	3.6%	0.6%		
	% of total catch	98.9%	98.6%	99.0%	99.5%		
Rock sole	Plock disc. rate	88.9%	96.4%	96.7%	34.2%		
	% of total catch	13.1%	17.1%	14.2%	15.4%		
Rockfish	Plock disc. rate	86.3%	99.0%	97.9%	15.6%		
	% of total catch	2.7%	1.5%	1.2%	1.4%		
Yellowfin sole	Plock disc. rate	85.8%	94.6%	93.1%	35.3%		
	% of total catch	15.9%	13.1%	9.9%	10.7%		
Mothership	Trawl	Pacific cod	Plock disc. rate	93.4%	96.7%	96.9%	51.0%
			% of total catch	23.2%	18.9%	20.5%	1.8%
		Pollock (pelagic)	Plock disc. rate	3.1%	1.5%	2.8%	0.2%
			% of total catch	98.5%	98.2%	99.0%	99.5%
Rock sole	Plock disc. rate	54.2%	26.3%	100.0%	0.0%		
	% of total catch	14.7%	13.7%	9.6%	0.0%		
Yellowfin sole	Plock disc. rate	66.6%	28.2%	55.1%	7.9%		
	% of total catch	13.5%	8.0%	14.8%	2.3%		

BSAI pollock catch and bycatch expressed by pollock discard rate and the percentage of pollock contained in the total groundfish catch (continued).

<b>VESSEL TYPE</b>	<b>GEAR</b>	<b>TARGET</b>	<b>POLLOCK CATCH</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998*</b>
Shoreside	Longline	Pacific cod	Plock disc. rate	100.0%	100.0%	100.0%	0.0%
			% of total catch	0.3%	0.2%	0.0%	0.0%
	Pot	Pacific cod	Plock disc. rate	97.9%	98.0%	97.9%	20.3%
			% of total catch	0.1%	0.1%	0.2%	0.4%
	Trawl	Pacific cod	Plock disc. rate	96.2%	98.2%	95.4%	41.4%
			% of total catch	19.5%	18.1%	28.0%	11.5%
		Pollock (bottom)	Plock disc. rate	3.5%	2.5%	1.4%	0.0%
			% of total catch	89.4%	84.7%	93.9%	0.0%
		Pollock (pelagic)	Plock disc. rate	1.4%	1.0%	0.8%	0.1%
			% of total catch	98.8%	98.5%	98.3%	99.4%
Yellowfin sole	Plock disc. rate	27.1%	6.9%	16.4%	0.0%		
	% of total catch	10.3%	6.1%	6.4%	0.0%		

\*1998 figures include catch data through August 31, 1998



GOA pollock catch and bycatch expressed by pollock discard rate and the percentage of pollock contained in the total groundfish catch.

VESSEL TYPE	GEAR	TARGET	POLLOCK CATCH	1995	1996	1997	1998*
Catcher processor	Longline	Pacific cod	Plck disc. rate	100.0%	100.0%	100.0%	19.7%
			% of total catch	0.2%	0.2%	0.2%	0.2%
	Sablefish	Plck disc. rate	100.0%	100.0%	100.0%	96.5%	
		% of total catch	0.1%	0.8%	0.0%	0.0%	
	Trawl	Deep water flatfish	Plck disc. rate	100.0%	100.0%	100.0%	0.0%
			% of total catch	4.5%	0.5%	2.1%	0.0%
		Flathead sole	Plck disc. rate	99.8%	99.4%	100.0%	4.1%
			% of total catch	5.7%	2.3%	0.9%	1.3%
		Pacific cod	Plck disc. rate	99.2%	74.1%	100.0%	17.4%
			% of total catch	6.1%	7.8%	6.9%	0.6%
		Rex sole	Plck disc. rate	99.6%	97.2%	98.2%	21.7%
% of total catch			4.1%	2.3%	2.9%	0.5%	
Rockfish	Plck disc. rate	99.1%	100.0%	96.7%	58.0%		
	% of total catch	0.8%	0.8%	1.5%	0.4%		
Shallow water flatfish	Plck disc. rate	98.4%	100.0%	100.0%	1.0%		
	% of total catch	10.3%	3.5%	1.1%	2.8%		
Shoreside	Longline	Pacific cod	Plck disc. rate	18.7%	38.1%	27.2%	7.9%
			% of total catch	1.0%	0.6%	0.9%	0.9%
	Sablefish	Plck disc. rate	100.0%	61.4%	100.0%	100.0%	
		% of total catch	0.0%	0.0%	0.0%	0.0%	
	Pot	Pacific cod	Plck disc. rate	99.8%	99.3%	85.6%	63.6%
			% of total catch	0.1%	0.1%	0.2%	0.0%
	Trawl	Deep water flatfish	Plck disc. rate	91.9%	71.6%	42.7%	32.0%
			% of total catch	3.3%	0.6%	1.0%	0.5%
		Flathead sole	Plck disc. rate	98.5%	87.1%	87.7%	25.1%
			% of total catch	4.8%	9.5%	3.5%	2.6%
		Pacific cod	Plck disc. rate	78.2%	85.4%	77.8%	41.6%
			% of total catch	3.4%	2.3%	4.1%	1.4%
		Pollock (bottom)	Plck disc. rate	0.2%	3.6%	7.6%	0.1%
			% of total catch	95.5%	74.5%	83.2%	80.6%
		Pollock (pelagic)	Plck disc. rate	10.2%	3.4%	4.9%	0.4%
	% of total catch		98.9%	98.9%	98.7%	99.1%	
Rex sole	Plck disc. rate	52.8%	0.5%	100.0%	65.1%		
	% of total catch	10.2%	5.2%	3.5%	0.4%		
Rockfish	Plck disc. rate	100.0%	78.9%	89.6%	59.6%		
	% of total catch	1.6%	0.7%	1.0%	0.8%		
Shallow water flatfish	Plck disc. rate	72.6%	68.6%	68.2%	64.0%		
	% of total catch	4.7%	4.2%	4.8%	4.4%		

\*1998 figures include catch data through August 31, 1998

BSAI Pacific cod catch and bycatch expressed by Pacific cod discard rate and percentage of Pacific cod in the total groundfish catch by gear type, target fishery, and year.

VESSEL TYPE	GEAR	TARGET	PCOD CATCH	1995	1996	1997	1998*
Catcher processor	Longline	Greenland turbot	Pcod disc. rate	27.94%	5.19%	3.10%	3.31%
			% of total catch	1.86%	2.31%	1.49%	0.93%
		Pacific cod	Pcod disc. rate	3.82%	3.39%	3.07%	2.96%
			% of total catch	86.00%	86.69%	85.45%	84.25%
		Rockfish	Pcod disc. rate	0.00%	69.21%	1.98%	
			% of total catch	0.38%	5.25%	2.07%	
		Sablefish	Pcod disc. rate	28.79%	48.27%	36.42%	3.15%
			% of total catch	2.76%	5.91%	1.79%	2.06%
	Pot	Pacific cod	Pcod disc. rate	1.52%	2.24%	0.44%	0.08%
			% of total catch	97.67%	96.99%	97.63%	96.60%
	Trawl	Atka mackerel	Pcod disc. rate	36.59%	24.71%	40.52%	0.32%
			% of total catch	4.93%	7.28%	2.75%	5.17%
		Flathead sole	Pcod disc. rate	50.19%	49.58%	27.85%	2.03%
			% of total catch	10.58%	8.91%	10.65%	7.02%
		Other flatfish	Pcod disc. rate	56.13%	47.39%	16.59%	0.00%
			% of total catch	9.14%	7.28%	4.85%	7.46%
		Pacific cod	Pcod disc. rate	13.12%	6.66%	8.40%	0.58%
			% of total catch	57.21%	57.06%	51.30%	61.01%
		Pollock (bottom)	Pcod disc. rate	76.84%	78.53%	70.58%	0.92%
			% of total catch	8.17%	5.05%	5.20%	9.73%
Pollock (pelagic)		Pcod disc. rate	91.46%	86.47%	90.11%	11.83%	
		% of total catch	0.72%	0.73%	0.44%	0.33%	
Rock sole	Pcod disc. rate	53.31%	47.97%	44.70%	2.81%		
	% of total catch	16.64%	15.47%	14.03%	14.09%		
Rockfish	Pcod disc. rate	44.55%	17.16%	24.66%	0.43%		
	% of total catch	1.74%	2.42%	0.95%	1.64%		
Yellowfin sole	Pcod disc. rate	55.95%	56.47%	35.94%	4.56%		
	% of total catch	7.03%	4.67%	4.33%	5.55%		
Mothership	Trawl	Pacific cod	Pcod disc. rate	14.05%	2.99%	2.59%	1.16%
			% of total catch	56.42%	63.47%	66.51%	90.60%
		Pollock (bottom)	Pcod disc. rate	81.22%	89.44%	61.94%	
			% of total catch	7.24%	5.61%	6.95%	
		Pollock (pelagic)	Pcod disc. rate	97.77%	93.62%	93.61%	0.80%
% of total catch	1.14%		1.20%	0.58%	0.48%		
Rock sole	Pcod disc. rate	42.72%	32.74%	91.24%			
	% of total catch	16.66%	15.94%	5.53%			
Yellowfin sole	Pcod disc. rate	62.55%	62.87%	95.20%	0.16%		
	% of total catch	6.61%	7.96%	3.11%	8.02%		

BSAI Pacific cod catch and bycatch expressed by Pacific cod discard rate and percentage of Pacific cod contained in the total groundfish catch (continued).

VESSEL TYPE	GEAR	TARGET	PCOD CATCH	1995	1996	1997	1998*
Shoreside	Longline	Greenland turbot	Pcod disc. rate	0.00%	100.00%	26.74%	72.16%
			% of total catch	2.40%	0.03%	0.21%	0.59%
		Pacific cod	Pcod disc. rate	17.99%	41.51%	0.62%	0.00%
			% of total catch	93.69%	45.90%	70.73%	98.00%
		Rockfish	Pcod disc. rate	100.00%	100.00%	0.00%	
			% of total catch	8.25%	5.42%	1.61%	0.00%
		Sablefish	Pcod disc. rate	99.53%	91.01%	90.62%	97.86%
			% of total catch	36.51%	3.63%	2.87%	5.21%
	Pot	Pacific cod	Pcod disc. rate	1.20%	1.21%	0.44%	0.55%
			% of total catch	95.78%	97.02%	97.17%	96.16%
	Trawl	Pacific cod	Pcod disc. rate	9.25%	4.53%	4.60%	0.18%
			% of total catch	65.96%	63.57%	58.56%	75.49%
		Pollock (bottom)	Pcod disc. rate	68.02%	4.89%	8.32%	
			% of total catch	7.31%	12.20%	1.78%	
		Pollock (pelagic)	Pcod disc. rate	26.29%	8.71%	5.68%	2.06%
			% of total catch	0.95%	0.86%	0.77%	0.46%
Yellowfin sole		Pcod disc. rate	4.76%	0.65%	1.81%		
		% of total catch	14.64%	12.81%	13.52%		

\*1998 figures includes catch data through August 31, 1998

GOA Pacific cod catch and bycatch expressed by Pacific cod discard rate and the percentage Pacific cod contained in the total catch

VESSEL TYPE	GEAR	TARGET	PCOD CATCH	1995	1996	1997	1998*
Catcher processor	Longline	Pacific cod	P. cod disc. rate	5.3%	1.5%	3.1%	0.7%
			% of total catch	98.1%	97.6%	97.9%	97.3%
	Sablefish	P. cod disc. rate	88.0%	95.7%	83.1%	18.6%	
		% of total catch	2.4%	4.4%	2.5%	0.9%	
	Trawl	Deep water flatfish	P. cod disc. rate	71.4%	86.5%	54.1%	7.9%
			% of total catch	4.7%	3.6%	2.0%	6.4%
		Flathead sole	P. cod disc. rate	64.0%	86.5%	78.6%	45.8%
			% of total catch	15.2%	14.6%	11.0%	9.2%
		Pacific cod	P. cod disc. rate	18.1%	6.2%	22.5%	2.8%
			% of total catch	56.2%	69.8%	22.2%	62.6%
		Rex sole	P. cod disc. rate	68.6%	55.8%	40.5%	9.1%
% of total catch	5.0%		5.2%	8.5%	9.1%		
Rockfish	P. cod disc. rate	62.1%	82.1%	57.4%	8.7%		
	% of total catch	1.7%	1.5%	1.5%	1.8%		
Shallow water flatfish	P. cod disc. rate	65.1%	88.9%	81.1%	21.7%		
	% of total catch	12.4%	25.6%	20.1%	12.8%		
Shoreside	Longline	Pacific cod	P. cod disc. rate	0.8%	2.5%	4.4%	1.5%
			% of total catch	77.4%	91.4%	89.4%	86.1%
		Rockfish	P. cod disc. rate	0.3%	2.0%	0.4%	0.0%
	% of total catch		11.5%	4.0%	8.8%	5.9%	
	Sablefish	P. cod disc. rate	45.0%	68.1%	48.2%	53.2%	
		% of total catch	1.0%	1.0%	1.7%	1.6%	
	Pot	Pacific cod	P. cod disc. rate	0.6%	0.4%	1.3%	0.2%
			% of total catch	98.9%	98.4%	96.2%	98.3%
	Trawl	Deep water flatfish	P. cod disc. rate	21.8%	28.5%	26.4%	27.5%
			% of total catch	5.8%	3.6%	3.3%	5.8%
		Flathead sole	P. cod disc. rate	84.0%	96.7%	70.1%	87.4%
			% of total catch	19.3%	47.3%	20.2%	25.4%
		Pacific cod	P. cod disc. rate	2.7%	1.7%	2.1%	0.5%
			% of total catch	85.7%	90.2%	83.4%	91.3%
		Pollock (bottom)	P. cod disc. rate	5.3%	19.4%	8.3%	4.1%
			% of total catch	2.1%	9.5%	7.5%	10.4%
Pollock (pelagic)	P. cod disc. rate	28.9%	39.4%	17.1%	2.7%		
	% of total catch	0.5%	0.7%	0.5%	0.5%		
Rex sole	P. cod disc. rate	15.7%	0.7%	77.1%	17.6%		
	% of total catch	6.0%	4.5%	1.5%	4.4%		
Rockfish	P. cod disc. rate	5.0%	100.0%	22.3%	9.7%		
	% of total catch	4.0%	3.1%	3.1%	7.1%		
Shallow water flatfish	P. cod disc. rate	30.9%	88.7%	68.5%	58.4%		
	% of total catch	14.4%	22.2%	26.9%	26.1%		

\*1998 figures includes total catch data through August 31, 1998

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**Improved Retention/Improved Utilization Committee  
Minutes  
September 21, 1998**

The committee convened on September 21, 1998 at 9:30 a.m. Committee members in attendance were Joe Kyle (chair), Chris Blackburn, Steve Hughes, John Iani, Teressa Kandianis, Paul MacGregor, Susan Robinson for Thorn Smith, and Arni Thomson. Members absent were Beth Stewart and Bob Mikol. Staff in attendance were Jane DiCosimo, Kent Lind, Seth Macinko, Bill Karp and Sarah Gaichas. Dave Benson also attended part of the meeting.

**IR/IU Program Review.** The committee requested a staff update on the timing of scheduled reports on the IR/IU Program. Sustainable Fisheries Act, Section 313 requires the Council to report to the Secretary on October 1, 1998 on Council efforts to attain full retention/full utilization. NMFS is scheduled to report on the progress of the IR/IU program at the December 1998 Council meeting since the first of the IR/IU fisheries is still underway. Since the NMFS report to the Council would be the basis for the Council report to the Secretary, it is apparent that the report will not be submitted until after the December Council meeting.

The committee recommends that the Council initiate a report of the first year of the IR/IU program, similar to that conducted for the IFQ program. Issues that should be addressed include:

- gear modifications employed by industry to meet the program goals
- changes in VIP rates as a result of the IR/IU program
- lost target fish as a result of the IR/IU program
- geographic redistribution of pollock this year
- costs of implementation categorized by sector
  - total costs in \$
  - how costs were measured (e.g., catch reduced by 20%)
  - mitigating economic conditions occurring this year compared with other years (market conditions)
  - economic benefits of the program
- actual and observer extrapolated catch estimates
- percentage of pollock going into meal as a primary product
- change in market conditions for pollock and P. cod

**Recordkeeping and reporting.** Kent Lind provided an update on recordkeeping and reporting changes for 1999 logbooks. The following changes recommended by the committee and Council earlier this year have been made on next year's forms.

- IR/IU reporting was removed from the catcher vessel logs (reported by processor)
- separate logbook for trawlers and longliners
- created whole fish code (not products or discard) in discard categories

**IR/IU EA/RIR.** Kent Lind reviewed the draft analysis of four separate actions recommended by the committee in March 1998 and approved by the Council for analysis in April 1998:

- Alternative 1. Allow discards of adulterated fish
- Alternative 2. Increase the maximum allowable AI pollock roe percentage from 7 to 8 percent.
- Alternative 3. Additional product forms against which pollock may be retained.
- Alternative 4. Clarify regulations for bait and fish consume onboard.

For Alternative 1, the committee concurred with defining adulterated by adopting existing federal law under Title 21, Chapter 9, Subchapter IV, Section 342 by reference. Under this action, NMFS would establish a new discard code for adulterated fish to be used any time any fish are discarded due to adulteration. The committee felt that the occurrence of intentionally adulterated fish was small, but supported a prohibition on intentional adulteration. The

committee recommended not putting limits on the amount of discards because of the possibility of entire holds or tows becoming contaminated from, for example, hydraulic fluid leaks or local infestations of parasites. The committee expressed its intent that vessels with fish meal plants also be allowed to discard adulterated fish. The committee further agreed with recordkeeping and reporting requirements that the estimated tonnage of discards be logged in the vessel's daily fishing logbook and reported in the processor's weekly production logbook.

The committee recommends adding 9% as an additional option to increase the maximum allowable roe percentage in the Aleutian Islands subarea, under Alternative 2. The committee briefly discussed the possible impacts of removals of gravid pollock females and other impacts on Steller sea lions. The committee reemphasized its concerns stated in the March 1998 minutes, regarding the need for roe stripping regulations and public perception issues:

*"The committee noted that IR/TU and pollock roe-stripping regulations were duplicative, but wanted to maintain the prohibition. The committee concurred that two options be examined by the Council: 1) increase the percent of roe that can be retained against round-weight equivalent of pollock catch in the Aleutian Islands from 7 to 8%; and 2) the roe-stripping regulations should be combined with the IR/TU regulations into a uniform set of regulations to eliminate redundancy. This approach of unifying the regulations would be consistent with BOF action in combining roe-stripping and IR/TU regulations."*

The committee concurred with Alternative 3 to add kirimi as a product form against which pollock roe may be retained and noted that other new product codes may be needed as markets for new products develop.

The committee supported both Option 1 and Option 2 under Alternative 4, and did not recommend Option 3 to limit the amount of fish 'consumed on board.'

Kent Lind will make the recommended committee changes prior to release of the EA/RIR for Council initial review at the October meeting.

**Other business.** The committee reiterated its request from March 1998, requesting a report on the amount of retained product (formerly discarded) going into meal as a primary product and requested that a reporting category be created to track the amount of fish going into meal, if the data is available at year-end, to determine the amounts of bycatch being avoided or ground into meal. This request should be addressed by NMFS in its December report to the Council.

The committee recommended that the USCG Training Center in Kodiak emphasize IR/TU regulations in its training of boarding officers.

The committee has expressed repeated concerns regarding the observer basket sampling methodology used to calculate discards. In head-and-gut fisheries, the trawl nets are stratified by species, with pollock front loaded in the net and more flatfish and halibut later in the net. Industry continues to be concerned that observers may be sampling the first fish out of the bag and misrepresenting the catch estimate (see March 1998 minutes regarding phantom fish). Bill Karp and Sarah Gaichas from the Observer Program responded that random sampling is not mandatory, but highly recommended. Observer Program staff offered to prepare a written description of the random sampling procedure for the skippers and vessel owners to have onboard. The Council would benefit from an examination of a comparison of WPR estimate and expanded observer estimate of IR/TU discards.

The committee requested a report from NMFS Enforcement Division on the number of IR/TU cases.

**Next meeting.** The next committee meeting is tentatively scheduled for Monday, November 23 at 1 p.m. AST via telephone to review the public review version of the EA/RIR.

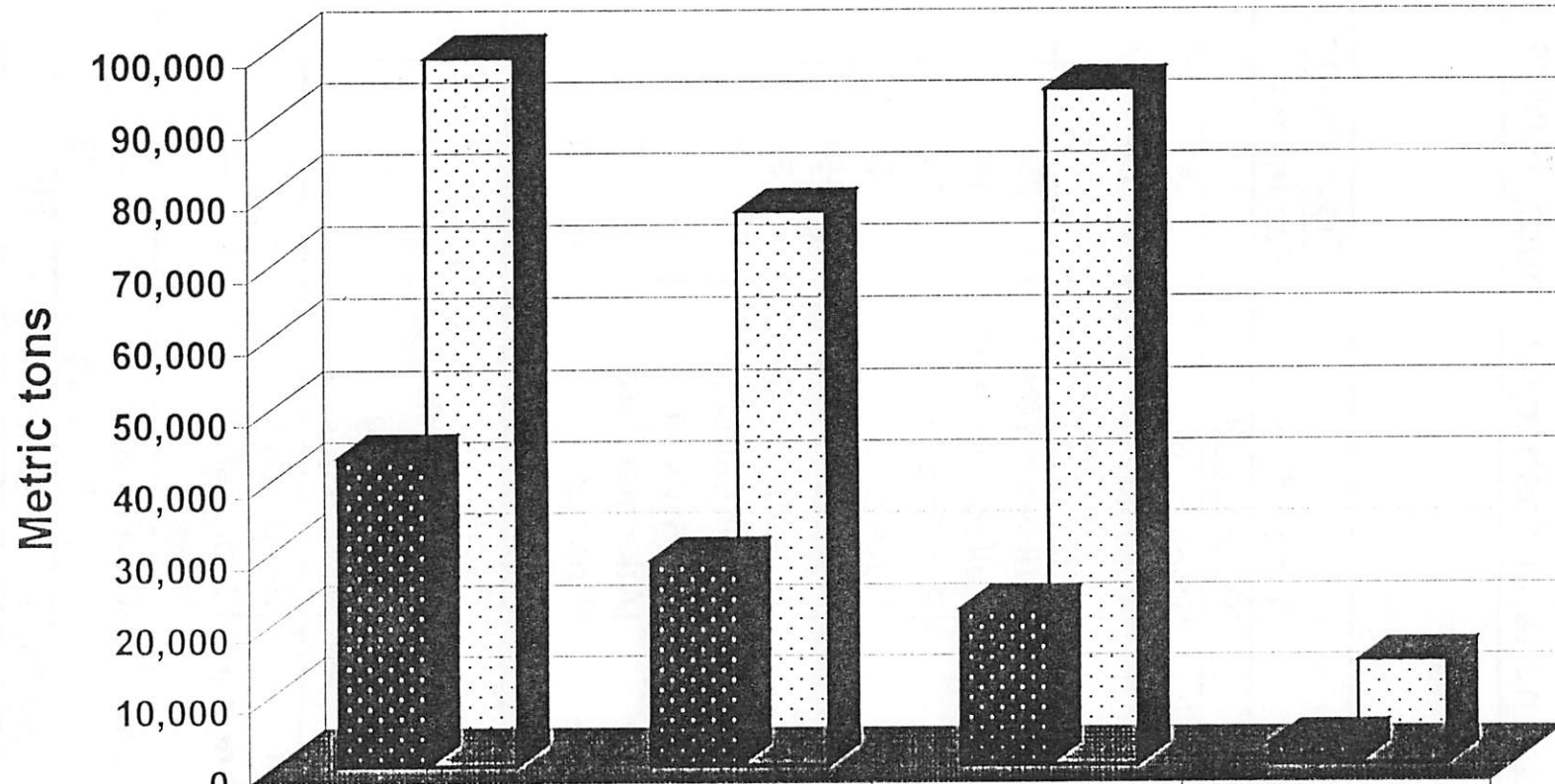
IR/II?

**1998 BSAI discards of pollock and Pacific cod by processor type, gear and target fishery (through 10/1/98)**

Processor type	Gear	Target fishery	Discards in metric tons	
			Pacific cod	Pollock
Catcher processor	Pot	Pacific cod	2	1
	Longline	Pacific cod	1,999	434
		Turbot	6	4
		Sablefish	0	0
	Trawl	Yellowfin sole	257	3,822
		Pollock (pelagic)	169	3,045
		Pacific cod	101	1,714
		Rock sole	97	1,300
		Flathead sole	54	1,046
		Pollock (bottom)	35	155
		Other flatfish	1	70
		Arrowtooth	2	62
		Atka mackerel	12	22
Rockfish		1	10	
Turbot	1	6		
Mothership	Pot	Pacific cod	0	0
	Trawl	Pollock (pelagic)	4	226
		Pacific cod	85	74
	Yellowfin sole	0	1	
Shoreside	Pot	Pacific cod	51	9
	Longline	Sablefish	46	0
		Turbot	7	0
	Trawl	Pacific cod	54	1,869
Pollock (pelagic)		23	673	
<b>Grand Total</b>			<b>3,006</b>	<b>14,540</b>



## Pollock and Pacific cod discards in the BSAI, 1995-1998

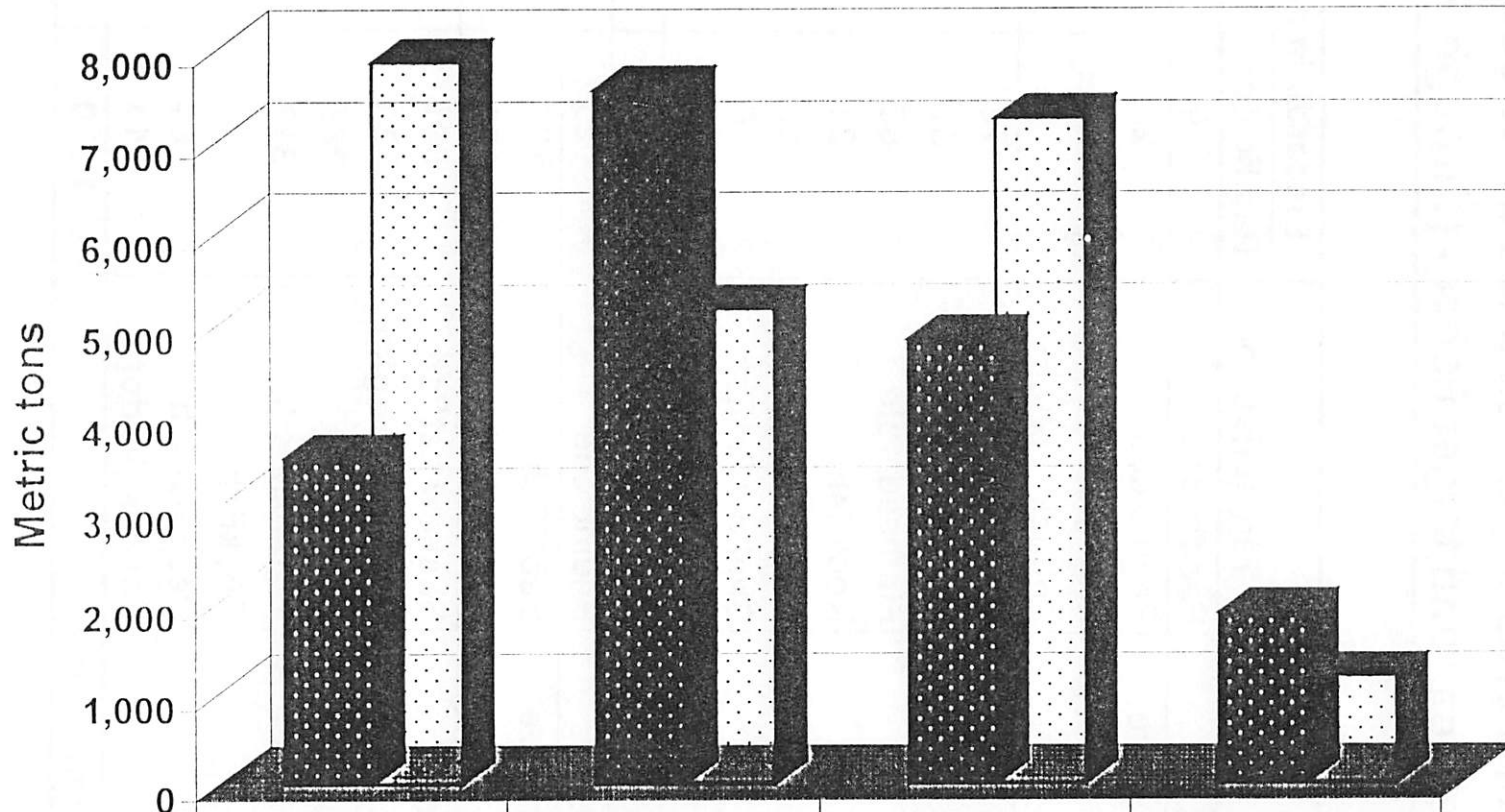


	1995	1996	1997	1998 through 10/1/98
■ Pacific cod	43,189	28,804	21,959	3,006
□ Pollock	98,854	77,206	94,217	14,540

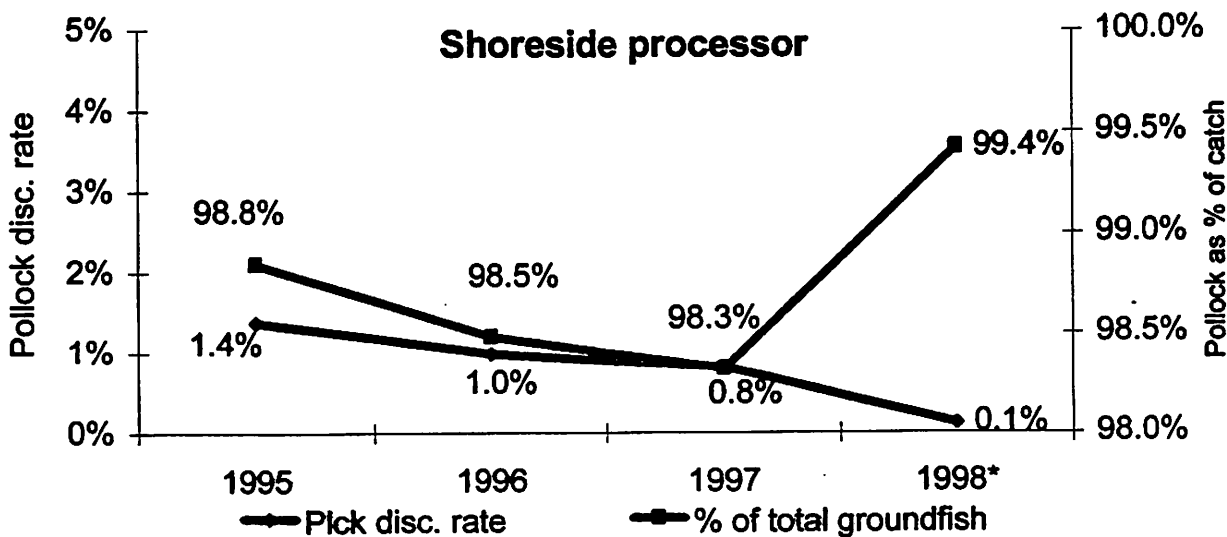
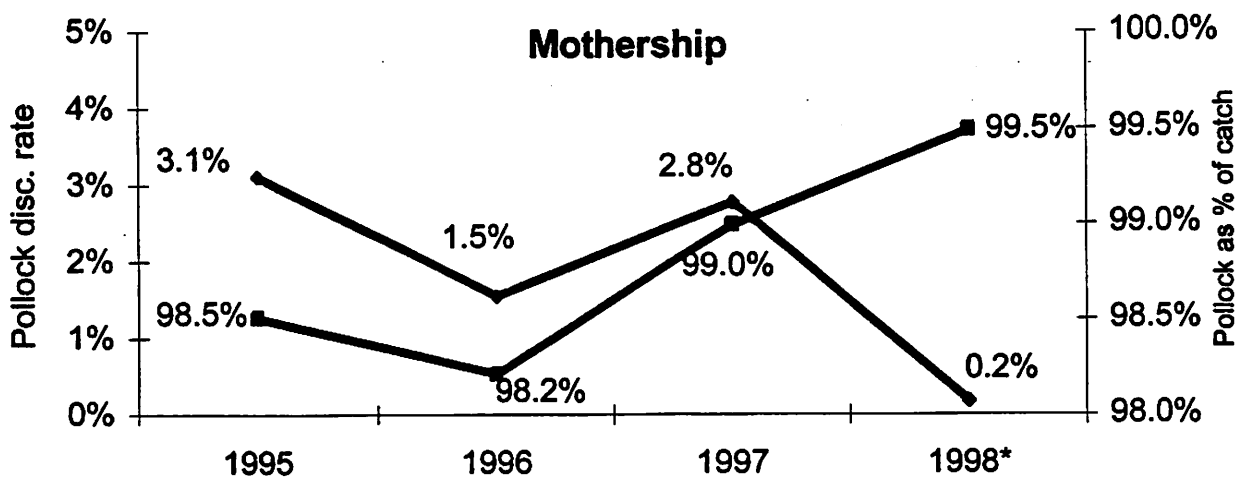
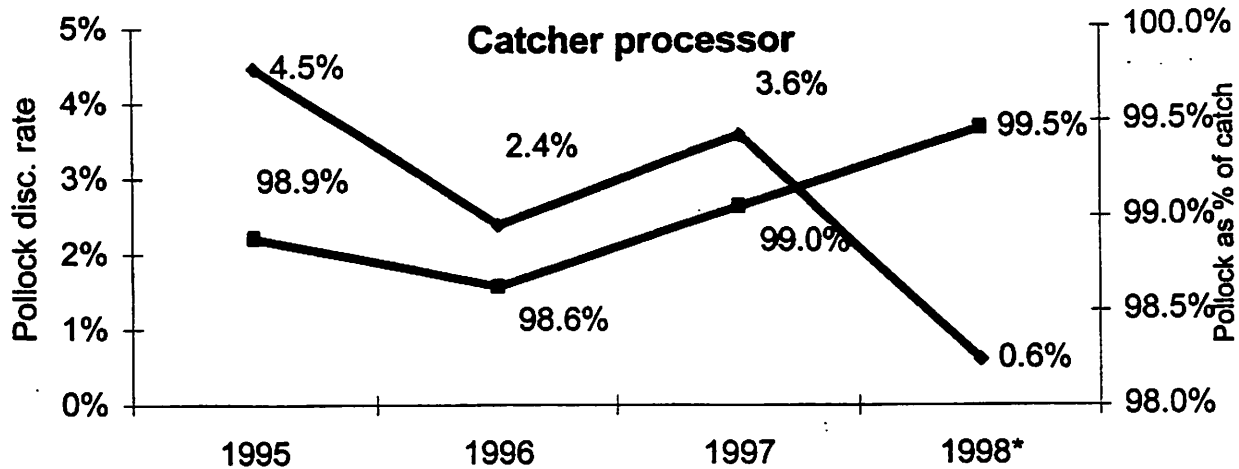
**1998 GOA discards of pollock and Pacific cod by  
processor type, gear and target fishery (through 10/1/98)**

Processor type	Gear	Target fishery	Discards in metric tons	
			Pacific cod	Pollock
Catcher processor	Pot	Pacific cod	0	0
	Longline	Pacific cod	22	1
Sablefish		3	0	
Pollock (bottom)		0	0	
	Trawl	Pacific cod	78	5
		Rex sole	57	8
		Flathead sole	58	1
		Rockfish	21	31
		Arrowtooth	13	2
		Shallow flatfish	5	1
		Deep flatfish	1	0
Mothership	Trawl	Pacific cod	43	0
Shoreside	Pot	Pacific cod	23	1
	Longline	Sablefish	137	0
		Pacific cod	94	5
	Trawl	Shallow flatfish	661	116
		Pollock (pelagic)	30	744
		Pacific cod	187	208
		Flathead sole	313	9
Rockfish		47	28	
Deep flatfish	64	6		
Pollock (bottom)	14	3		
<b>Grand Total</b>			<b>1,870</b>	<b>1,168</b>

## Pollock and Pacific cod discards in the GOA, 1995-1998



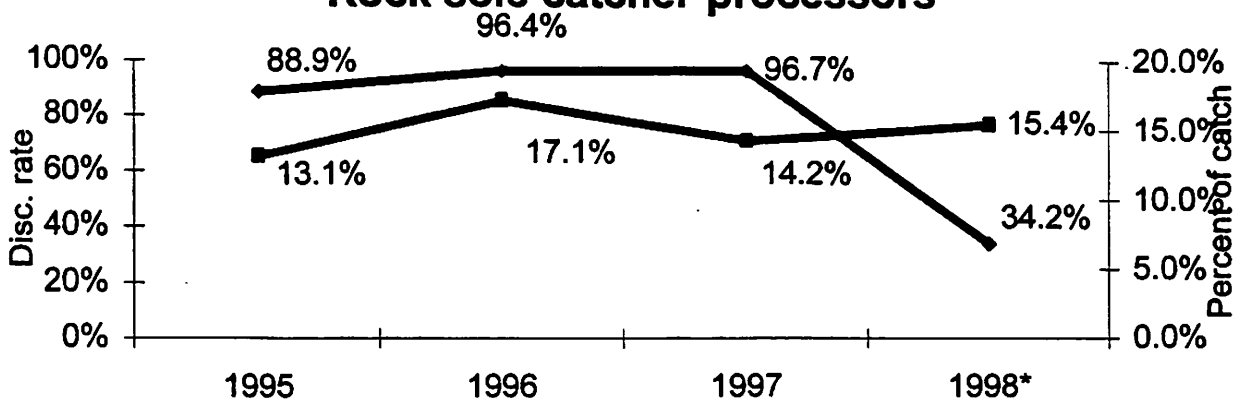
	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998 through 10/1/98</b>
<b>■ Pacific cod</b>	<b>3,546</b>	<b>7,555</b>	<b>4,828</b>	<b>1,870</b>
<b>▣ Pollock</b>	<b>7,859</b>	<b>5,156</b>	<b>7,242</b>	<b>1,168</b>



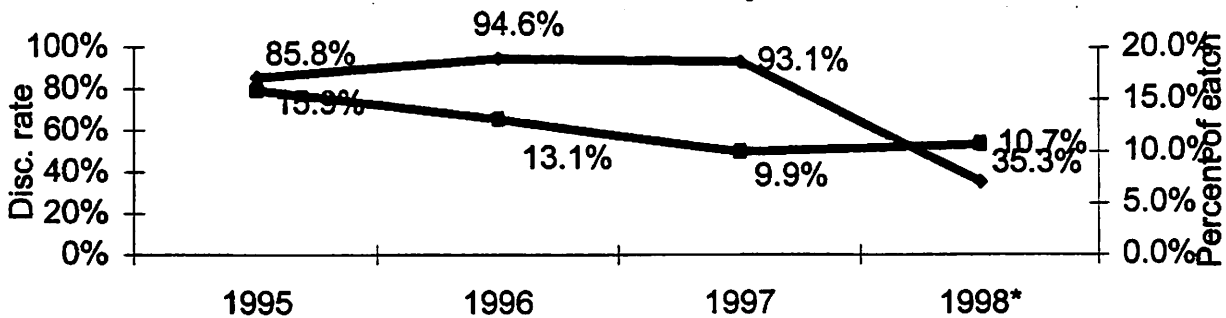
**BSAI pollock catch composition and discard rates in the pelagic pollock target fishery, 1995-1998**

**\*1998 figures includes catch data through August 31, 1998**

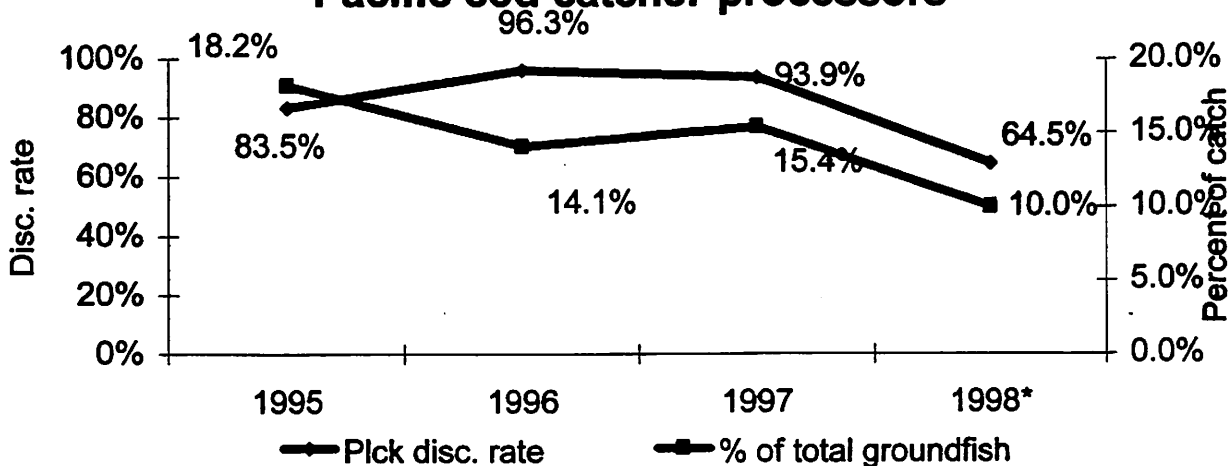
### Rock sole catcher processors



### Yellowfin sole catcher processors

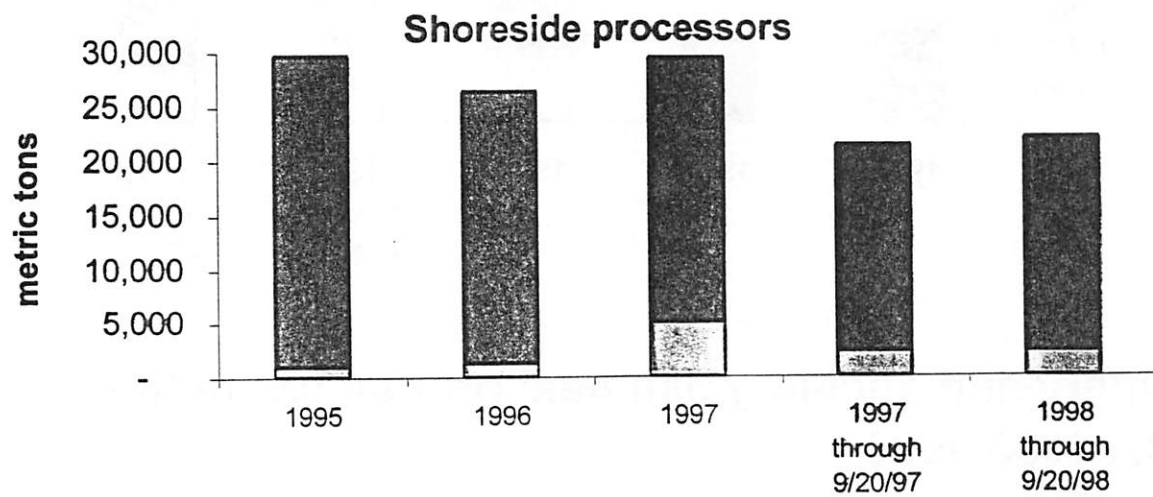
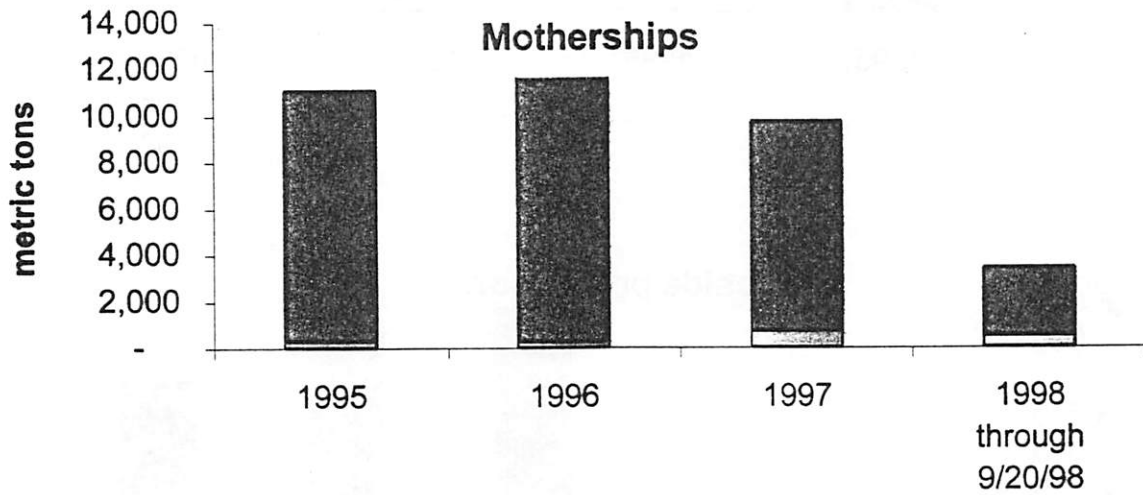
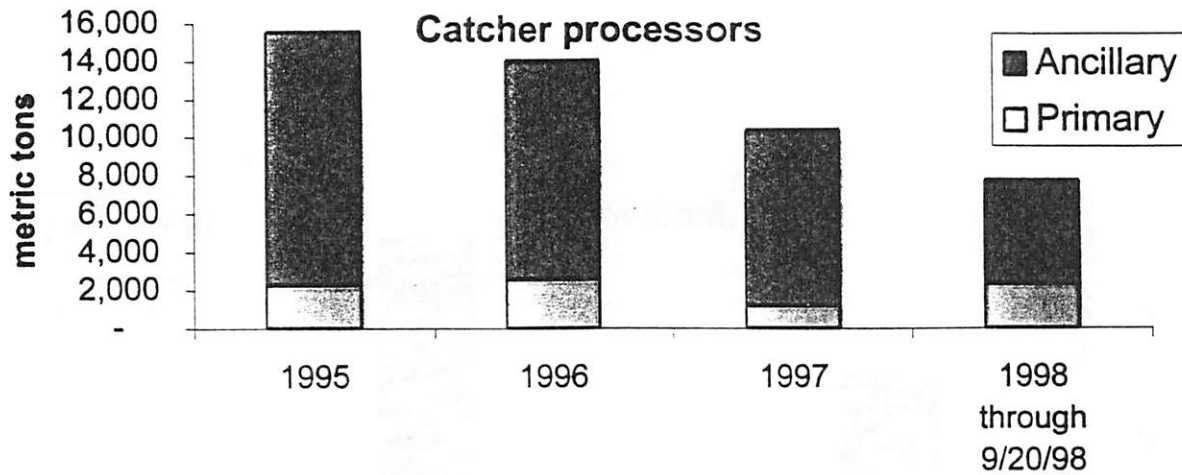


### Pacific cod catcher processors

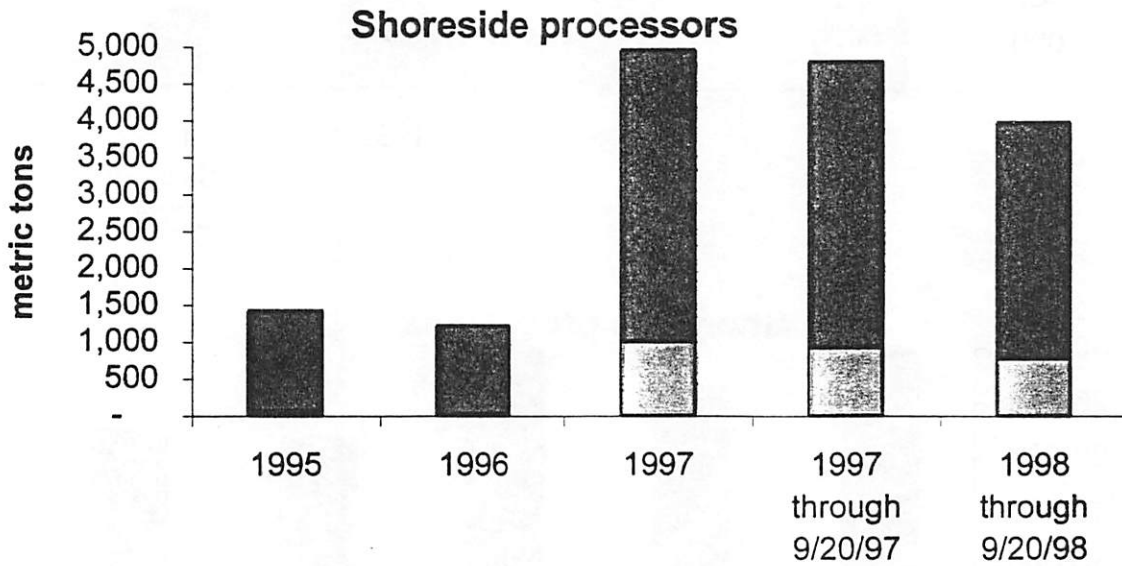
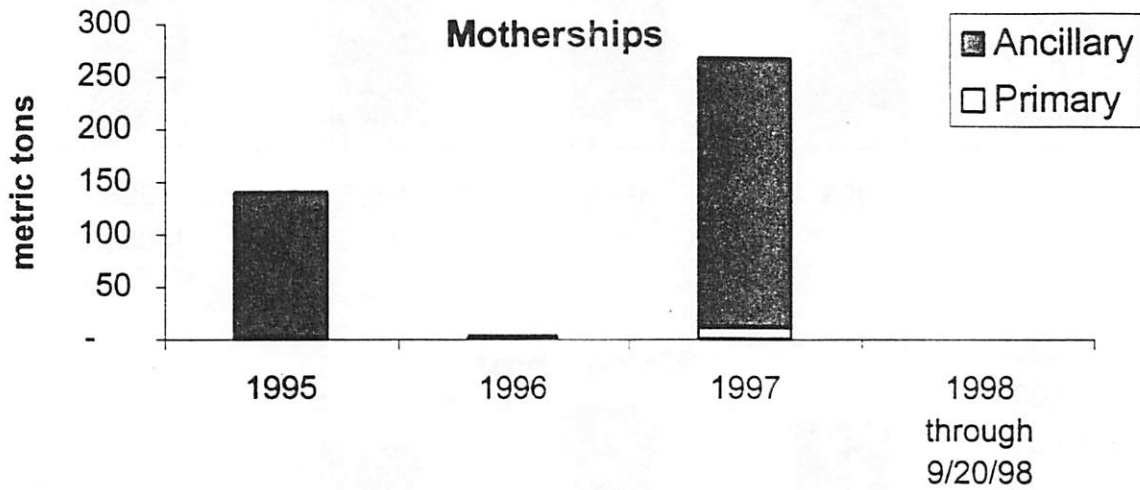


## BSAI pollock catch composition and discard rates in the selected trawl catcher processor fisheries, 1995-1998

\*1998 figures includes catch data through August 31, 1998



**Primary and ancillary fishmeal production in the BSAI, 1995-1998**



**Primary and ancillary fishmeal production in the GOA 1995-1998**