M E M O R A N D U M

TO:

Council, AP, and SSC Members

FROM:

Clarence G. Pautzke

Executive Director

DATE:

April 7, 1989

SUBJECT:

Gulf of Alaska and Bering Sea/Aleutian Islands Groundfish Fishery Management Plans

ACTION REQUIRED

Approve proposed groundfish amendments for publication.

BACKGROUND

The Council reviewed amendment proposals in January and selected eight topics for further development during the current cycle:

- (a) Allocate sablefish total allowable catch in the BSAI.
- (b) Establish a fishing season framework for all groundfish fisheries in the GOA and BSAI.
- (c) Establish a Shelikof District in the Central Regulatory Area of the GOA.
- (d) Establish a groundfish fishing closed zone near the Walrus Islands and Cape Peirce in the BSAI.
- (e) Replace the king crab protection time/area closures around Kodiak Island and modify the halibut bycatch management regime for the GOA.
- (f) Expand the Pacific cod trawl exemption zone in the BSAI.
- (g) Implement a system of observer coverage and other data gathering and data reporting requirements for the groundfish fisheries of the GOA and BSAI.
- (h) Clarify the Secretary's authority to split or combine species groups within the target species management category by a framework procedure for the GOA and BSAI.

The groundfish plan teams have incorporated the proposals, with several alternatives, into an amendment package that includes an Environmental Assessment (EA) and draft Regulatory Impact Review (RIR). The proposals will constitute Amendment 18 and 13 to the Gulf and Bering Sea/Aleutians plans, respectively.

The Council needs to approve the draft amendments for public review. The proposed alternatives are summarized in item D-2(a)(1). The draft EA/RIR sent to you on March 31 (Chapter 8 was sent out under separate cover from the Northwest and Alaska Fisheries Center) contains the presentation of amendment topics and environmental and economic analyses of the alternatives.

A minimum 30-day public comment period on the amendment package will commence soon after the Council meeting. The Council will review public comments and take final action in June, and the amendments could be implemented by November or December 1989.

GOA AMENDMENT 18 AND BSAI AMENDMENT 13 SUMMARY

- 1. Allocate Sablefish Total Allowable Catch in the Bering Sea/Aleutian Islands.
 - Alternative 1: Maintain the status quo (i.e. do nothing).
 - Alternative 2: Determine expected bycatch, and allocate the remaining sablefish TAC to the directed fishery.
 - Alternative 3: Allocate the sablefish TAC between the fixed and trawl gear groups.
- 2. Establish a Fishing Season Framework for all Groundfish Fisheries in the Gulf of Alaska and Bering Sea/Aleutian Islands.
 - Alternative 1: Maintain the status quo (i.e. do nothing).
 - Alternative 2: Establish a framework procedure for the annual setting of fishing seasons (date specific) for any of the managed groundfish species using a rule related notice procedure for implementation.
 - Alternative 3: Establish a procedure for the annual setting of fishing seasons (date specific) for any of the managed groundfish species using a regulatory amendment procedure for implementation.
- 3. Establish a Shelikof District in the Central Regulatory Area of the Gulf of Alaska.
 - Alternative 1: Maintain the status quo (i.e. do nothing).
 - Alternative 2: Establish a Shelikof Strait management area.
- 4. Establish a Groundfish Fishing Closed Zone near the Walrus Islands and Cape Peirce in the Bering Sea/Aleutian Islands.
 - Alternative 1a: Maintain the status quo (i.e. do nothing).
 - Alternative 1b: Maintain the status quo, but develop a cooperative program, involving all concerned parties, with voluntary guidelines to minimize disturbance to walrus.
 - Alternative 2: Establish 12-mile radius trawl closure zones around walrus haulout sites with seasonal closures.
 - Alternative 3: Seasonal trawl closure north of a line from Cape Constantine to the southernmost tangent of a 12-mile radius around Cape Peirce.

- 5. Replace the King Crab Protection Time/Area Closures Around Kodiak Island and Modify the Halibut Bycatch Management Regime for the Gulf of Alaska.
 - a. Implement a Revised Time/Area Trawl Closure Plan to Protect King Crab Around Kodiak Island.
 - Alternative 1: Status quo (i.e. do nothing).
 - Alternative 2: Extend existing time/area closure measures for another three years.
 - Alternative 3: Implement a modified time/area closure scheme for bottom trawling for three years.
 - b. Amend the Halibut PSC Framework for the Gulf of Alaska.
 - Alternative 1: Status quo (i.e. do nothing).

Alternative 2: More fully implement the existing halibut PSC framework and/or permit limited retention of halibut bycatch. This alternative is an unspecified combination of measures including permitting use of pot gear that minimizes halibut bycatch, setting halibut PSC limits for each major gear group, apportioning PSC limits of each gear group by target fishery, setting a PSC reserve for vessels whose bycatch rates are low, and permitting limited halibut bycatch retention.

- 6. Expand the Pacific Cod Trawl Exemption Zone in the Bering Sea/Aleutian Islands.
 - Alternative 1: Status quo (i.e. do nothing).
 - Alternative 2: Extend the northern boundary of the exemption zone as defined under Amendment 10 to a line approximating the 30 fathom isobath.
 - Alternative 3: Extend the northern boundary of the exemption zone as defined under Amendment 12a to a line approximating the 30 fathom isobath.
- 7. Implement a System of Observer Coverage and Other Data Gathering and Reporting Requirements for the Groundfish Fisheries of the Gulf of Alaska and the Bering Sea/Aleutian Islands.
 - See Agenda item C-6.
- 8. Clarify Secretary's Authority to Split or Combine Species Groups Within the Target Species Management Category by a Framework Procedure for the Gulf of Alaska and the Bering Sea/Aleutian Islands.
 - Alternative 1: Take no action to clarify the status quo, which might cause future confusion as to the appropriate procedure for splitting additional species within the target species category.
 - Alternative 2: Clarify the Secretary's authority to split or combine species groups within the target species category by a more timely framework procedure.

MEMORANDUM

TO:

Council, AP, and SSC Members

FROM:

Clarence G. Pautzke

Executive Director

DATE:

April 7, 1989

SUBJECT:

Gulf of Alaska and Bering Sea/Aleutian Islands Groundfish Fishery Management Plans

ACTION REQUIRED

Final approval of a regulatory amendment to redefine directed fishing for groundfish in the Gulf of Alaska and the Bering Sea/Aleutian Islands.

BACKGROUND

Last June the Council requested NOAA Fisheries to implement a regulatory amendment, effective through December 31, 1989 that would enforce directed fishing definitions on the basis of retention rather than the catch composition of a single haul using the following directed fishing definitions based on round weight:

Bering Sea/Aleutians

- (a) 20% for all groundfish species except pollock.
- (b) 50% for pollock in the Aleutians.
- (c) 20%-30% for pollock in the Bering Sea from January 1 through March 31 at the discretion of the Regional Director based on the southern extent of the sea ice.

Gulf of Alaska

- (a) 4% for hook and longline sablefish.
- (b) 20% for other groundfish species.

In September the Council declared an emergency concerning the 20% bycatch of sablefish in the Bering Sea and Aleutians and followed up in December with emergency action to lower the retainable sablefish bycatch to 1% of groundfish or 10% of the Greenland turbot and Pacific ocean perch onboard, whichever is greater.

In January 1989 the Council was informed that the Secretary had not approved the Council's recommendation to use retention as the basis for directed fishing limits because of concerns with conservation and enforcement. However, after additional public testimony, the Council reaffirmed its retention decision which NOAA Fisheries then agreed to implement for 1989. The resulting emergency rule covers March 28 - June 26, 1989 and bases enforcement on retention using the following limits:

- (a) 20% for all groundfish except sablefish in the Gulf of Alaska and Bering Sea/Aleutians.
- (b) 4% for long line sablefish in the Gulf of Alaska.
- (c) 20% for trawl caught sablefish in Gulf of Alaska.
- (d) 1%/10% rule for sablefish in the Bering Sea and Aleutians.

In January the Council also approved a follow-up regulatory amendment to make more permanent its December emergency action to reduce the bycatch levels of sablefish in the Bering Sea and Aleutians.

The Council then requested NOAA Fisheries to develop directed fishing definitions for the groundfish fisheries of the Bering Sea and Aleutians and the trawl sablefish fishery in the Gulf of Alaska for final approval in April using a regulatory amendment. The Region has developed the draft paper under item D-2(b)(1) which discusses enforcement of directed fishing definitions and specific percentage levels for the groundfish fisheries off Alaska.

The Council is scheduled to approve a regulatory amendment and may want to request the Secretary of Commerce to extend the emergency rule another 90 days beyond June 26 or at least until the new regulatory amendment is implemented.

NOAA Fisheries Alaska Region Fishery Management Division April 10, 1989

-- REGULATORY AMENDMENT -- CHANGES PERTINENT TO THE DIRECTED FISHING DEFINITION

Billing Code 3510-22

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
50 CFR Parts 672 and 675
[Docket No.]
Groundfish of the Gulf of Alaska, Groundfish Fishery of the Bering Sea and Aleutian Islands Area.
AGENCY: National Marine Fisheries Service (NMFS), NOAA, Commerce.
ACTION: Proposed rule.

SUMMARY: The Secretary of Commerce (Secretary) proposes a rule that designates bycatch percentages for various groundfish species that are caught incidentally in other groundfish fisheries and prohibits retention of these species in excess of these designated amounts. Bycatch definitions would replace definitions of directed fishing in the Code of Federal Regulations. This action is necessary to promote conservation of groundfish. It is intended to further the goals and objectives contained in fishery management plans that govern these fisheries.

DATE: Comments are invited until [insert date 30 days after date of filing with the Office of the Federal Register].

ADDRESS: Comments may be sent to Steven Pennoyer, Director, Alaska Region, National Marine Fisheries Service, P.O. Box 21668, Juneau, AK 99802. Copies of the environmental assessment/regulatory impact review/initial regulatory flexibility analysis (EA/RIR/IRFA) [TO BE PREPARED] may be obtained from the same address. Comments on the environmental assessment are particularly requested.

FOR FURTHER INFORMATION CONTACT: Ronald J. Berg (Fishery Biologist, NMFS), 907-586-7230.

SUPPLEMENTARY INFORMATION:

Background

The domestic and foreign groundfish fisheries in the Exclusive Economic Zone (EEZ) of the Gulf of Alaska and Bering

Sea and Aleutian Islands area are managed by the Secretary under the Fishery Management Plans (FMPs) for Groundfish of the Gulf of Alaska and the Groundfish Fishery of the Bering Sea and Aleutian Islands Area. The FMPs were prepared by the North Pacific Fishery Management Council (Council) under the authority of the Magnuson Fishery Conservation and Management Act (Magnuson Act) and are implemented by regulations for the foreign fishery at 50 CFR Part 611 and for the U.S. fishery at 50 CFR Parts 672 and 675.

At its January 16-19, 1989, meeting, the Council requested that NOAA Fisheries prepare a regulatory amendment to replace an emergency rule that reduces the allowable percentage of sablefish that may be retained when the sablefish directed fishery in the Bering Sea is closed. In addition to the directed fishing definition as it is generally applied, the Council requested that NOAA Fisheries develop definitions specifically for the Gulf of Alaska (GOA) sablefish trawl fishery and the various Bering Sea/Aleutian Islands Area (BSAI) groundfish fisheries, which would be included with the regulatory amendment.

The emergency rule that is in effect modifies the definition of directed fishing with respect to enforcement and also limits the amount of sablefish caught in the BSAI to 10 percent of retained Greenland turbot and Pacific ocean perch and 1 percent of other groundfish retained on board a vessel. When directed fishing for a groundfish species is prohibited, subsequent incidental catches, commonly called "bycatches", are measured against the total amount of fish and fish products on board a vessel in round weight equivalents. Except as modified to account for species specific percentages used in the definition contained in the emergency rule, the definition reads as follows:

Emergency Rule

<u>Directed Fishing</u> means with respect to any species, stock, or other aggregation of fish, fishing that results in the <u>retention</u> on board a fishing vessel of any groundfish species or species group in an amount equal to or greater than xx percent of the total amount of fish and fish products on board, as calculated in round weight equivalents, at any time.

Under this definition, if the Secretary of Commerce (Secretary) closes a groundfish fishery early with the intent that amounts of bycatch be left to support other groundfish fisheries, these amounts would be compared to retained amounts of groundfish species on board any fishing vessel where first sorting occurs. First sorting may occur on a catcher vessel, a catcher/processor vessel, or a mothership, including foreign processing vessels in joint venture operations, receiving groundfish from catcher vessels. Under this definition, a vessel

operator is not in violation if amounts of bycatch caught are in excess of allowed retainable amounts.

This definition removes the "instant bandit" effect that results from wording in the codified definition of directed fishing regulations (see 50 CFR Part 672.2 for GOA groundfish and 50 CFR Part 675.2 for BSAI groundfish).

The definition in codified regulations reads as follows:

Codified Regulation

Directed Fishing, with respect to any species, stock or other aggregation of fish, means fishing that is intended or can reasonably be expected to result in the catching, taking or harvesting of quantities of such fish that amount to 20 percent or more of the catch, take, or harvest, or to 20 percent or more of the total amount of fish or fish products on board at any time. It will be a rebuttable presumption that, when any species, stock, or other aggregation of fish comprises 20 percent or more of the catch, take, or harvest, or 20 percent or more of the total amount of fish or fish products on board at any time, such fishing was directed to fishing for such fish.

Under this definition, bycatch species are compared against each catch on an individual haul or set basis, as well as the total amount of fish on board. If a fisherman catches an amount of groundfish that has been designated as a bycatch species, and the amount of bycatch in the total catch exceeds an allowable amount, the fisherman is in violation of the directed fishing definition. He is in violation as soon as the catch comes on board his vessel even if the amount of the bycatch was caught inadvertently.

This application of the definition of directed fishing has been a contentious issue among fishing industry representatives, because they are liable for their catches before they have had the chance to observe them. If a catch is brought on board a vessel and a particular groundfish species is observed by enforcement officers to be in excess of the directed fishing definition, the vessel operator could be cited. The industry has contended that enforcement of the definition creates potential enforcement standards that are too burdensome. The emergency rule was implemented to set aside this definition for the interim until a regulatory amendment could be implemented to resolve this issue.

Two issues have been associated with the directed fishing definition. The first issue pertains to its enforcement. The status quo definition requires that it be enforced on a catch

basis as well as on the basis of retained fish on board a vessel. The emergency rule definition requires that it be enforced only on the basis of retained fish on board a vessel. The second issue pertains to the actual percentages used in the definition. These two issues are addressed separately under Enforcement and Percentages Sections as follows:

Enforcement

Although the status quo definition in the Code of Federal Regulations was intended as a conservation measure to encourage fishermen to actively modify fishing practices when excessive amounts of bycatch might result, The Secretary recognizes the burden that it has caused. On the other hand, the Secretary believes that, since the definition contained in the emergency rule allows fishermen to top off catches, fishermen are not encouraged to avoid areas where high bycatch rates might result. The Secretary proposes a rule, therefore, that would solve the "instant bandit" problem, but which would also not allow fishermen to top off their catches. A definition that is based on retained catch, as well as retained amounts of fish and fish products on board is described below.

With respect to bycatch amounts, fishery management decisions usually relate to how much bycatch is allowed while fishing for other species, rather than what amounts constitute directed fishing. The Secretary proposes deleting the definition of directed fishing and defining "bycatch" instead.

The regulation would read as follows:

Bycatch means (1) retained catch on an individual haul-by-haul or set basis of any species, stock, or other aggregation of fish (herein called species) on board a fishing vessel in an amount equal to or less than a designated percent of the sorted catch, and (2) retention on board a fishing vessel of amounts of any species less than or equal to a designated percent of the total amount of fish and fish products on board, as calculated in round weight equivalents, at any time. Any catches in excess of bycatch percentages must be treated as prohibited species under §672.20(e) [GOA regulations; §675.20(e) in BSAI regulations] of this part.

The definition of directed fishing would be deleted, and a definition of bycatch would be implemented. Bycatch would be compared against the sorted retained catch, not just catch, as well as the amount of fish or fish products on board a vessel. Thus, a vessel operator would not be in violation merely because he had caught too much fish. He must promptly sort his catch and discard at sea any amount in excess of the allowable bycatch. He

would be in violation only if he retained the excess fish. Since bycatch would also be compared against the total amount of groundfish on board the vessel, a vessel operator would be liable for any excess fish, processed or not, that is sorted and retained on board. A vessel operator would not be able to top off his vessel over periods of time even though the resulting bycatch would still be less than the allowable percentage. Measures would be based on round weight equivalents.

The Secretary believes this option distributes the harvest of bycatch over the fishing season more efficiently and accomplishes the objective of minimizing waste of species in low Since a vessel operator would not be allowed to target on bycatch, species designated as bycatch are better protected. Otherwise, a vessel operator could have on board substantial amounts of other groundfish such as Pacific cod and pollock and then target on a bycatch species such as sablefish. Even though the resulting proportion of sablefish to the overall amount of groundfish on board a vessel might not exceed the allowable amount, larger amounts of sablefish would have been caught than if the catches were entirely incidental to the other groundfish catches. Catches would, therefore, approach specified TACs more quickly with result that, if the TAC is reached, further catches would be required to be treated as a prohibited species.

Percentages

Gulf of Alaska trawl-caught sablefish. Sablefish are caught incidentally while targeting with trawl gear for flounder, rockfish, pollock, and Pacific cod. To determine bycatch percentages of sablefish in these target fisheries, the 1988 State of Alaska fish ticket database was examined. If one of these target species represented 50 percent of the landed catch it was assumed to be the target species. Amounts of landed sablefish were then compared to the sum of the landed target species and sablefish to agree with the method of measuring bycatches. Respective sablefish bycatches in fisheries for flounder and rockfish (Sebastes and Sebastolobus) were 18 and 15 percent of the total retained catch. Respective sablefish bycatches in fisheries for pollock and Pacific cod were 6 and 7 percent. Based on these results, the Secretary proposes to designate the bycatch of sablefish in flounder and rockfish catches to be 20 percent (see Table 1). Further, the Secretary proposes to designate the bycatch percentage for sablefish in pollock and Pacific cod catches to be 10 percent.

The Secretary notes that these proposed percentages are a few points higher than average rates recorded from landed catches. Some observations, however, from individual fish ticket records approached, or even exceeded the average percentages.

Rather than designate bycatch percentages that would give no room for minor discrepancies, the Secretary proposes somewhat higher percentages.

Table 1. Bycatch designated percentages for sablefish caught in the Gulf of Alaska with trawl gear, and for various groundfish species caught in the Bering Sea and Aleutian Islands with trawl, hook-and-line, and pot gear.

		Target	Fishery	in Gulf o	of Alaska
Coom	Bycatch Spec		Rockfi	sh Pollo	ck P. cod
	Sablefish	1es 20	20	10	10 ⁻

II a = h = --

Target Fishery in Bering Sea and Aleutian Islands

	•,	otner	Pac.			Gn.		
		flatfish"	cod	YFS	Pollock	turbot	Rockfish	Sablefish
Trawl	Pollock	20	20	20		1	1	1
	YFS	20	1		1	1	1	1
	"O. flatfish	ı"	10	20	10	1	1	1
	Pacific cod	20		20	20	1	1	1
	Sablefish	1	1	1	1	20	15	
	GN turbot	1	1	1	1	1	1	25
	Rockfish	1	1	1	1	1	1	15
H&L	Sablefish	1	1	1	1	30	15	
	Pacific cod	1		1	1	1	1	1
	Gn. turbot	1	1	1	1		1	20
Pot	Sablefish	1	1	1	1	1	1	
	Pacific cod	1		1	1	1	1	1

Bering Sea and Aleutian Islands Groundfish. Bycatch percentages in the Bering Sea and Aleutian Islands groundfish fisheries were examined by gear type and by target fishery. Data used to estimate bycatch rates were obtained from (1) observed joint venture catches as reported in NOAA Technical Memorandum NMFS F/NWC-155, "By-catch Rates in the Bering Sea and Aleutian Islands Joint Venture Fishery, 1968-88". Jerald D. Berger. November 1988, and (2) the 1988 State of Alaska fish ticket database.

Bycatch rates show variability due to areas and seasons fished. Annual variation is likely, too, if stocks of any species vary substantially in abundance. As bycatch species fluctuate in abundance, changes in bycatch rates should show the same trend. For example, when sablefish is abundant, then

sablefish bycatch rates would be larger for each gear type. If sablefish is not abundant, then sablefish bycatch rates would be smaller. Other than similar trends, bycatch rates among the gear types are expected to be independent. This variability presents practical enforcement problems that must be considered when recommending bycatch rates for the fisheries. Although different bycatch rates for different times of the fishing year and for each statistical area, or even for each 1° latitude x 1 1/2° longitude block might be observed, the accounting by enforcement officers for discrepancies in apparent catches on board fishing vessels is not feasible. Given this, aggregated rates are recommended, using INPFC combined areas 51-54. Although rates were examined for trends, no obvious patterns were detected to warrant regulation of bycatches differently during seasons of the year.

Bycatch Percentages in Trawl Fisheries

Trawl target fisheries are those described in the above referenced Technical Memorandum. They are: "other flatfish", Pacific cod, bottom pollock, midwater pollock, yellowfin sole, and other groundfish. Rock sole was not a separate target species prior to 1989. For each of these target fisheries, (pollock midwater and bottom combined), bycatch designated percentages are proposed and are summarized in Table 1, above. Definitions of bycatch that will continue to use the 20 percent figure as in the directed fishing definition are:

- 1. Pollock when compared to "other flatfish", Pacific cod, and yellowfin sole;
- Yellowfin sole when compared to "other flatfish";
- 3. Pacific cod when compared to "other flatfish", yellowfin sole, and pollock;
- 4. Sablefish when compared to Greenland turbot.

Designated percentages that would change from the 20 percent figure currently used in the directed fishing definition are:

Pollock - 1% of amounts of Greenland turbot, rockfish, and sablefish.

Yellowfin sole - 1% of Pacific cod, pollock, Greenland turbot, rockfish, and sablefish.

"Other flatfish" - 10% of yellowfin sole, 5% of Pacific cod and pollock, and 1 % of all the other species.

Pacific cod - 1% of Greenland turbot, rockfish, and sablefish.

Sablefish - 15% of rockfish and 1% of "other flatfish", Pacific cod, yellowfin sole, and pollock.

Greenland turbot - 25% of sablefish, and 1% of all the other species.

Rockfish - 15% of sablefish, and 1% of all the other species.

Bycatches in Hook-and-line Fisheries

Hook-and-line target fisheries are: sablefish, Greenland turbot, rockfish, and Pacific cod. With respect to sablefish, the bycatch designated percentage should be 1 percent of all species other than Greenland turbot and rockfish, and 30 an 15 percent, respectively, of these two species. With respect to Pacific cod, the bycatch designated percentage should be 1 percent of all species. With respect to Greenland turbot, the bycatch designated percentage should be one percent of all species other than sablefish and 20 percent of sablefish. increased to 30 percent (from 10 percent in the emergency rule).

Bycatches in Pot Fisheries

Pot fisheries are: sablefish and Pacific cod. With respect to both species the bycatch designated percentage should be 1 percent of all species.

Enforcement of the above bycatch definitions would be done by boarding officers through the review of catches observed during or after a boarding and through a review of amounts of fish and fish products on board a vessel Part of the latter review would likely be accomplished by reviewing records of products in a vessel's logbooks. Although several bycatch definitions are involved, accounting is done the same way. example, if fishing for pollock is closed and retention of pollock other than bycatch is prohibited, then a boarding officer would add up the amount of all species other than "other flatfish", Pacific cod, and yellowfin sole, and multiply the sum Then, the boarding officer would add up the amount by 1 percent. of "other flatfish", Pacific cod, and yellowfin sole and multiply that sum by 20 percent. The overall sum from the two results would be compared to the amount of pollock. If the amount of pollock exceeded the overall sum, that vessel would have violated the bycatch definition for pollock.

Classification

The Assistant Administrator has determined that this rule is necessary for the conservation and management of the groundfish fishery off Alaska and that it is consistent with the Magnuson Act and other applicable law.

The Alaska Region, NMFS, prepared an environmental assessment [ENVIRONMENT ASSESSMENT TO BE PREPARED].

The NOAA Administrator determined that this proposed rule is not a "major rule" requiring a regulatory impact analysis under Executive Order 12291. This determination is based on the socioeconomic impacts discussed in [REGULATORY IMPACT REVIEW TO BE PREPARED]

The Alaska Region, NMFS, prepared an initial regulatory flexibility analysis as part of the regulatory impact review [INITIAL REGULATORY FLEXIBILITY ANALYSIS TO BE PREPARED]

This rule does not contain a collection of information requirement subject to the Paperwork Reduction Act.

NOAA has determined that this rule will be implemented in a manner that is consistent to the maximum extent practicable with the approved coastal zone management program of the State of Alaska. This determination has been submitted for review by the responsible State agencies under §307 of the Coastal Zone Management Act.

This proposed rule does not contain policies with federalism implications sufficient to warrant preparation of a Federalism Assessment under Executive Order 12612.

List of Subjects in 50 CFR Parts 672 and 675

Fisheries.

Dated:

National Marine Fisheries Service.

PART 672 - GROUNDFISH OF THE GULF OF ALASKA [AMENDED]

1. The authority citation for Part 672 continues to read as follows:

Authority: 16 U.S.C 1801 et seq.

- 2. In §672.2, the definition of Directed Fishing is deleted and a new definition of Bycatch is added as follows:
 - §672.2 Definitions.

* * *

Bycatch means (1) retained catch on an individual haul or set basis of any species, stock, or other aggregation of fish (herein called species) on board a fishing vessel in an amount equal to or less than a designated percent of the sorted catch, and (2) retention on board a fishing vessel of amounts of any species less than or equal to a designated percent of the total amount of fish and fish products on board, as calculated in round weight equivalents, at any time. Any catches in excess of bycatch percentages must be treated as prohibited species under §672.20(e) of this part.

- (1) With respect to any species other than sablefish, the bycatch designated percentage is 20 percent of all species.
- (2) With respect to sablefish caught with hook-and-line gear, the bycatch designated percentage is 4 percent of all species.
- (3) With respect to sablefish caught with trawl gear, the bycatch designated percentage is 10 percent of all species, other than "other flounder" and rockfish (genera <u>Sebastes</u> and <u>Sebastolobus</u>, plus 20 percent of "other flounder" and rockfish species of the genera <u>Sebastes</u> and <u>Sebastolobus</u>.

* * *

3. In §672.7, paragraph (c) is revised to read as follows: §672.7 Prohibitions.

* * *

(c) Conduct any fishing contrary to a notice of closure issued under §672.20 or contrary to a notice of inseason adjustment issued under §672.22 of this part.

* * * *

- 4. The word "directed" is deleted in the following paragraphs: § 672.6, paragraphs (a) and (c)(3); §672.20, paragraph (c)(2)(i), (ii), (iv); and §672.23, paragraph (b), and paragraph (c)(2)(i).
- 5. In §672.20, paragraph (c)(2) redesignated as (c)(3) and a new paragraph (c)(3)) is added to read as follows:

§672.20 Notices.

- (c) * * *
- (3) Notices of bycatch. When the Regional Director determines that the TAC of any target species or of the "other species" category in any regulatory area or district remaining during the fishing year is necessary for bycatch in fisheries for other groundfish species during the remainder of the fishing year, the Secretary will publish a notice in the Federal Register specifying that species or species group to be bycatch only and prohibiting further retention of such species in excess of allowable bycatch percentages defined under §670.2 of this part for the remainder of the fishing year.
 - (ii) Notices of area closure. * * *

PART 675 - GROUNDFISH FISHERY OF THE BERING SEA AND ALEUTIAN ISLANDS AREA [AMENDED]

6. The authority of citation for Part 675 continues to read as follows:

Authority: 16. U.S.C. 1801 et seq.

7. In §675.2, the definition of Directed Fishing is deleted and a new definition of Bycatch is added as follows:

§675.2 Definitions.

* * *

Bycatch in a trawl fishery means (1) retained catch on an individual haul basis of any species, stock, or other aggregation of fish (herein called species) on board a fishing vessel in an amount equal to or less than a designated percent of the sorted catch, and (2) retention on board a fishing vessel of amounts of any species less than or equal to a designated percent of the total amount of fish and fish products on board, as calculated in round weight equivalents, at any time. Any catches in excess of bycatch percentages must be treated as prohibited species under §675.20(e) of this part.

- (1) With respect to pollock, the bycatch designated percentage is 1 percent of all species, other than "other flatfish", Pacific cod, yellowfin sole, plus 20 percent of "other flatfish", Pacific cod, and yellowfin sole.
- (2) With respect to Pacific cod, the bycatch designated percentage is 1 percent of all species, other than "other flatfish", pollock, yellowfin sole, plus 20 percent of "other flatfish", pollock, and yellowfin sole.
- (3) With respect to yellowfin sole, the bycatch designated percentage is 1 percent of all species, other than than "other flatfish" and "rock sole", plus 20 percent of "other flatfish" and rock sole.
- (4) With respect to "other flatfish" and rock sole, the bycatch designated percentage is 1 percent of all species, other than Pacific cod, yellowfin sole, and pollock, plus 10 percent of Pacific cod and pollock, and 20 percent of yellowfin sole.
- (5) With respect to sablefish, the bycatch designated percentage is 1 percent of all species, other than rockfish in the genera <u>Sebastes</u> and <u>Sebastolobus</u> and Greenland turbot, plus 20 percent of rockfish in the genera <u>Sebastes</u> and <u>Sebastolobus</u> and Greenland turbot.
- (6) With respect to Greenland turbot, the bycatch designated percentage is 1 percent of all species, other.

Bycatch in a hook-and-line fishery means (1) retained catch on an individual set basis of any species, stock, or other aggregation of fish (herein called species) on board a fishing vessel in an amount equal to or less than a designated percent of the sorted catch, and (2) retention on board a fishing vessel of amounts of any species less than or equal to a designated percent of the total amount of fish and fish products on board, as calculated in round weight equivalents, at any time. Any catches in excess of bycatch percentages must be treated as prohibited species under §675.20(e) of this part.

- (1) With respect to sablefish, the bycatch designated percentage is 1 percent of all species, other than rockfish of genera (<u>Sebastes</u> and <u>Sebastolobus</u>) and Greenland turbot, plus 25 percent of Greenland turbot and 15 percent of rockfish of the genera (<u>Sebastes</u> and (<u>Sebastolobus</u>).
- (2) With respect to Pacific cod, the bycatch designated percentage is 1 percent of all species.
- (3) With respect to Greenland turbot, the bycatch designated percentage is 1 percent of all species other than

rockfish genera (<u>Sebastes</u> and <u>Sebastolobus</u>) and sablefish, plus 20 percent of sablefish and xx percent of rockfish genera (<u>Sebastes</u> and <u>Sebastolobus</u>).

Bycatch in a pot fishery means (1) retained catch on an individual set basis of any species, stock, or other aggregation of fish (herein called species) on board a fishing vessel in an amount equal to or less than a designated percent of the sorted catch, and (2) retention on board a fishing vessel of amounts of any species less than or equal to a designated percent of the total amount of fish and fish products on board, as calculated in round weight equivalents, at any time. Any catches in excess of bycatch percentages must be treated as prohibited species under §675.20(e) of this part.

- 6. In §675.7, paragraph (b) is revised to read as follows: §675.7 General prohibitions.
 - * * *
- (b) Conduct any fishing contrary to a notice issued under §675.20(a), or contrary to an inseason adjustment issued under §675.20(e) of this part.
- * * * * *
- 6. The word "directed" is deleted in paragraphs (a)(7) and (9) in §675.20.
- 7. In §675.20, paragraph (a)(7) is revised to read as follows:
- §675.20 General limitations.
 - (a) * * *
- (7) When the Regional Director determines that the TAC of any target species or of the "other species" category remaining during the fishing year is necessary for bycatch in fisheries for other groundfish species during the remainder of the fishing year, the Secretary will publish a notice in the Federal Register specifying that species to be bycatch only and prohibiting further retention of such species in excess of allowable bycatch percentages defined under §675.2 of this part for the remainder of the fishing year.

Filename: BYCATCH.PR/RJBerg

Attachment: Data pertinent to bycatch percentages.

Bycatch Percentages in Trawl Fisheries

Trawl target fisheries are those described in the above referenced Technical Memorandum. They are: "other flatfish", Pacific cod, bottom pollock, midwater pollock, yellowfin sole, and other groundfish. For each of these target fisheries, bycatch rates for pollock, Pacific cod, yellowfin sole, Greenland turbot, arrowtooth flounder, other flatfish, sablefish, Pacific ocean perch, other rockfish, and Atka mackerel are recommended. Rock sole was not a separate target species prior to 1989. Bycatch percentages recommended for rock sole, therefore, are same as for "other flatfish.

With respect to pollock in fisheries for "other flatfish", Pacific cod, or yellowfin sole, the bycatch percentage should remain at 20 percent. This recommendation is based on observed 3-year bycatch rates as follows:

pollock in an "other flatfish fishery" - 7-18%, in a Pacific cod fishery - 7-12%, in a yellowfin sole fishery - 7-12%.

With respect to yellowfin sole in an "other flatfish" fishery, the bycatch percentage should remain at 20 percent. This recommendation is based on observed 3-year bycatch rates as follows:

Yellowfin sole in an "other flatfish" fishery - 10-29%.

However, with respect to yellowfin sole in fisheries for Pacific cod and pollock (bottom and midwater) fisheries, the bycatch percentage should be reduced to 1 percent. This recommendation is based on observed 3-year bycatch rates as follows:

Yellowfin sole in a Pacific cod fishery - 0-0%, in a bottom pollock fishery - 1-2%, in a midwater pollock fishery - 0-0%.

With respect to "other flatfish" in a yellowfin sole fishery, the bycatch percentage should remain at 20 percent. This recommendation is based on observed 3-year bycatch rates as follows:

"Other flatfish" in a yellowfin sole fishery - 8-17%

However, with respect to "other flatfish" in a Pacific cod fishery, the bycatch percentage should be reduced to 10 percent.

This recommendation is based on observed 3-year bycatch rates as follows:

```
"Other flatfish" in Pacific cod fishery - 5-9%,
```

Similarly, with respect to "other flatfish" in a pollock fishery, the bycatch percentage should be reduced to 5 percent. This recommendation is based on observed 3-year bycatch rates as follows:

```
in a bottom pollock fishery - 2-4%, in a midwater pollock fishery - 0-0%.
```

With respect to Pacific cod, the bycatch percentage should remain at 20 percent, plus 1 percent of the amount of rockfish and Greenland turbot. This recommendation is based on observed 3-year bycatch rates as follows:

```
Pacific cod in an "other flatfish" fishery - 12-25%, in a bottom pollock fishery - 6-16%, in a midwater pollock fishery - 0-0%, in a yellowfin sole fishery - 3-12%, and in sablefish, POP, rockfish, and Atka mackerel fisheries - 0-0.
```

[Note:] Joint venture fisheries have not targeted on sablefish, POP, rockfish. Bycatch rates of Pacific cod in these fisheries are estimated from DAP catches.

With respect to sablefish, the bycatch should be 1 percent of the total amount of fish, except rockfish and Greenland turbot, plus 25 percent of the amount of Greenland turbot and 15 percent of the amount of rockfish. This recommendation is based on observed 3-year bycatch rates as follows:

```
in an "other flatfish" fishery - 0- 0%, in a Pacific cod fishery - 0- 0%, in a bottom pollock fisher - 0- 0%, in a midwater pollock fishery - 0- 0%, in a yellowfin sole fishery - 0- 0%, in a Greenland turbot* fishery -14-30% (av=20) in a rockfish fishery* - 2-30% (av=11)
```

* Note: rates for Greenland turbot, and rockfish fisheries were derived from the 1988 State of Alaska fish ticket database.

Although empirical data indicate that on average, sablefish are not caught in fisheries for "other flatfish", Pacific cod, pollock, and yellowfin sole, a bycatch rate of 1 percent is

recommended to avoid discarding incidentally caught sablefish as a prohibited species if retention can be accommodated. The 12-month average rate of sablefish compared to Greenland turbot is 20 percent. The 12-month average rate of sablefish compared to rockfish is 11 percent.

Bycatches in Hook-and-line Fisheries

With respect to sablefish in Greenland turbot fisheries, the bycatch percentage should be increased to 30 percent (from 10 percent in the emergency rule). This recommendation is base on nineteen records in the 1988 State of Alaska fish ticket database, which showed an annual average bycatch of 27 percent (range 7-44).

With respect to sablefish in rockfish fisheries (including POP) the bycatch percentage should be increased to 30 percent (from 10 percent in the emergency rule). This recommendation is based on thirty-two records in the 1988 State of Alaska fish ticket database, which showed an annual average bycatch of 27 percent (range 4-43).

Bycatches in Pot Fisheries

With respect to sablefish in Pacific cod fisheries, the bycatch percentages should be 1 percent. This recommendation is based on 33 records in the 1988 State of Alaska fish ticket database, which showed an annual average of 1 percent (range 0-9).

Appendix I. GOA bycatch percentages of sablefish to other groundfish species caught with trawl gear during 1988 when the other groundfish species were 50 percent of the landings, by month.

	ish as a SH + sal ls).				ROCKFI	Sablefish as a percent of ROCKFISH + sablefish when sablefish were present.					
Month	# Rec.	Avg.	Max.	Min	Month	# Rec.	Avg.	Max.	Min		
	•	10.0	10.0	10.0	1	Ü	100	100			
2	1		19.0		2	Ţ		19.0			
3	6		36.4		3	1	36.4	36.4	36.4		
4	16	3.9	18.8	0.0	4	6	10.3	18.8	4.7		
5	20	8.5	23.4	0.0	5	11	15.4	23.4	0.0		
6	16	15.3	21.0	10.1	6	16	15.3	21.0	10.1		
7	34	6.8	37.0	0.0	7	16	14.4	37.0	0.0		
8	8	7.1	14.7	0.0	8	5	11.4	14.7	6.7		
9		2.8	19.8	0.0	9	3	18.1	19.8	15.1		
10	2	10.6	21.3	0.0	10	1	21.3	21.3	21.3		
11	5	2.2	9.0	0.0	11	2	5.4	9.0	1.8		
12	1	18.7	18.7	18.7	12	1	18.7	18.7	18.7		
YR	128	7.2	37.1	0.0	YR	63	14.6	37.0	0.0		

	ish as ER + sal s).				FLOUND	Sablefish as a percent of FLOUNDER + sablefish when sablefish were present.					
Month	# Rec.	Avg.	Max.	Min	Month	# Rec.	Avg.	Max.	Min		
1	5	0.0	0.0	0.0	1	0					
2	20	0.0	0.0	0.0	2	0					
3	23	0.0	0.0	0.0	3	0					
4	4	7.6	22.7	0.0	4	2	15.2	22.7	15.2		
5	7	3.2	22.6	0.0	5	1	22.6	22.6	22.6		
6	16	17.8	27.3	0.0	6	14	20.3	27.3	6.5		
7	21	15.3	39.7	0.0	7	18	17.8	39.7	3.1		
8	23	13.4	23.2	0.0	8	20	15.4	23.2	2.6		
9	10	15.4	30.3	0.0	9	8	19.3	30.3	3.2		
10	19	0.0	0.0	0.0	10	0					
11	24	0.0	0.0	0.0	11	0					
12	10	0.0	0.0	0.0	12	0					
YR	182	6.2	39.7	0.0	YR	63	17.8	39.7	2.6		

Appendix I (con't). GOA bycatch percentages of sablefish to other groundfish species caught with trawl gear during 1988 when the other groundfish species were 50 percent of the landings, by month.

Month # Rec. Avg. Max 1 74 0.5 23.2 2 119 0.2 7.3 3 245 0.1 14.3 4 134 0.0 3.5 5 69 1.3 35.6 6 47 1.5 20.7 7 21 5.6 20.7 7 21 5.6 20.7 8 9 2.4 21.7 9 25 1.9 22.1 10 47 0.0 0.0 11 50 0.0 0.0 12 16 0.0 0.1 18 856 0.5 35.6	lefish as a perce IFIC COD + sablef	Sablefish as a percent POLLOCK + sablefish (a records) Month # Rec. Avg. Max 1 56 0.2 2.8 2 32 0.0 0.1 1.3 4 16 0.1 1.3 5 5 5 0.3 1.6 6 4 9.6 19.7 24 6.6 27.8 9 6.2 18.0 9 50 2.4 23.1 10 137 0.0 0.1 8.1 11 200 0.1 8.1 11 200 0.1 8.1 11 200 0.1 8.1 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 0.6 27.1 11 11 11 11 11 11 11 11 11 11 11 11 1
60000000000000000000000000000000000000	~ ⁰	(all (all (all of 0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Month # 2 3 3 4 4 5 5 6 6 7 7 8 8 9 10 11 12 YR	Sablefish PACIFIC CO	Sablefish POLLOCK + sablefish Month # 1 2 3 4 5 6 7 10 11 12 VR
14 7 7 2 8 8 8 11 11 10 0	ا ا هظ≽ا	Rec. Rec. 12 19 19 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Avg. Max. Min 4.6 23.2 0.1 1.7 7.6 0.0 3.8 14.5 0.0 2.1 3.7 0.6 11.1 35.6 0.3 8.7 20.5 0.3 11.2 20.0 0.0 21.7 21.7 21.7 15.9 22.5 3.2 7.2 35.6 0.0	a percent of sablefish we present.	percent of efish when present. Avg. Max. Mi 0.8 2.8 0 0.3 0.5 0 3.4 3.4 3 1.1 1.2 1 1.6 1.6 1 1.6 2 19.3 19 8.4 27.1 0 6.2 18.6 0 10.2 23.1 0 4.9 8.8 1

Table 1. Bycatch percentages in trawl-caught groundfish fisheries for fishing areas 51 and 52 by target species during 1986, 1987, and 1988 (source NOAA Technical Memorandum F/NWC-155).

Target fishery	: ot	her fi Year	latfish	Target fishery:	Pacif	ic coo	i .
19	986	1987	1988		1986	1987	1988
Pollock	7	10	18	Pollock	12	7	8
Pacific cod	17	25	12	Pacific cod	78	87	86
YFS	29	10	17	YFS	0	0	0
GN turbot	0	0	0	GN turbot	0	0	0
AR flounder	0	0	0	AR flounder	0	0	0
Other flatfish	45	50	50	Other flatfish	9	5	5
Sablefish	0	0	0	Sablefish	0	0	0
POP	0	0	0	POP	0	0	0
Other rockfish	0	0	0	Other rockfish	0	1	0
Atka mackerel	0	0	0	Atka mackerel	0	1	0

Target fishery:		ttom po Year	llock	Target fishery:		ter po Year	llock
19	986	1987 1	988		1986	1987	1988
Pollock	87	86	77	Pollock	99	99	99
Pacific cod	6	5	16	Pacific cod	1	0	0
YFS	1	2	1	YFS	0	0	0
GN turbot	0	0	0	GN turbot	0	0	0
AR flounder	2	1	1	AR flounder	0	0	0
Other flatfish	2	3	4	Other flatfish	0	0	0
Sablefish	0	0	0	Sablefish	0	0	0
POP	0	0	0	POP	0	0	0
Other rockfish	0	0	0	Other rockfish	0	0	0
Atka mackerel	0	0	0	Atka mackerel	0	0	0

Target fishery: Yellowfin sole Target fishery: Other groundfish Year Year 1987 1988 1987 1988 Pollock Pollock Pacific cod Pacific cod YFS YFS GN turbot GN turbot AR flounder AR flounder

Other flatfish	17	8	15	Other flatfish	13	20	24
Sablefish	0	0	0	Sablefish	0	0	0
POP	0	0	0	POP	0	0	0
Other rockfish	0	0	0	Other rockfish	0	0	0
Atka mackerel	0	0	0	Atka mackerel	0	0	0

Table 2. Trawl bycatch percentages of sablefish to Greenland turbot for fishing areas 51-54 (source: 1988 State of Alaska database).

				of efish (all	Sablefish as a percent of Greenland turbot + sablefish when sablefish were present				
Month	# Rec	. Avg.	Max.	Min	Month	# Rec	. Avg.	Max.	Min
1	1	0.0	0.0	0.0	1	0			
2	0				2	0			
3	2	0.0	0.0	0.0	3	0			
4	2	0.0	0.0	0.0	4	0			
5	0				5	0			
6	1	29.7	29.7	29.7	6	1	29.7	29.7	29.7
7	3	7.8	24.0	0.0	7	1	24.0	24.0	24.0
8	8	7.1	25.4	0.0	8	4	14.1	25.4	2.4
9	1	0.0	0.0	0.0	9	0			
10	2	25.0	26.2	23.8	10	2	25.0	26.2	23.8
11	0				11	0			
12	0				12	0			
YR	20	8.0	29.7	0.0	YR	9	20.0	29.7	2.4

Table 3. Trawl bycatch percentages of sablefish to rockfish species for fishing areas 51-54 (source: 1988 State of Alaska database).

Sablef					Sablefish as a percent of rockfish + sablefish records) when sablefish were present
Month	# Rec	. Avg	Max	Min	Month # Rec. Avg. Max. Min
1	0				1 0
2	0				2 0
3	3	0.0	0.0	0.0	3 0
4	0				4 0
5	1	30.2	30.2	30.2	5 1 30.2 30.2 30.2
6	1	0.0	0.0	0.0	6 0
7	8	3.7	12.4	0.0	7 4 7.4 12.4 1.6
8	6	6.7	23.5	0.0	8 4 10.1 23.5 2.2
9	1	24.8	24.8	24.8	9 1 24.8 24.8 24.8
10	1	0.0	0.0	0.0	10 0
11	6	0.3	1.8	0.0	11 1 1.8 1.8 1.8
12	1	8.6	8.6	8.6	12 1 8.6 8.6 8.6
YR	27	5.0	30.2	0.0	YR 12 11.3 30.2 1.6

Table 4. Hook-and-line bycatch percentages of sablefish to Greenland turbot for fishing areas 51-54 (source: 1988 State of Alaska database).

	ish as and tui s)			Sablefish as a percent of Greenland turbot + sablefish when sablefish were present					
Month	# Rec.	. Avg.	Max.	Min	Month	# Rec.	Avg.	Max.	Min
1	0				1	0			
2	5	0.0	0.0	0.0	2	0			
3	3	0.0	0.0	0.0	3	0			
4	0				4	0			
5	2	22.2	44.4	0.0	5	1	44.2	44.2	44.2
6	2	0.0	0.0	0.0	6	0			
7	15	23.4	49.5	0.0	7	11	31.9	49.5	9.6
8	42	2.1	47.3	0.0	8	4	22.2	47.3	6.8
9	6	3.5	9.5	0.0	9	3	6.9	9.5	3.9
10	0				10	0			
11	0				11	0			
12	0				12	0			
YR	75	6.7	49.5	0.0	YR	19	26.	6 49.	5 3.9

Table 5. Hook-and-line bycatch percentages of sablefish to rockfish species for fishing areas 51-54 (source: 1988 State of Alaska database).

	sh + sa	a percent blefish (a		Sablefish as a percent of rockfish+ sablefish when sablefish were present
Month	# Rec.	Avg. Max.	Min	Month # Rec. Avg. Max. Min
1	37	0.0 0.0	0.0	1 0
2	40	0.0 0.0	0.0	2 0
3	77	0.1 7.1	0.0	3 2 4.3 7.1 1.4
4	35	2.1 46.9	0.0	4 2 36.2 46.9 25.5
5	104	4.0 47.9	0.0	5 17 24.3 47.9 2.2
6	69	4.1 48.7	0.0	6 8 35.3 48.7 11.9
7	13	6.7 44.0	0.0	7 2 43.4 44.0 42.7
8	12	0.0 0.0	0.0	8 0
9	55	0.0 0.0	0.0	9 0
10	70	0.1 8.2	0.0	10 1 8.2 8.2 8.2
11	29	0.0 0.0	0.0	11 0
12	19	0.0 0.0	0.0	12 0
YR	560	1.6 48.7	0.0	YR 32 27.2 48.7 1.4

Table 6. Hook-and-line bycatch percentages of Greenland turbot to sablefish for fishing areas 51-54 (source: 1988 State of Alaska database).

Greenland turbot as a percent of sablefish (all records)						perce when	Greenland turbot as a percent of sablefish when sablefish were present.				
Month	# Rec	. Avg	. Max.	Min	Month	# Rec	. Avg	. Max	Min		
1	4	10.2	20.0	0.0	1	3	_	20.0			
2	10	3.6	21.6	0.0	2	3		21.6	4.8		
3	10	5.7	27.0	0.0	3	5	11.3	27.0	2.5		
4	31	0.0	0.0	0.0	4						
5	42	3.5	43.7	0.0	5	4	37.2	43.7	30.0		
6	94	3.3	40.1	0.0	6	11		40.1	6.4		
7	72	8.6	47.7	0.0	7	29	21.3	47.7	1.2		
8	88	3.1	39.3	0.0	8	24		39.3			
9	179	1.0	29.6	0.0	9	8		29.6			
10	12	4.7	34.2	0.0	10	3	18.7	34.2			
11					11						
12	1	10.0	10.0	10.0	12	1	10.0	10.0	10.0		
YR	543	3.0	47.7		YR	91	18.2		7 1.2		

Table 7. Pot bycatch percentages of sablefish to Pacific cod, by month for fishing areas 51-54 (source: 1988 State of Alaska database).

Sablefish as a percent of PACIFIC COD + sablefish (all records)					Sablefish as a percent of PACIFIC COD + sablefish when sablefish were present.					
1	# Rec.	_	Max. 0.0		Month # Rec. Avg. Max. Min [NONE]					
2 3	0 3	3 5	10.4							
4	13		0.0							
5	4		0.0							
6	0									
7	0									
8	1	0.0	0.0	0.0						
9	1	0.0	0.0	0.0						
10	4	0.0	0.0	0.0						
11	5	4.0	19.8	0.0						
12	1	0.0	0.0	0.0						
YR	33	0.9	19.8	0.0						

Table 8. Pot bycatch percentages of Pacific cod to sablefish, by month (source 1988 State of Alaska fish ticket database).

Pacific cod as a percent of SABLEFISH + Pacific cod (all records)					Pacific cod as a percent of SABLEFISH + Pacific cod when Pacific cod were present.					
Month	# Rec.	Avg.	Max.	Min	Month	# Rec.	Avg.	Max.	Min	
1	0		~							
2	0									
3	1	0.1	0.1	0.1	3	1	0.1	0.1	0.1	
4	0									
4 5	3	0.0	0.0	0.0						
6	2	0.2	0.0	0.0	6	1	0.0	0.0	0.0	
7	0									
8 9	1	9.2	9.2	9.2	8	1	9.2	9.2	9.2	
9	0									
10	1	0.0	0.0	0.0						
11	0									
12	0									
YR	8	1.2	9.2	0.0						

Ouota costs and cuts AFTER a period of rapid growth during the early 1980s, the New blight Zealand fishing industry achieved record production and export figures in 1987. But last year brought ominous signs that all is not well with

the industry, particularly in its fastest growing section — deepsea

exploitation of the deeper species began, reflected exports the expansion of some sections. From 128,278 mettons valued NZ\$197.2 million in 1981, they jumped 22 per cent in volume to 155,942 tons in 1987 and a remarkable and reasonable profitability.

From 1981, soon after 225 per cent in value to \$676.3 million. Most of the increase came from the harvesting of finfish and squid.

> Substantial investments in vessels, shore plants and shoreside facilities were made in the belief that there would be continued growth

But problems have arisen which seem likely to block further improvements. They include some revisions downwards of the total allowable catch (TAC) estimates for some important species, substantial increases in some resource rentals, and claims by the indigenous Maori people for the hand-ing over of a substantial portion of the country's total fish resource (see FNI, April 1988).

As FNI has reported, their claim is based on the wording of the 1840-Treaty. of Waitangi, which is being interpreted as guaranteeing to the Maori people certain resources, including "their fisheries". The issue has thrown the NZ industry into state of turmoil claims and counter-claims varying from rational to ridiculous

Reduced

this With uncertainty hanging over it, the industry has also had to consider a government announcement that some quotas are likely to be reduced for species such as orange roughy and hoki. And the Minister of Fisheries, Colin Moyle, announced that he was prepared to apply the maximum increase in resource rentals that the law will allow - 20 per cent.

The catch and quota problems of 1988 and into 1989 have their origin in the early part of the decade. In 1982, after there had been some development in deepwater fishing, the then NZ government asked officials to report on a long-term strategy covering catch allocations and assistance to the deepwater section.

This led to the Deepwater Fishery Development Strategy of November 1982.

Under this policy, allocations were made to compan-ies which had demonstrated involvement in deepwater fishing through NZ owned joint venture vessels.

Ouota

Industry members did not The new strategy intro-duced the Individual Transnecessarily agree with the Ministry's assessment and Scheme some pointed to better catfor the deepwater ches in 1988, compared with

Similar

the year before. But government researchers and industry did agree that research should be maintained.

future

for NZ

fishing

ment set up a similar scheme

the ITQS, there has been a

considerable amount of trad-

ing of quota and, when the government has released

further quotas, these have

During 1987, in addition

to considerable private buy-

ing and selling of quotas,

more tenders were called by government for increased

quotas of orange roughy at

about \$410 per metric ton.

These, and the earlier alloca-

tions, combined with suc-cessful export marketing of

deepwater species to build

up optimism and confidence

However, in mid-1988, a series of shocks hit the

industry on top of the major

concern over the Maori fish-

the government might have to reduce the TAC for the

two prime deepwater species

Research Station, said that,

after four years of research, there were indications that

roughy resource could be 55

per cent below what had

expressed over hoki stocks,

although the prospect of

fears

orange

were

sustainable

been originally estimated.

cuts was more distant.

orange roughy and hoki. Dr. John McKoy, chief exe-cutive of the Greta Point

The first of these was that

among quota holders.

ing rights issue

been put up for tender.

Since the introduction of

for the inshore fishery.

In August 1987, it had been announced that the Ministry would be getting funding for an \$18.5 million ocean-going research trawler, considered essential for investigation of the deepwater stocks. But the project has been deferred to two years running.

Shelved

While the government was putting off this expenditure, one of its senior ministers was criticising a large NZ company, Fletcher Fishing, for postponing a \$200 million expansion project!

Probably the biggest cause of discontent in the industry was the announcement that resource rentals ta species would quota species increased by 20 per cent.

When its objections had no effect, the industry, through the NZ Fishing Industry Association, sought in the High Court to have rentals increase in declared invalid. It lost there but went on to the Appeal Court where, in November, five judges unan dismissed the appeal. unanimously

Meanwhile, fishing companies have been renewing earlier accusations that the government is crippling them.

Dr. Brian Rhoades, chief executive of Sealord Products, said in mid-August that the Minister had taken

Above left: A huge haul of orange roughy in the peak period of fishing in the period of fishing in early 1980s. The species is now subject to reduced Above: Working quotas. Above: Working for bluenose and Alfonsino on the east coasts of the North Island.

no notice of an independent economic study which revealed that in the last financial year there was only 3.3 per cent return on investments of over \$500 million.

Other industry leaders went further. They quoted the conclusion of a study that the current \$16 million a year in resource rentals should have been reduced rather than increased to more than \$20 million.

One of the problems of the resource rental system. has probably received the critical scrutiny it deserves, is the provision that the rentals are payable in full on the allocated quota for each catch species. whether the quota is caught or not.

This practically forces holders to fish right up to the quota limit. Perhaps the desire to get the maximum financial return from the resource rentals has superseeded the traditional concept that the economic sus-tainable yield is usually reached before the biological sustainable yield.

Possibly the new concept is that the quotas set both a maximum and a minimum level and, as the resource rentals have been included in government's budget. they must be realised.

But fishing people know that frequently the cost of catching the last few tons of a dwindling resource is unprofitable and, for conservation reasons, undesirable.

Pressure on the holder to fish to the quota limit may be costing a lot of fishing time and money, in addition to the resource rental on the uncaught portion.

Another practical problem for the industry is that, as the catches of target quota species decline, continued trawling may result in the holder exceeding quotas in other associated species. such as bluenose or dories, targetting orange when roughy.

There is also a danger of catching other valuable by-catch species. The risk of penalty may thus force the quota holder to stop fishing early for target species on which he will already have paid resource rentals, or to dump the by-catch of other species.

Conveyor

- a Danish high-class product

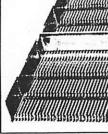
JAM conveyor belts are designed and developed in special consideration of the demands which are made in the

food industry.

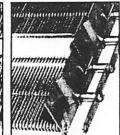
JAM conveyor belts are characterized by the surface being completely plane

and smooth.
It is practically impossible for the belt to become clogged up, and it is very easy to clean. The design of the be makes it very easy to take them apart for extension or shortening. JAM is always prepared to help you

choose the right belt type, with building-in suggestions, and lay-outs for complete solutions of conveyance in the tinned food industry, for drying and freeze tunnels, bakery ovens, lacquering plants etc.

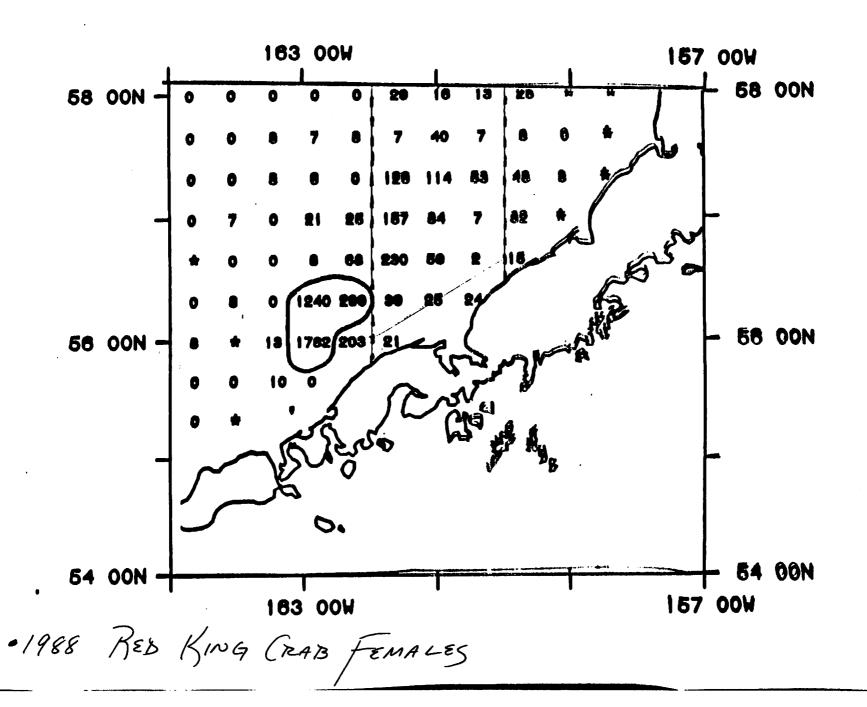


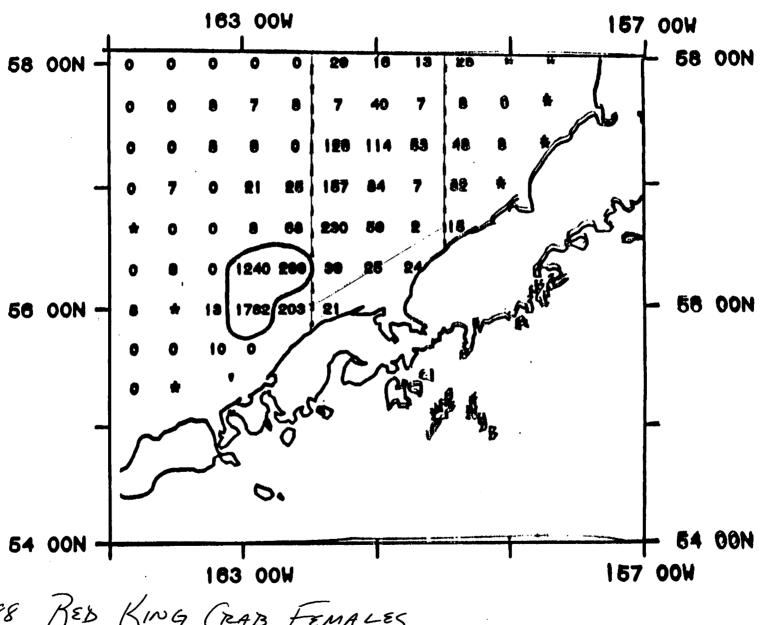
Type 50-2.5/2.5-5 pitch 50 mm, wire diameter 2.5, slot pitch 2.5-15 mm, can be equipped with side plates and crosslights. In stain-less steel, acidprool and galvani-





Maskinfabriken JAM A/S Alsvej 2 - DK-5800 Nyborg Denmark Tel. +459 31 16 17 - Tx. 50 471 jam dk Fax +459 31 23 25





-1988 RED KING CRAB FEMALES

Resolution 89-1

WHEREAS: The summer of 1988 report on the Factory Trawler Fishery for Pacific Cod off Port Moller indicates a high herring bycatch, and

WHEREAS: Bycatch rates as high as 25% of the catch are documented by the observer data, and

WHEREAS: This bycatch is occurring at times when the herring stocks that spawn at Port Moller, Herendeen Bay and from Bear River to Frank's Lagoon are staging to spawn, spawning and reschooling and recovering from spawning, and

WHEREAS: The Factory Trawler fishing is occurring directly in the migration path of the post spawning Togiak stocks, and

WHEREAS: The Southwest Regional Council is quite concerned for the continued biological health of the Port Moller area discreet herring spawning stocks, and

WHEREAS: These stocks have not been very large recently and are quite vulnerable to overfishing due to the factory trawler bycatch, and

WHEREAS: The Southwest Regional Council is also concerned about the potential reallocation of fully utilized Togiak stocks to factory trawler bycatch.

NOW THEREFORE BE IT RESOLVED that the Southwest Regional Council recommends that the Port Moller Pacific Cod trawl fishery be closed from April 5 to July 31 to conserve and protect the Port Moller area herring stocks.

Copies of this resolution to be sent to:
Gary Slaven, Chairman, Board of Fisheries;
John Petersen, Chairman, North Pacific Fisheries Management Council;
Commissioner Don Collinsworth; and
Governor Steve Cowper.

Attested by: Robert Heyano, Chairman

Signature: Robert Hujans

Resolution 89-2

WHEREAS: Factory trawlers have been roe stripping pollock, saving the valuable roe while discarding usable flesh, while fishing in the Gulf of Alaska and the Bering Sea, thus under utilizing the available resources, and

WHEREAS: The rapidly growing domestic trawl fleet now have, or will soon have the capacity to exceed the T.A.C. in these areas, and

WHEREAS: Shore plants in the communities of the region have made substantial investments in plants and equipment to more fully utilize pollock in the production of surimi, fillets, fish meal, as well as roe, and

WHEREAS: Factory trawlers participating in roe stripping realized increased catches, which result in shortened seasons which economically adversely affects shore plants and the communities they are located in, and

WHEREAS: Large amounts of discarded fish carcasses on the fishing grounds will foul the bottom potentially damaging other fisheries.

NOW THEREFORE BE IT RESOLVED that the Southwest Regional
Fish and Game Council strongly urges the North Pacific Fisheries
Management Council to develop regulations which would prohibit the
practice of roe stripping and dumping carcasses overboard.

Copies of this resolution to be sent to:
Gary Slaven, Chairman, Board of Fisheries;
John Petersen, Chairman, North Pacific Fisheries Management Council;
Commissioner Don Collinswoth; and
Governor Steve Cowper.

Attested by: Robert Heyano, Chairman

Signature: Robert Theyares

Resolution 89-3

WHEREAS: The Gulf of Alaska Joint Venture fishery for flatfish has experienced a high bycatch rate of halibut and other species, and

WHEREAS: The value of this bycatch approaches and may even exceed the value of the targeted flatfish, and

WHEREAS: The lost income is taken from many fishermen and coastal communities and the profit from flatfish joint ventures only goes to a few individuals, and

WHEREAS: The flatfish resource is being exploited by a struggling domestic fishery, with observer coverage, which can ill afford competition in the markets or loss of concnetrations of flatfish in the areas available and feasible for shoreside delivery.

NOW THEREFORE BE IT RESOLVED by the Southwest Regional Council that flatfish joint ventures no longer be authorized in the Gulf of Alaska.

Copies of this resolution to be sent to:

Gary Slaven, Chairman, Board of Fisheries

John Petersen, Chairman, North Pacific Fisheries Management Council Commissioner Don Collinsworth

Governor Steve Cowper

Congressional Delegation in Washington, D. C.

Attested by: Robert Heyano, Chairman

Signature: Robert Theyano

Resolution 89-4

WHEREAS: The groundfisheries have bycatches of finfish and shellfish that affect long established industries of which our coastal communities are very dependent on, and

WHEREAS: The data on these bycatches is no longer effectively collected, and

WHEREAS: The discards of groundfish species are not reliably recorded and may lead to overfishing, and

WHEREAS: Obtaining the maximum economic benefit to the nation is not possible without observer data, and

WHEREAS: Marine mammals and sea bird populations are directly affected by the health of the fish stocks they feed on, and

WHEREAS: Marine mammals are a bycatch particularly on the groundfish trawl fisheries.

NOW THEREFORE BE IT RESOLVED by the Southwest Regional Council that a comprehensive observer program is necessary in the Alaska region. Be it further resolved that potential damage to fish, marine mammals and sea bird population dictates a yearly application of an observer program, and that funding is at least partly a federal government responsibility, and that any fees collected from the fishing industry not be used for other purposes and that any fees be equitably applied to the industry.

Copies of this resolution to be sent to: Gary Slaven, Chairman, Board of Fisheries John Petersen, Chairman, North Pacific Fisheries Management Council Governor Steve Cowper Congressional Delegation in Washington, D. C.

Attested by: Robert Heyano, Chairman

Signature: Robert Nuyano

Resolution 89-5

WHEREAS: The Southwest Regional Council has a number of problems with the way in which fisheries were categorized under the provisions of the new Marine Mammal Reauthorization Act, and

WHEREAS: The categories were assigned without adequate public testimony by the fishermen who will be affected because no hearings were held in our communities, and

WHEREAS: These categories were assigned without adequate data to show any problems with marine mammals interactions or population, and

WHEREAS: The Southwest Regional Council feels that all salmon fisheries should have been categorized as a 2 or a 3, based on the current criteria.

NOW THEREFORE BE IT RESOLVED by the Southwest Regional Fish and Game
Council that the Secretary of Commerce resolve these issues before the provisions of the Act (for example: observer coverage) are implemented.

Copies of this resaolution to be sent to:

Dr. Nancy Foster, Director, Office of Protected Resources, National
Marine Fisheries Service, 1335 East-West Highway, Silver Spring, MD 20910

Mr. John Sease, National Marine Fisheries Service, Juneau, Ak.

Attested by: Robert Heyano, Chairman

Signature: Robert Wiejano

Resolution 89-6

WHEREAS: Most Southwest Alaska communities have not had a reasonable opportunity for their residents to participate in this fishery, and

WHEREAS: The fishery resources that Southwest Alaska residents are currently dependent on are vulnerable to high seas interception, large natural fluctuations of abundance, or reduction due to bycatch in the bottom fisheries, and

WHEREAS: A cut off for participation in these fisheries is not necessary for conservation, and

WHEREAS: The only new mamagement actions necessary for conservation in this fishery are obvious data collection, mamagement of bycatches, accounting of discards, and prohibition of roe stripping.

NOW THEREFORE BE IT RESOLVED by the Southwest Regional Fish and Game Council that the residents of the coastal Alaska continue to have open access to the bottomfish resources of the Gulf of Alaska and the Bering Sea.

Copies of this resolution to be sent to:

Gary Slaven, Chairman, Board of Fisheries;

John Petersen, Chairman, North Pacific Fisheries Management Council; and The Alaska Congressional Delegation.

Attested by: Robert Heyano, Chairman

Signature: Robert Hugans