Agenda Item G-2
July, 1980

MEMORANDUM

DATE: July 14, 1980

TO: Council, SSC and AP Members

FROM: Jim H. Branson, Executive Director

SUBJECT: Bering Sea Groundfish Fishery Management Plan

ACTION REQUIRED

Review of amendments and recommendation for release to the public. Set time and place for public hearing(s).

Background

The amendment to the Bering Sea Plan was first presented to the Council at the March meeting and an amendment package was approved to be sent out to the public in April. This public hearing was not held before the May meeting due to the lack of time to give notice to the public and delays with the EIS preparation and schedule.

The PDT prepared a final amendment package which has been reviewed by the SSC subgroup. Several additions to the package have been made since it was sent out to the public in April. The PDT also had the opportunity to discuss at greater length the options for the management of incidental (prohibited) species in both the Gulf of Alaska and the Bering Sea. Their paper and recommendations are included as attachments.

Because of a delay in the preparation of the Environmental Impact Statement, the schedule for the review and approval of the amendment package, itself, has been delayed also. A public hearing could be scheduled for the August meeting but would not include the DEIS. We could conceivably have the amendments implemented in April if we proceed without the EIS - it will be June if we move them together.

The original FMP does not have an expiration date, once implemented it should function until amended. It will, however, restrict the U.S. fishery in the "halibut savings area" unless that portion of the Plan is disapproved by NMFS. The amendment package, in any case, won't go through fast enough to have any affect on that problem.

In summary, it probably doesn't make much difference if we delay the amendment to tie in with the DEIS or move it separately. Aside from the U.S. fishery in the "halibut" zones the only other timely problem appears to be the large increase in cod OY in the amendment that would not be available until mid-season if we wait on the EIS.

Attachments

1. Additions to the amendment package
2. DAH estimated for the Bering Sea Aleutian Island area (under G4(a))
3. PDT report on the options for management of incidental species catch
4. PDT report on the joint venture time and area closure criteria
5. Memo from Pat Travers to Jim Branson: Legal Analysis of Bering Sea/Aleutian Islands amendment package

APPENDIX G-2(a)
July, 1980

DRAFT

PROPOSED AMENDMENTS TO THE

Fishery Management Plan

for the

Groundfish Fishery of the

Bering Sea/Aleutian Island Area

dated

November 19, 1979

Submitted for Review

by the

Bering Sea/Aleutians Groundfish

Plan Development Team

July 1980

CONTENTS

This amendment package contains proposed amendments to the following sections of the existing FMP dated November 19, 1979:

(Above sections replaces original sections 11, 12, and 14)

Annex I, II, III, and VI have been updated and maintain the same numbering system as before.

Optimum yield - Option 1 of 3. 2:1.13:dms

The following 2 sections go as a package as option 1 of 3 options:
Section 11.0 Optimum Yield
Section 12.0 Apportionment of Optimum Yield

11.0 OPTIMUM YIELD (OY)

11.1 Maximum Sustainable Yield (MSY) of the Groundfish Complex

The groundfish complex and its fishery is a distinct management unit of the Bering Sea. It is made up of more than 10 commercially important species and many others of lesser or no commercial importance. Together, they form a large subsystem of the Bering Sea ecosystem with intricate interrelationships between predators and prey, between competitors, and between those species and their environment. Therefore, the productivity and MSY of groundfish should be conceived for the groundfish complex as a unit rather than for many individual species groups.

The MSY of the groundfish complex is in the range of 1.7-2.4 million mt. This is calculated by summing the MSY's of individual species groups that are derived from species-by-species analysis as noted in Annex I. A reasonable verification of the MSY for the groundfish complex is derived by averaging the 1968-1977 catches when the fishery went through periods of growth, peak, decline, and some stability (see Section 5.2 on History of Exploitation). The average catch was 1.8 million mt with a range of 1.1-2.4 million mt.

The latest version of the Bering Sea ecosystem model developed by the Northwest and Alaska Fisheries Center (Granfeldt 1979) shows that the minimum sustainable exploitable biomass for the groundfish complex covered by this FMP is about 9.5 million mt. This PROBUB model (Prognostic Bulk Biomass model) simulated the principal components of the ecosystem (mammals, birds, demersal fish, semi-demersal fish, pelagic fish, squid, crabs, and benthos) and considered their fluctuations in abundance caused by predation, natural

mortality, environmental anomalies, and fishing. The magnitude of the minimum sustainable exploitable biomass (9.5 million mt) shows that the MSY may be even higher than 1.7-2.4 million mt.

11.2 Allowable Biological Catch (ABC) of the Groundfish Complex

The ABC of the groundfish complex is 1.4-2.0 million mt or 85% of the MSY range. This deviation from MSY reflects a combination of factors on the quality of data used, condition of stocks, population dynamics, and ecosystem theories, such as

(1) the fact that MSY's of some individual species groups are based on incomplete data and models requiring some questionable assumptions which makes it prudent to use conservative estimates of MSY;

(2) the fact that three elements of the groundfish complex (sablefish, Pacific ocean perch, and Pacific halibut) are currently depleted (Annex I) and rebuilding of these stocks may not be achieved by lowering catches of these individual species alone;

(3) the requirements of the marine mammals and birds for readily available quantities of prey items;

(4) evidence that groundfish removals of close to 2 million mt in the past have led to population stresses and declines for a number of species like pollock, yellowfin sole, sablefish, and Pacific ocean perch;

(5) the concern that ecosystem production may be shifted to lower trophic levels of little or no commercial value by overfishing the upper trophic levels;

(6) the desire to maintain a large resource biomass so that the fishery is not solely dependent on young recruits each year and to maintain a "biological cushion" to buffer adverse anomalies in upper trophic level production; and

(7) the ABC of the groundfish complex derived by summing the ABC's of individual species groups during 1977-80 (Annex I) is within the range of 1.4-2.0 million mt and appears likely to remain so for a few years.

11.3 Optimum Yield of the Groundfish Complex

The optimum yield (OY) of the management unit equals ABC, 1.4-2.0 million mt. This range will be the OY of the Bering Sea/Aleutians groundfish complex covered by this FMP unless the plan is amended. The amendment will be made when the status of the groundfish complex changes substantially from the present condition or when socioeconomic factors dictate that OY falls outside the present range.

The OY of the groundfish complex is made up of total allowable catches (TAC's) of individual species groups. An initial and final TAC is established during a fishing year. The initial TAC is at the low end of the OY range (1,400,000 mt) and is apportioned by species groups according to Section 12.1.1. The initial TAC is established to allow the fishery to operate at the beginning of the fishing year and until the Final TAC is determined.

The Final TAC for the groundfish complex is determined during the first three months of the fishing year to allow use of the most current information from the previous year's fishery. ABC's are determined by species groups according to data and analytical procedures described in Annex I that incorporate commercial fishery and research survey data and information from scientific meetings with foreign and U.S. scientists. The ABC's may be adopted by the Council as TAC's or be modified by the Council for socio-economic reasons. Socio-economic factors of importance to the domestic fishery that may be included as OY considerations are (a) higher catch rates or larger average size fish than can be expected when production is at the level of ABC, and (b) limited seasonal availability of fishing time.

The Final TAC for the groundfish complex must be within the OY range of 1.4-2.0 million mt unless this FMP is amended or the Secretary exercises his authority to implement emergency regulations to reduce OY below 1.4 million mt. The Final TAC's for each species group will be published in the Federal Register as an annual supplement to this FMP by the Regional Director.

12.0 TOTAL ALLOWABLE CATCH (TAC)

12.1 Initial TAC

Initial TAC for the management unit is set at 1,400,000 mt by the beginning of the fishing year. It is apportioned into (a) Initial Reserves and (b) Initial Allocations to Fishery (Figure 25-1).

(a) Initial Reserves

Initial Reserves are separated into a (1) reserve for correction of operational problems in the fishery which is at the discretion of the Regional Director, and (2) a reserve for expansion of the domestic fishery. The Initial Reserve for Correction of Operational Problems is set at 1% of the mid-point of the OY range--17,000. This reserve will be distributed among species groups and among nations during the fishing year at the discretion of the Regional Director to correct unforeseen operational problems in the fishery that have insignificant biological consequences to the stocks.

The Initial Reserve for Domestic Fishery Expansion is set at 10% of the Initial TAC. The Initial TAC is the sum of TAC's by species group which are derived according to Table 23.1. Therefore, the Initial Reserve for Domestic Fishery Expansion is 140,000 mt. This Reserve may be released to DAH anytime during the fishing year by the Regional Director.

Option 1 of 3

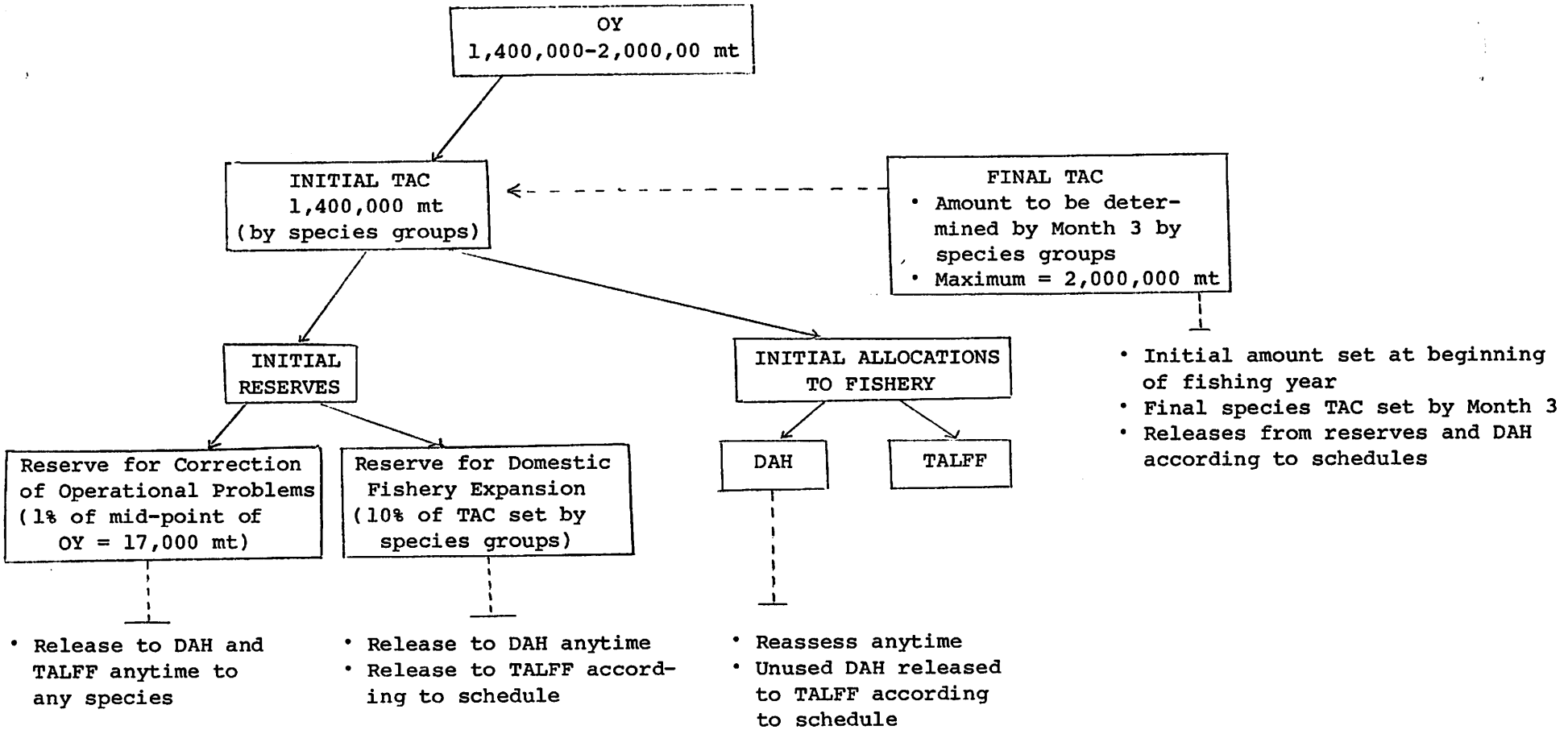


Figure 25.1.--Apportionment of Optimum Yield

(b) Initial Allocations to Fishery

Initial Allocations are available to the fishery by species groups as shown in Table 23-1. They will remain the same from year-to-year unless this FMP is amended, and will total the low end of the OY range (Initial TAC) less the Initial Reserves (see section 12.1.1)--1,243,000 mt. These initial species allocations are available for apportioning into DAH and TALFF at the beginning of each fishing year to get fishing operations started while the final species allocations are determined with the most up-to-date data.

Sixty days prior to the beginning of each fishing year, the Council shall project domestic needs for each species category for the coming year. Those projections form DAH (Annex II) and allow the Council to determine at that time the initial TALFF of each species category, as follows:

Initial TALFF equals Initial Allocation to Fishery (Table 23-1) minus DAH. The projection on DAH may be reassessed and updated anytime during the fishing year. The current estimate of Initial TALFF is shown in Annex III.

12.1.2 Final TAC

The Final TAC is determined by the third month of the fishing year according to Section 11.3. When the Final TAC of the groundfish complex is determined, the Initial Reserves and Initial Allocations to the Fishery are updated to Final Reserves and Final Allocations to the Fishery.

(a) Final Reserves

The Final Reserve for Correction of Operational Problems remains the same as before--1% of the mid-point of the OY range or 17,000 mt. This reserve will be distributed among species groups and among nations in any amount and at any time during the fishing year at the discretion of the Regional Director to correct unforeseen operational problems in the fishery that have insignificant biological consequences to the stocks.

Table 23.1--Bering Sea/Aleutians groundfish MSY, ABC, OY, and initial TAC's, in metric tons.

MSY	=	1,700,000 - 2,400,000 metric tons
ABC = 85% MSY	=	1,400,000 - 2,000,000 metric tons
OY	=	1,400,000 - 2,000,000 metric tons
Initial TAC	=	1,400,000 metric tons (low end of OY)
Reserves	=	17,000 metric tons -- Regional Director's Reserve for Correction of Operational Problems 140,000 metric tons -- 10% Initial TAC as Reserve for Domestic Fishery Expansion
Initial Allocation to Fishery	=	1,243,000 metric tons (Initial TAC - Reserves) -- Amounts to be allocated to DAH and TALFF

Species group	Areas[1]	Proportion[2]	Initial TAC[3] (1,400,000 mt)	Initial reserve for domestic fishery expansion[4]	Initial Allocation to Fishery[5]
Pollock	I, II	.6800	952,000	95,200	856,800
	III, IV	.0230	32,200	3,220	28,980
Pacific ocean perch	I, II, III	.0025[7]	3,500	350	3,150
	IV	.0025[7]	3,500	350	3,150
Other rockfishes	I, II, III	.0050	7,000	700	6,300
	IV	.0050	7,000	700	6,300
Sablefish	I, II, III	.0015[7]	2,100	210	1,890
	IV	.0005[7]	700	70	630
Pacific cod		.0500	70,000	7,000	63,000
Yellowfin sole		.0600	84,000	8,400	75,600
Turbots		.0400	56,000	5,600	50,400
Other flatfishes[8]		.0500	70,000	7,000	63,000
Atka mackerel	IV	.0300	42,000	4,200	29,300[6]
Squid		.0200	28,000	2,800	16,700[6]
All others		.0300	42,000	4,200	37,800
Total		1.0000	1,400,000	140,000	1,243,000

See next page for footnotes.

1/ Areas as defined in Figure 25-2.

2/ Long term production of individual species groups relative to that of entire groundfish complex.

3/ Determined by multiplying "Proportion" times total initial TAC, which is fixed at 1,400,000 mt (low end of OY).

4/ 10% of initial TAC.

5/ Initial TAC - Reserves

6/ Reserve for Correction of Operational Problems (17,000 mt) taken from Atka mackerel and squid categories (8,500 mt each) because actual catches have not approached initial species TAC.

7/ Depleted stocks, proportion set at 50% long term value; pollock proportion increased by corresponding amount to rectify total.

8/ Excluding Pacific halibut.

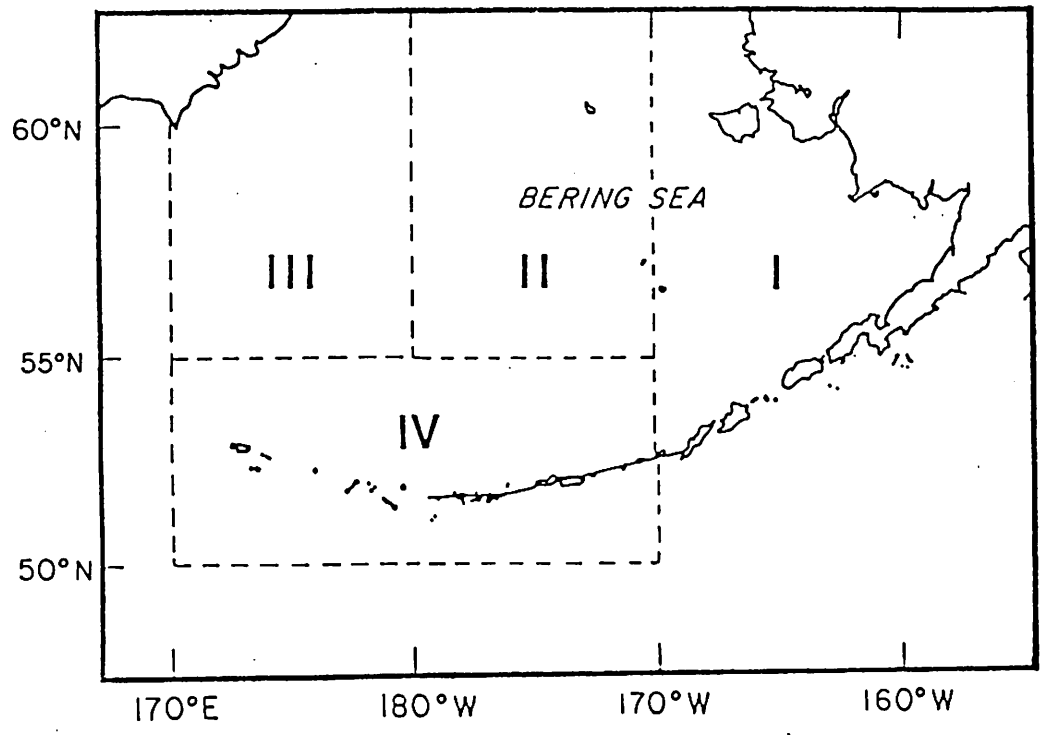


Figure 25-2.--Map designating the four groundfish regulatory areas of the Bering Sea/Aleutian Island region.

This reserve may be released to DAH or TALFF by the Regional Director when the opportunity for operational problems is no longer likely to arise and the Reserve is considered no longer needed.

The Final Reserve for Domestic Fishery Expansion is set at 10% of Final TAC. The Final TAC is the sum of TAC's by species groups which are derived according to Section 11.3. The Final Reserve for Domestic Fishery Expansion will be held through the first half of each fishing year to accommodate unexpected domestic production in excess of DAH. By the end of the sixth month of the year, any reserve not needed for DAH will be released to TALFF.

(b) Final Allocations to Fishery

When the Final TAC is determined, the amount less the Final Reserves is available as final allocations to the fishery. The allocations are by species groups, just as the Initial Allocations were, and are available for apportioning into DAH and TALFF.

Final TALFF equals final TAC minus reserves minus updated DAH. Unused DAH, that portion of the DAH not needed for domestic fisheries for the rest of the year, will be released to TALFF by the beginning of Month 6 of the fishing year.

Optimum yield - Option 2 of 3.
The following 2 sections go as a package as option 2 of 3 options:
Section 11.0 Optimum Yield
Section 12.0 Apportionment of Optimum Yield

11.0 OPTIMUM YIELD (OY)

11.1 Maximum Sustainable Yield (MSY) of the Groundfish Complex

The groundfish complex and its fishery is a distinct management unit of the Bering Sea. It is made up of more than 10 commercially important species and many others of lessor or no commercial importance. Together, they form a large subsystem of the Bering Sea ecosystem with intricate interrelationships between predators and prey, between competitors, and between those species and their environment. Therefore, the productivity and MSY of groundfish should be conceived for the groundfish complex as a unit rather than for many individual species groups.

The MSY of the groundfish complex is in the range of 1.7-2.4 million mt. This is calculated by summing up the MSY's of individual species groups that are derived from species-by-species analysis as noted in Annex I. A reasonable verification of the MSY for the groundfish complex is derived by averaging the 1968-1977 catches when the fishery went through periods of growth, peak, decline, and some stability (see Section 5.2 on History of Exploitation). The average catch was 1.8 million mt with a range of 1.1-2.4 million mt.

The latest version of the Bering Sea ecosystem model developed by the Northwest and Alaska Fisheries Center (Granfeldt 1979) shows that the minimum sustainable exploitable biomass for the groundfish complex covered by this FMP is about 9.5 million mt. This PROBUB model (Prognostic Bulk Biomass model) simulated the principal components of the ecosystem (mammals, birds, demersal fish, semi-demersal fish, pelagic fish, squid, crabs, and benthos) and considered their fluctuations in abundance caused by predation, natural

Table 23-2.--Bering Sea/Aleutians groundfish MSY, ABC, OY, and initial TAC's, in metric tons.

MSY = 1,700,000 - 2,400,000 mt
ABC = 80% Mid-MSY = 1,600,000 mt
OY = 1,600,000 mt
Reserves = 25% OY = 400,000 mt
(16,000 mt or 4% of Reserves = Reserve for Correction of Operational Problems)
(384,000 mt or 96% of Reserve = Reserve for Domestic Fishery Expansion and Final TAC)
Initial TAC = 1,200,000 mt (OY - Reserves)
Final TAC = 1,600,000 mt (determined by species by month 3)

Species Group	Areas[1]	Proportion[2]	Initial TAC[3]
Pollock	I, II	.6800	816,000
	III, IV	.0230	27,000
Pacific ocean perch	I, II, III	.0025[4]	3,000
	IV	.0025[4]	3,000
Other rockfishes	I, II, III	.0050	6,000
	IV	.0050	6,000
Sablefish	I, II, III	.0015[4]	1,800
	IV	.0005[4]	600
Pacific cod		.0500	60,000
Yellowfin sole		.0600	72,000
Turbots		.0400	48,000
Other flatfishes[5]		.0500	60,000
Atka mackerel		.0300	36,000
Squid		.0200	24,000
All others		.0300	36,000
Total		1.0000	1,200,000

1/ Areas defined in Figure 25-2. Blank means all areas combined.
2/ Long-term surplus production of individual species groups relative to that of entire groundfish complex.
3/ "Proportion" times total initial TAC, which is fixed at 1,200,000 mt.
4/ Depleted stocks, proportion set at 50% long term value; pollock proportion increased by corresponding amount to rectify total.
5/ Excluding Pacific halibut.

Optimum Yield: Option 3 of 3
(Note: The third option for OY determination follows essentially the same procedures presented in the original FMP dated November 19, 1979. This section (Section 11.0) replaces the same section in the original FMP.)

11.0 OPTIMUM YIELD (OY)

Determinations of MSY, EY, and ABC are made for individual species groups through species-by-species assessments of the stocks as described in Annex I. The combined ABC's of the species groups total 1,865,000 mt.

Without having identified social nor economic reasons for reducing the yield of the stocks in this fishery below ABC, OY is considered equal to ABC as shown in Table I.1 of Annex I.

It is noted that such economic factors that are considered important by domestic fishing vessels as (a) higher catch rates or larger average size than can be expected when production is at the level of ABC and (b) limited seasonal availability of fishing time could be introduced as OY considerations.

mortality, environmental anomalies, and fishing. The magnitude of the minimum sustainable exploitable biomass (9.5 million mt) shows that the MSY may be even higher than 1.7-2.4 million mt.

11.2 Allowable Biological Catch (ABC) of the Groundfish Complex

The ABC of the groundfish complex is set at 80% of the mid-point of the MSY range--1.6 million mt. This ABC is believed to be achievable each year for the next few years and, therefore, is set at 1.6 million mt until the status of stocks changes drastically from present conditions and the plan has to be amended. The deviation of MSY to ABC reflects a combination of factors pertaining to annual variations in condition of stocks, quality of data used, and population dynamics and ecosystem considerations such as:

(1) the fact that EY varies annually depending on individual condition of stocks but in recent years (1973-1979) they averaged close to 1.6 million mt and are expected to average the same over the next few years;

(2) when catches from the groundfish complex were controlled to levels close to 1.6 million mt, the condition of the entire groundfish complex either improved or stabilized from the condition when catches exceeded this level during 1971-1975;

(3) the fact that MSY's of some individual species groups are based on incomplete data and models requiring some questionable assumptions which makes it prudent to use conservative estimates of MSY;

(4) the fact that three elements of the groundfish complex (sablefish, Pacific ocean perch, and Pacific halibut) are currently depleted (Annex I) and rebuilding of these stocks may not be achieved by lowering catches of these individual species alone;

(5) the requirements of marine mammals and birds for readily available quantities of prey items;

(6) evidence that groundfish removals of close to 2 million mt in the past have led to population stresses and declines for a number of species like pollock, yellowfin sole, sablefish, and Pacific ocean perch;

(7) the concern that ecosystem production may be shifted to lower trophic levels of little or no commercial value by overfishing the upper trophic levels;

(8) the desire to maintain a large resource biomass so that the fishery is not solely dependent on young recruits each year and to maintain a "biological cushion" to buffer adverse anomalies in upper trophic level production.

11.3 Optimum Yield of the Groundfish Complex

The optimum yield of the groundfish complex equals ABC, 1.6 million mt. The conservative ABC is sufficient to cover such OY concerns as larger exploitable biomass in order to provide higher catch rates and larger average fish sizes during period of domestic fishery development and rebuilding of three depressed stocks.

12.0 APPORTIONMENT OF OPTIMUM YIELD

The OY of 1.6 million mt is apportioned into Reserves and initial TAC's as defined in Figure 25-3.

12.1 Reserves

Twenty-five percent of the groundfish complex OY (or 400,000 mt), will be reserved. Therefore, the total of the initial TAC's will be 1,200,000 mt. The reserves will be released to TAC according to the schedule in Section 12.1.2 and to either DAH or TALFF as determined by domestic needs, unless the Secretary exercises his emergency authority under Section 305(e) of the FCMA.

Rationale for the reserve is: (1) to assure that unanticipated needs of the domestic fishery can be met without exceeding OY; (2) to provide in-season

Option 2 of 3

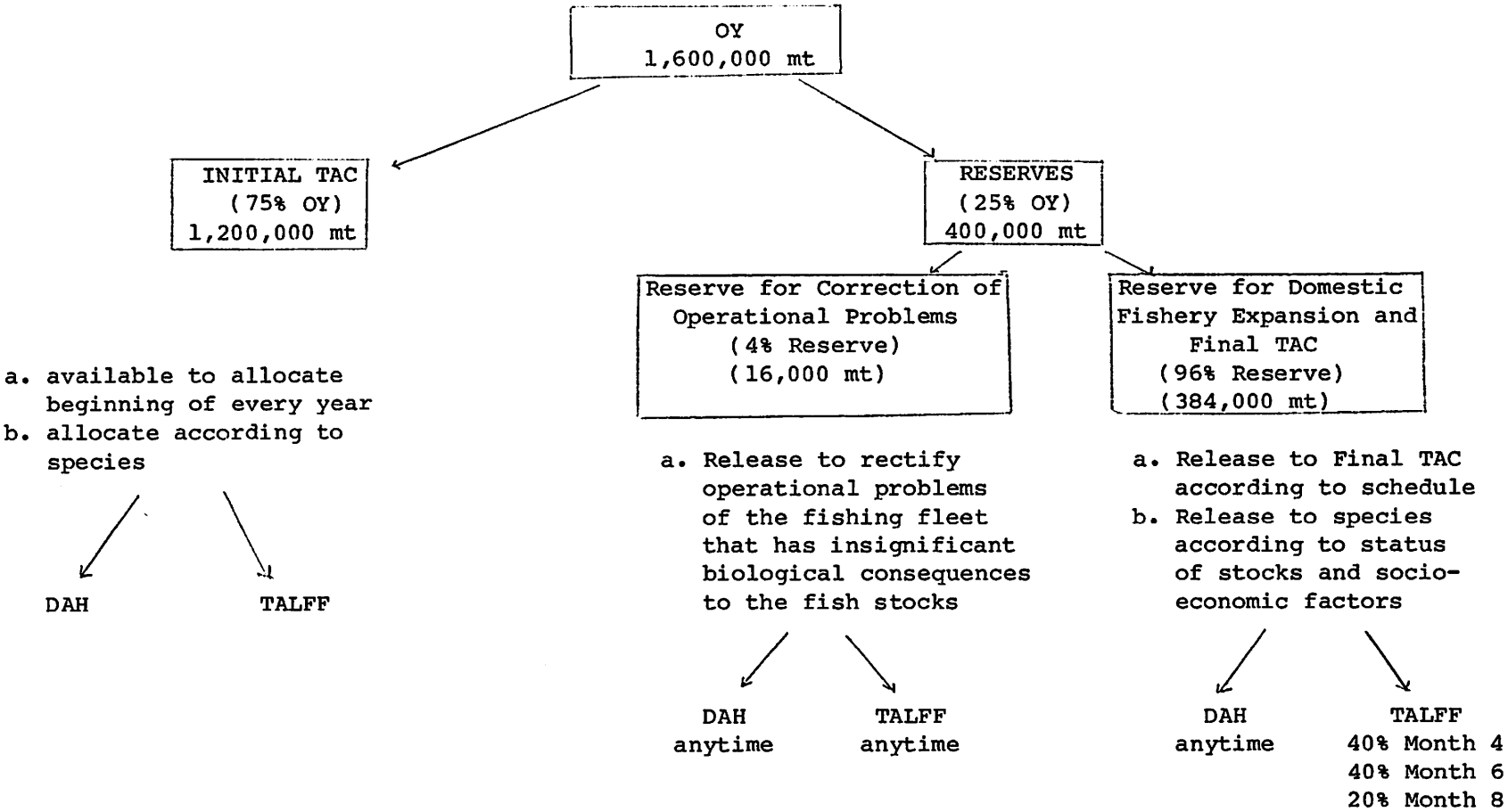


Figure 25.3--Apportionment of Optimum Yield

management flexibility which will allow the Regional Director to mitigate minor operational problems in the fishery (see Section 12.1.1); and (3) to provide the pool which the Regional Director will distribute to individual species' Final TAC's (Section 12.2) on the basis of the most current status of stocks analyses.

12.1.1 Reserve for Correction of Operational Problems

Four percent of the Reserves (16,000 mt) will be set aside for the Regional Director to allocate, at his discretion, among all elements of the fishery, foreign and domestic, to correct unforeseen operational problems of the fishing fleet that have insignificant biological consequences to the stocks.

12.1.2 Reserve for Domestic Fishery Expansion and Final TAC

The remaining reserves of 384,000 mt will be released to Final TAC's, apportioned among species groups as described in Section 12.2, and allocated to TALFF and DAH according to the following schedule:

A. Release of Reserve to DAH. At any time, the Regional Director may reassess DAH and apportion to DAH any amounts from this Reserve he determines are needed to supplement DAH.

B. Release of Reserve and Unused DAH to TALFF. In consultation with the North Pacific Fishery Management Council, the Regional Director shall apportion to TALFF all or part of this Reserve according to the following schedule: 40% at the beginning of month 4, 40% at the beginning of month 6, and 20% at the beginning of month 8.

As soon as practicable after the first day of the eighth month of the fishing year and after consultation with the North Pacific Fishery Management Council, the Regional Director shall apportion to TALFF that part of the DAH

he determines will not be harvested by U.S. fishermen during the remainder of the fishing year.

12.1.3 In addition to the above, any portion of the reserve not transferred to TALFF as scheduled may be transferred on a subsequent scheduled date.

12.2 Total Allowable Catch (TAC)

Whereas, MSY, ABC, OY, and Reserve apply to the groundfish complex as a whole and are intended to remain unchanged from year-to-year unless this FMP is so amended, TAC's apply to individual species or species groups, and will be determined annually by the Regional Director, with advice from the Council, in the following manner.

Initial TAC's for each species group are based on the average proportion of the total groundfish production that can be expected of each species group. Those proportions multiplied by 1,200,000 mt (OY for the complex less Reserve for the complex) result in initial TAC's for each species group and will remain unchanged from year-to-year unless this FMP is amended (Table 23-2).

Final TAC's for each species group will be determined annually by apportioning the 400,000 mt Total Reserve among species groups in the following manner:

By the third month of each fishing year the Regional Director, with advice from the Council and on the basis of the then most current status of stock (an update of Annex I) and any socio-economic analyses, will apportion 384,000 of the Reserve (set aside for Domestic Fishery Expansion and Final TAC) to individual species TAC's. Therefore, the sum of the Final TAC's will equal 1,584,000 mt which, together with the Reserve for Correction of Operational Problems (16,000 mt) will total the 1.6 million mt OY for the management unit--unless the Secretary exercises his emergency authority.

The resulting Final TAC's for each species group will be published in the Federal Register as an annual supplement to this FMP.

Table I.1--MSY, EY, and ABC values for Groundfish in the Bering Sea/Aleutian Region during 1981 (1000's mt).

Species	Region1/	MSY	EY	ABC	(1979 OY)	(1979 OY - 1981 ABC Change
Pollock	BS	1,100-1,600	1,200	1,200	(1,000)	(+200)
	AL	?	?	100	(100)	(0)
Yellowfin sole	BS-AL	169-260	169	169	(117)	(+52.0)
Turbots	BS-AL	90	71	71	(90)	(-19)
Other flatfishes	BS-AL	42.9-76.8	60	60	(61)	(-1)
Pacific cod	BS-AL	58.7	160	120	(58.7)	(+61.3)
Pacific ocean perch	BS	32	5	1.0	(3.25)	(-2.25)
	AL	75	13	2.6	(7.50)	(-4.9)
Other rockfish	BS	?	7.0	7.0	(7.7)	(+6.6)
	AL	?	7.3	7.3		
Sablefish	BS	11.35	2.6	2.6	(3.5)	(-0.9)
	AL	1.85	1.1	1.1	(1.5)	(-0.4)
Atka mackerel	BS-AL	33	?	24.8	(24.8)	(0)
Squid	BS-AL	>10	>10	10	(10)	(0)
Pacific halibut	BS-AL	5	0.3	2/	-	-
Other included species	BS-AL	89.4	89.4	89.4	(74.2)	(+15.2)
Total3/		1,713.2-2,338.1	1,795.4	1,865.8	(1,559.15)	(+306.65)

1/ BS - Eastern Bering Sea (statistical areas I & II).
AL - Aleutian Region (statistical area IV).

2/ Subject to separate FMP.

3/ Excluding Pacific halibut.

4/ New status of stocks update expected by September 1980

Section 13. PROHIBITED SPECIES

The Section on Prohibited Species is drafted jointly by the Plan Development Teams of the Bering Sea/ Aleutians and the Gulf of Alaska Groundfish Fisheries

and seperated from this draft amendment package for review.

14.0 MANAGEMENT REGIME

14.1. MANAGEMENT OBJECTIVES

Four priority objectives dictate the philosophy of management for the groundfish fishery in the region:

(A) Rational and optimal use, in biological and socio-economic sense, of the region's fishery resources as a whole;

(B) Minimize the impact of groundfish fisheries on prohibited species and continue the rebuilding of the Pacific halibut resource;

(C) Provide for the opportunity and orderly development of domestic groundfish fisheries, consistent with (A) and (B) above; and

(D) Provide for foreign participation in the groundfish fishery, consistent with all three objectives above, to take the portion of the optimum yield not utilized by domestic fishermen.

14.2. AREA, FISHERIES, AND STOCKS INVOLVED

This Fishery Management Plan and its Management Regime applies:

A. To the U.S. Fishery Conservation Zone of that portion of the North Pacific Ocean adjacent to the Aleutian Islands which is west of 170°W, and of the entire Bering Sea (See Figure 26).

B. To all foreign and domestic fishing vessels operating in the area described in A above, except:

1. U.S. and Canadian fishermen when they are operating under IPHC regulations;

2. Those U.S. vessels which are operating legally in any fishery for shellfish.

C. To all stocks of finfish and squid except salmon, steelhead trout, Pacific halibut, and herring which are distributed or are exploited predominantly in the area described in A, above.

Four categories of species groups (Annex VI) that are likely to be taken by the groundfish fishery and to which the optimum yield concept is applied somewhat differently are:

1. Prohibited Species -- those species groups which must be immediately returned to the sea when caught and brought aboard. Records of catch of each species must be maintained.

2. Target Species -- species groups which are commercially important, targeted upon by the groundfish fishery, and for which a sufficient data base exists that allows each to be managed on its own biological merits. A specific TAC or OY applies to each species group. Records of catch of each species must be maintained.

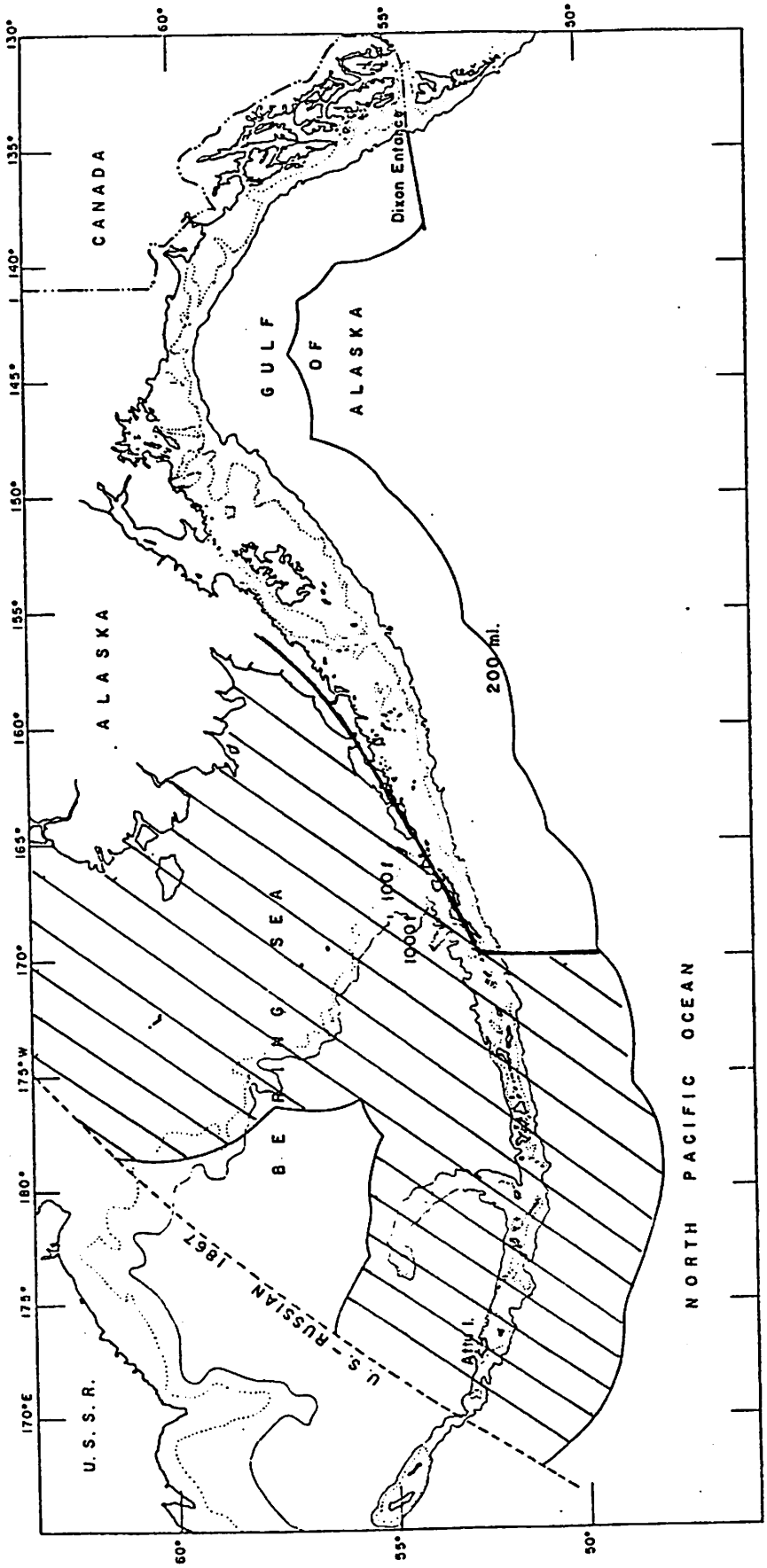


Figure 26.--Area (diagonal lines) over which this Fishery Management Plan applies.

ORIGINAL

3. Other Species -- species groups which currently are of slight economic value and not generally targeted upon. This category, however, contains species with economic potential or are important ecosystem components, but sufficient data is lacking to manage each seperately. Accordingly, a single TAC or OY applies to this category as a whole. Records of catch of this category as a whole must be maintained.

4. Non-specified Species -- species groups of no current nor forseeable econo,ic value and which are taken in the fisher only as an incidental by-catch to target fisheries. Virtually no data exists which would allow population assessments, but occasional records from U.S. observers aboard foreign and U.S. vessels show no noticeable decline in abundance. The TAC or OY for this category is the amount which is taken incidentally while fishing for target species, whether retained or discarded. No record of catch is necessary.
(NOTE: If observer or enforcement records show that any species in this category is being actively targeted upon or that the abundance of any species is being substantially reduced, that species will be transferred to another species category.

14.3. FISHING YEAR

The fishing year shall apply on a calender year basis (January 1 - December 31). Should this FMP be implemented at a date other than January 1, fish allocations will have to be prorated on a 12-month basis.

14.4. MANAGEMENT MEASURES--DOMESTIC FISHERY

14.4.1 Permit requirements

All U.S. vessels operating in that part of the Bering Sea/Aleutian groundfish fishery under this FMP must have on board a current permit issued by the Secretary of Commerce, or, if considered acceptable by the Secretary, a State of Alaska vessel license.

14.4.2. Prohibited species

In accordance with existing State and Federal statutes and subject to requirements in Section 13.0.

14.4.3. Fishing Area Restrictions

A. General

None

B. Trawl Fishery

1. Area A--"Bristol Bay Pot Sanctuary" (as described in Appendix III and Figure 27) -- domestic trawling will be permitted year-round on an experimental basis and be monitored closely by observers.

2. Area B--"Winter Halibut-savings Area" (as described in Appendix III and Figure 27):

(i) December 1 - May 31 -- domestic trawling will be permitted on an experimental basis and monitored closely by observers.

(ii) June 1 - November 30 -- no closures.

3. Other areas -- no closures.

Rationale -- To reduce high incidental catches and mortality of juvenile halibut which are known to occur in winter concentrations in the Bristol Bay Pot Sanctuary and the Winter Halibut-savings Area while allowing some expansion in primarily the traditional crab-bait trawl fishery and the development of a domestic groundfish fishery for human consumption.

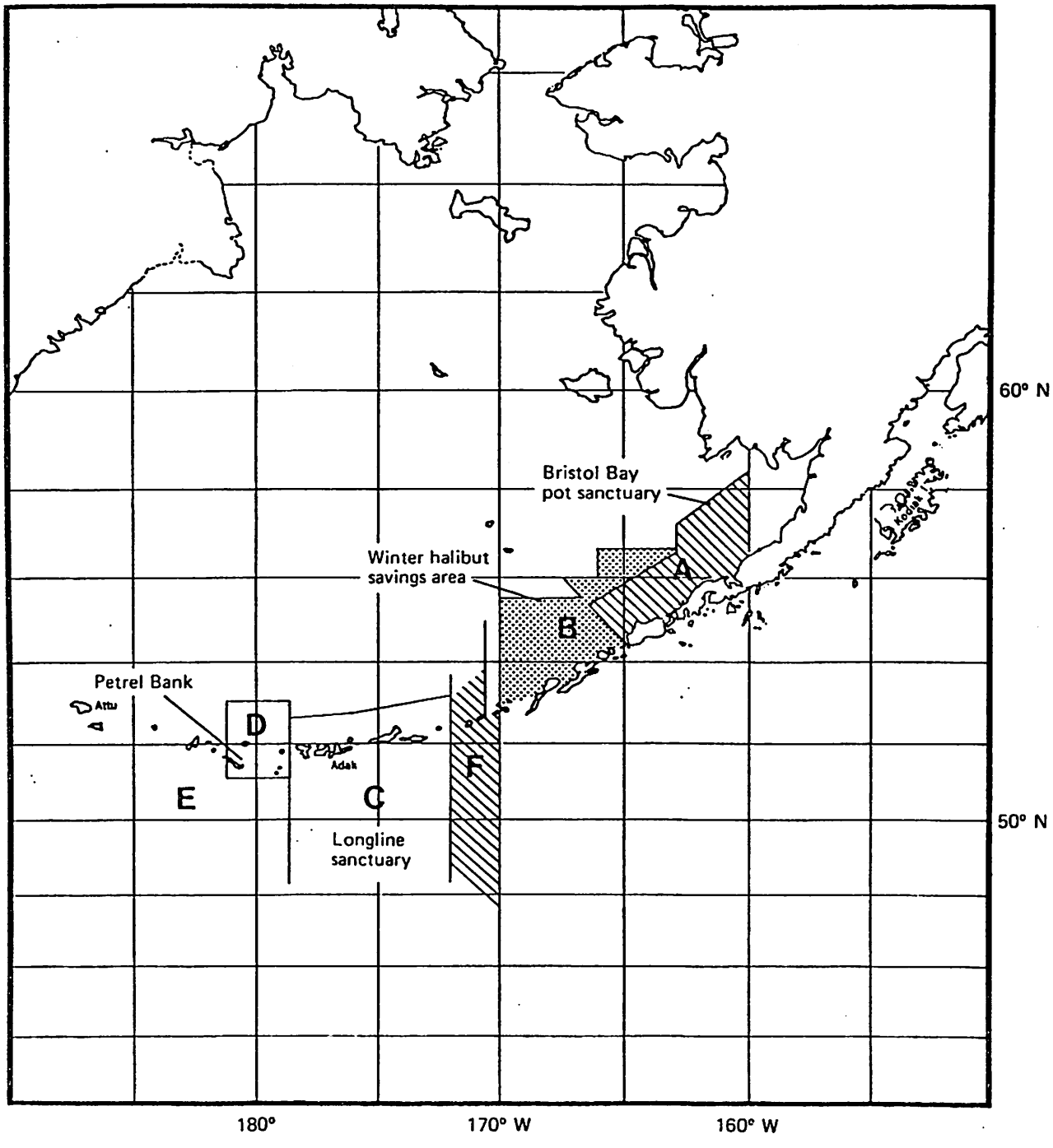


Figure 27. General location of areas described in management measures for the Bering Sea/Aleutians groundfish fisheries (see Appendix II for geographical coordinates).

C. Longline Fishery

1. Area B - Winter Halibut-savings Area (as described in Appendix III and Figure 27):

(i) December 1 - May 31 -- domestic longlining will be permitted landward of the 500 m isobath until the total U.S. longline catch (excluding halibut) from this area exceeds 2,000 mt.

(ii) June 1 - November 30 -- no closures.

2. Other areas -- no closures.

Rationale -- To reduce high incidental catch and mortality of juvenile halibut which are known to occur in winter concentrations in the Winter Halibut-savings Areas while allowing for some expansion in the domestic setline fishery for species other than halibut.

D. In-Season Adjustment of Time and Area

The Regional Director or his designee may issue field orders adjusting time and/or area closures for conservation reasons. The field orders may open or close fishing areas or parts thereof and fishing seasons based upon the following considerations:

1. The effect of overall fishing effort within a fishing area or part thereof;
2. Catch per unit of effort and rate of harvest;
3. Relative abundance of stocks within the area in comparison with pre-season expectations;
4. The proportion of prohibited species being caught;
5. General information on the condition of stocks within the area;
6. Information pertaining to the guideline harvest level for species within a fishing area or part thereof; or

7. Any other factors necessary for the conservation and management of the groundfish resource.

Rationale: The Council finds that the guideline harvest levels in this FMP, which are based upon projections of the status of stocks, economic and other conditions several months in advance of the actual conduct of the fishery may be found to be mis-specified in light of unpredicted and unanticipated adverse or favorable stock conditions which are revealed in-season. Under such circumstances, the Council further finds it appropriate for conservation purposes only, that the Regional Director of NMFS, Alaska Region, or his designee, in close coordination with the Commissioner of the Alaska Department of Fish and Game, take immediate action by issueing field orders adjusting the time and/or area restrictions; therefore this FMP provides that seasons and areas shall be subject to in-season adjustment by the Regional Director of NMFS.

It is expected that the actual opening and/or closing dates for the seasons prescribed in this plan will be adjusted by the Regional Director pursuant to the authority described in this section. Such action is not considered emergency action that would require admentment of the plan; adjusting the season opening and closing dates is meant to be an inherent part of the seasons themselves. For this reason, any adjustments made by the Regional Director or his designee will be effected by the issuance of a field order and announcement in the maner currently utilized by the State of Alaska.

14.4.4. Gear Restrictions

None

14.4.5. Statistical Reporting Requirements

A. Fishermen Reports

Fishery data compiled for the domestic groundfish fishery should be of the same general degree of precision as those required of foreign fishermen:

catch by species, by ½ degree latitude x 1 degree longitude areas, by gear type and vessel class, and by month;

effort (e.g. hours towed, number of hooks, number of pots, number of landings, number of trips) by gear type and vessel class, and by month.

In order to compile such data sets, the performance of individual vessels must be made available. To do so will probably require, in addition to fish sales tickets made out for each delivery, one or a combination of the following: logbooks, port sampling, and interviews with fishermen.

In addition to collecting this information from domestic vessels which land their catches at Alaskan ports, it must also be collected from those vessels which sell or use their catch for bait on the fishing grounds, from vessels which land their catches in other states, and from vessels which deliver their catches to foreign processing vessels.

Annual data compilations, in the above format, should be available to the Secretary by May 31 of the following year. In addition, preliminary catch data -- by species and by major statistical area (i.e., Areas I, II, III, IV) -- should be compiled by month and made available to the Secretary by the end of the following month.

Arrangements, including financing and schedule of implementation, for the collection, compilation, and summarization of these fishery data will be developed through consultations between officials of NMFS, State of Alaska, and other states in which landings of catch from this fishery are likely.

B. Processor reports

All processors of groundfish shall report information necessary for the periodic reassessment of DAP. The regulations implementing this plan specify the information to be reported and the time schedule for reporting.

C. Joint Venture reports

Persons delivering U.S. caught groundfish to foreign processing vessels shall report information required for periodic reassessment of that portion of the DAH to be delivered to foreign processors.
JVP. The JVP will be responsible for reporting the catch statistics required of domestic trawlers since the entire catch is delivered in cod ends to JVP. The regulations implementing this plan specify the information to be reported and the time schedule for reporting.

D. Non-processed Fish

Persons catching or delivering non-processed fish for use as bait

or for direct consumption shall report information necessary for periodic reassessment of DNP. The regulations implementing this plan specify the information to be reported and the time schedule for reporting.

14.4.6. Limited Entry

Implementation of a limited entry program will not be necessary for this fishery now. However, a limited entry program should be designed by the Council during the early stages of domestic fishery development so that it can be implemented well before the time that the fishery becomes fully or over-capitalized.

14.5. MANAGEMENT MEASURES--FOREIGN FISHERIES

14.5.1. Permit Requirements

All foreign vessels operating in this Management Unit must have on board a permit issued by the Secretary of Commerce. Required by FCMA.

14.5.2. Prohibited species

No retention of salmon, steelhead trout, halibut or Continental Shelf Fishery Resource to prevent covert targetting on species of special socioeconomic importance to U.S. fishermen. The catch of prohibited species is also subject to requirements of Section 13.0.

14.5.3. Fishing Area Restrictions

A. General

(i) No harvesting year-round within 12 miles of the baseline used to measure the territorial sea, except in the western Aleutian Islands as described in Appendix III. To prevent conflicts with U.S. fixed gear and small inshore fishery vessels and to prevent catch of localized inshore species important to U.S. commercial and subsistence fishermen. If joint venture operations are permitted,

foreign ships receiving fish from American fishermen may operate to within three miles of the baseline used to measure the territorial sea. However, when operating within that area between 3 and 12 miles of the baseline used to measure the territorial sea, such foreign processors may not receive fish from foreign vessels.

(ii) This management unit (or individual sub-area where specific quotas apply) will be closed to all fishermen of a nation for the remainder of the calendar year when that nation's allocation of any species or species group is exceeded, except that such closures will affect longline fishing only if the national allocation of any of the following species is exceeded: sablefish; Pacific cod; Greenland turbot; and Pacific halibut.

Purpose -- to discourage foreign fleets from covertly targetting on depleted species/stocks and to prevent damaging by-catches after the allowed catch has been taken; this provision places the burden of responsibility on the foreign fleets to avoid taking such species/stocks and to develop fishing gear and fishing practices which will minimize or eliminate their incidental capture.

B. Trawl Fishery

(i) Area A -- No trawling year-round in the Bristol Bay Pot Sanctuary (as described in Appendix III and Figure 27).

Rationale--to prevent conflicts between foreign mobile gear and concentrations of U.S. crab pots; to prevent incidental catch of juvenile halibut which are known to concentrate in this area.

(ii) Area B -- No trawling from December 1 to May 31 in the Winter Halibut-savings Areas (as described in Appendix II and Figure 27).

Rationale--to protect winter concentrations of juvenile halibut, to protect spawning concentrations of pollock and flounders.

(iii) Area C -- No trawling year-round in the Longline Sanctuary Area (as described in Appendix III and Figure 27).

Rationale -- To provide a sanctuary for foreign and domestic longline fishing in recognition of the situation in which highly developed trawl fisheries in both the Bering Sea/Aleutian area and the Gulf of Alaska have tended to preempt grounds from the traditional longline fishing method.

(Prior to 1977, no Danish seiners, side trawlers, or pair trawlers operated in this area, and less than one percent of the foreign stern trawl effort occurred in this area. Because of the displacement of the Japanese land-based dragnet fleet from the Soviet 200-mile zone that fleet has, since 1977, increased its utilization of the trawl grounds surrounding the Aleutian archipelago. As a result, during the first 7 months of 1978, of the total foreign stern trawl effort in the Bering Sea/Aleutian region, about three percent (3%) occurred in this longline sanctuary area.)

(iv) Area D --No trawling January 1 - June 30 in the area known as Petrel Bank (as described in Appendix III and Figure 27. Trawling is permitted seaward of three nautical miles from July 1 - December 31.

Rationale -- to avoid gear conflicts during the conduct of the domestic king crab fishery and to avoid the incidental catch of king crab by trawling. Data available from the fishery in the Petrel Bank area indicates a substantial incidental trawl catch of red, blue and golden king crab. The crab savings effected by the trawl closure is a direct benefit to the domestic fleet in terms of potential catch and of long-range benefit in terms of conservation of crabs not subject to the rigors of a trawl effort during the softshell or moulting period.

(v) Area E --No trawling January 1 - April 30 in Area E (as described in Appendix III and Figure 27) EXCEPT trawling is permitted seaward of three nautical miles from May 1 - December 31.

Rationale -- To avoid gear conflicts during the conduct of the domestic king crab fishery and the development of the domestic bottomfish effort and to avoid the adverse effects of the incidental catch of king crabs by trawl.

(vi) Area F -- Trawling permitted up to three nautical miles in Area F (as described in Appendix III and Figure 27).

C. Longline Fishery

(1) Area B -- Winter Halibut Savings Area (as described in Appendix III and Figure 27)

(i) December 1 - May 31 -- no longlining landward of the 500 m isobath.

(ii) June 1 - November 30 -- no closures

Rationale -- To prevent high incidental catch and mortality of juvenile halibut which are known to occur in winter concentrations in the area.

(2) Other areas -- no closures.

(3) Throughout the area west of 172-00'W, longlining is permitted seaward of three nautical miles.

(4) Area F -- Longlining permitted up to three nautical miles in Area F (as described in Annex III and Figure 27).

D. In-Season Adjustment of Time and Area

The Regional Director or his designee may issue filed orders adjusting time and/or area closures for conservation reasons as noted in Section 14.4.3.1

The Regional Director or his designee may also issue field orders adjusting time and/or area restrictions on foreign vessels to solve serious gear conflict problems with domestic fixed gear fishing operations. The field orders may open or close fishing areas or parts thereof in such gear conflict situations. The criteria for determining the seriousness of the situations as basis for implementing special in-season time-area closures are:

1. More than two gear loss reports have been submitted in person or by radio to NMFS or Coast Guard detailing: (a) amount of gear lost, (b) date set and date gear was found missi (c) observations of foreign vessels operating in area, identified, if possible by call letters, and (d) other pertinent information of gear conflict situation. Reports of gear loss must be confirmed by affidavit at the earliest opportunity.
2. Foreign vessels are verified by NMFS or Coast Guard to have been operating in the area of conflict.
3. Coast Guard or NMFS patrol unit has visited area and confirmed the general gear conflict situation as indicated by reports.
4. Foreign vessels in area have been contacted by patrol unit or by radio message advising of the gear conflict, defining the problem area and requesting that the foreign vessels depart the area voluntarily.
5. Foreign vessels decline to depart area and domestic fixed gear fishing is continuing and need for specific closure is clear.

14.6. Operational Needs and Costs (1000's dollars)

150 observer-months of foreign fishery observer coverage	450	1/
12 observer-months of domestic fishery observer coverage	35	
NWAFC allocation compliance analyses	10	
NMFS computerized foreign fishery information system	36	
NMFS Alaska Regional Office Management Division	435	
NOAA/Justice administration of penalties	12	
800 Coast Guard ship patrol days	2800	
2500 Coast Guard aerial patrol hours	1900	
State of Alaska fishery data collection	20	
Total	5698	

Costs of federal, State, and IPHC biological research are not included inasmuch as they would be financed in the absence of this Fishery Management Plan.

1/ Reimbursed by foreign governments to the U.S. Treasury. Same degree of observer coverage as in 1979. The optimal coverage representing about 20% coverage is 270 observer-months costing $810,000.

14.7. Effects of the Management Regime on Availability, Cost, and Quality of Fishery Products

Except where necessary to restore depleted stocks (Pacific ocean perch, Pacific halibut, and sablefish), optimum yields have been set equal to maximum biological production. The total OY for the Bering Sea/Aleutian groundfish fishery druing 1979 is 1,409,400 mt, some 34,000 mt greater than that allowed by the Preliminary Management Plan for 1978 -- hence, availability of fishery products will not be reduced.

Although any mangement measure is likely to add expense to a fishery, the fishery restrictions proposed by the FMP are the minimum necessary to assure healthy stocks of all species, and most are carry-overs from the past several years -- therefore, costs of fishery products should neither be unreasonably inflated nor significantly increased as a result of implementation of this FMP.

The management regime of this FMP is not expected to have any effect on the quality of commodities produced from Bering Sea/Aleutian groundfishes.

As has been discussed earlier in Section 8.1.3, it seems highly unlikely that management actions taken in the Bering Sea will have any significant effect on the availability, cost, or quality of groundfish products to U.S. consumers. Therefore, specific management actions including the determination of optimum yield, have not been taken for the express purpose of addressing consumer interests. However, in future years this situation may change. At that time it will be necessary to more explicitly take into account consumer interests. Several studies are currently under way to provide the information upon which such decisions can be based. The largest of these is a contract let by the U.S. Department of Commerce to examine both international and national opportunities for the development of underutilized species in the U.S. fisheries conservation zone. Although primarily focused on opportunities for domestic industry development, this study should provide a good deal of useful information on patterns of groundfish consumption and prices. Particularly, it will fill important gaps in our understanding of foreign groundfish markets.

Other studies funded by the National Marine Fisheries Service, Northwest and Alaska Fisheries Center, and the Pacific and North Pacific Councils will provide further useful information. The proper orientation of near term research efforts to reflect consumer interests is probably the most important thing that can be done at this stage. If accomplished, it will insure that the information is available upon which decisions representative of consumer interests can be made when they are required in future Bering Sea and Aleutian groundfish management plans.

19.0. REFERENCES

(Add the following new references)

Granfeldt, E. 1979. Marine ecosystem simulation for fisheries management. U.S. Dept. Commerce, NOAA, NMFS, NWAFC processed Report 79-10, Seattle, Wa. unpubl. manuscr.

Laevastu, T. and F. Favorite. 1979. Ecosystem dynamics in the eastern Bering Sea. U.S. Dept. Commerce, NOAA, NMFS, NWAFC, Seattle, Wa. unpubl. manuscr.

Otto, R.S., T.M. Armetta, R.A. MacIntosh, and J. McBride. 1979. King and Tanner crab research in the eastern Bering Sea, 1979. U.S. Dept., NOAA, NMFS, NWAFC, Seattle, Wa. Unpubl. manuscr. (Submitted to INPFC)

Appendix III. Specific areas closed to fishing during certain times of the year for some fishing vessels are shown in Figure 27 and defined as follows:

Area A -- Bristol Bay Pot Sanctuary

The portion of the Fishery Conservation Zone encompassed by straight lines connecting the following points, in the order listed:

Cape Sarichef Light (54°36'N - 164°55'42"W)

55°16'N - 166°10'W

56°20'N - 163°00'W

57°10'N - 163°00'W

58°10'N - 160°00'W

Intersection of 160°00'W with the Alaska Peninsula

Area B -- Winter Halibut-savings Area

That portion of the Fishery Conservation Zone encompassed by straight lines connecting the following points, in the order listed:

Cape Sarichef Light (54°36'N - 164°55'42"W)

52°40'N - 170°00'W

55°30'N - 170°00'W

55°30'N - 166°47'W

56°00'N - 167°45'W

56°00'N - 166°00'W

56°30'N - 166°00'W

56°30'N - 163°00'W

56°20'N - 163° 00'W

55°16'N - 166°10'W

55°16'N - 166°10'W

Cape Sarichef Light (54°36'N - 164°55'42"W)

Area C -- The area between 172-00'W and 178-30'W within the FCZ south of a line drawn to connect the following coordinates:

53°14'N - 172°00'W

52°13'N - 176°00'W

52°00'N - 178°30'W

Area D -- The area known as Petrel Bank on the north side of the Aleutian Islands between the following coordinates:

52°51'N - 178°30'W

51°15'N - 178°30'W

51°15'N - 179°00'E

52°51'N - 179°00'E

52°51'N - 178°30'W

Area E -- The area west of 178°30'W but excluding Area D known as Petrel Bank that is defined above.

Area F -- The area bounded by 170°W and 172°W on the south side of the Aleutian Islands and that bounded by 170°30'W and 172°W on the north side of the Aleutians.

DRAFT:/PTRAVERS:/ljg:/08/16/80

AGENDA G-2(e)
JULY, 1980

TO: GC - Eldon V. C. Greenberg
GCF - Jay S. Johnson
NPFMC - Jim H. Branson

FM: GCAK - Patrick J. Travers

SUBJ: Legal Analysis of Proposed Amendments to the Bering Sea/Aleutian Islands Groundfish FMP - DRAFT

INTRODUCTION

At the March 1980 meeting of the North Pacific Fishery Management Council (Council), a number of proposed amendments to the Fishery Management Plan for Groundfish in the Bering Sea/Aleutian Islands Area (FMP) were presented to the Council for consideration. These amendments had been developed by the Bering Sea/Aleutians Plan Development Team (PDT). The Council authorized the holding of public hearings on these proposed amendments, which would go into effect in 1981. At its April 1980 meeting, the Council adopted an amendment to the FMP raising the OY for Pacific cod. This amendment is intended to take effect, if possible, during 1980. At an earlier meeting in January 1980, the Council had amended the FMP to authorize the Regional Director to issue field orders adjusting time/gear restrictions for conservation reasons.

There is now a total of ten proposed amendments to the FMP. The Council intends to take final action on the eight proposed amendments that it still has under consideration at its July 1980 meeting in Anchorage. Following adoption by the Council, proposed amendments will be forwarded to NMFS for review and approval by the Assistant Administrator pursuant to FCMA section 304(a)-(b). FCMA section 304(b) provides, in part:

> "The Secretary shall review any fishery management plan, and any amendment to any such plan, prepared by the Council and submitted to him to determine whether it is consistent with the National Standards, the other provisions of this Act, and any other applicable law."

The following discussion will first describe the ten proposed amendments and summarize the rationale for each. The compliance of the proposed amendments with the National Standards, with other provisions of the FCMA, and with other applicable law will then be discussed in turn. Finally, the enforceability of the proposed amendments, should they be approved and implemented, will be discussed.

DESCRIPTION OF AND RATIONALE FOR THE PROPOSED AMENDMENTS

The proposed amendments to the FMP that are under consideration, and the reasons put forward in support of their adoption, are as follows (materials prepared by the PDT describing the eight amendments still under Council consideration appear as Attachment A):

(1) Establish a new multispecies, multiyear OY concept accompanied by a new system of reserves and schedule of reserve releases. The PDT proposed two options for the introduction of the single multiyear OY for the entire Bering Sea/Aleutians groundfish complex, with total allowable catches (TAC) assigned to individual groundfish species groups and a large reserve being established within OY to ensure flexible response to short-term fluctuations in the fishery. (A third option was to retain the current species-by-species OY concept.)

(a) The first option would provide for an OY range of 1,300,000-2,000,000 metric tons for the entire Bering Sea/Aleutian groundfish complex. Within the range, the Council would annually specify a final OY for the next fishing year. Within this OY, TAC's for the individual species groups would be established, each TAC being apportioned among DAH, TALFF, and reserve in

the same manner that species group OY's currently are. The option would specify a series of initial TAC's, derived from the 1,300,000 metric ton lower end of the OY range. From this would be subtracted an initial reserve of 25 percent or 325,000 metric tons. The remaining 975,000 metric tons would then be multiplied by a figure representing the total potential yield of each species group relative to the entire groundfish complex; and the product would be modified to account for the current status of the species group in question, yielding an initial TAC for each species group. Each initial TAC would be divided into TALFF and DAH. The initial reserve would be divided into a 16,250 metric ton "special reserve," which would remain available throughout the year for allocations by the NMFS Alaska Regional Director among all elements of the fishery, both foreign and domestic, to rectify unforeseen incidental catch problems having insignificant biological effects on the resource; and a 308,750 metric ton normal reserve. When the final OY for a coming fishery year had been determined, the amount being added to the initial OY would be added to the initial normal reserve to constitute the final normal reserve. This would then be allocated to each of the species group TAC's. Once allocated to TAC, reserves would be released to DAH whenever the Regional Director found this to be necessary for continuation of the domestic fishery. After consultation with the Council, the Regional Director would apportion to TALFF up to 40 percent of normal

reserve at the beginning of April; up to 40 percent at the beginning of June; and up to 20 percent at the beginning of August. Any part of the reserve not apportioned to TALFF as scheduled could be so apportioned on a subsequent scheduled date. As soon as possible after August 1, and in consultation with the Council, the Regional Director would apportion to TALFF any part of the DAH that he determined would not be harvested by United States fishermen during the remainder of the fishing year.

(b) The second option would establish a multiyear OY for the entire Bering Sea/Aleutians groundfish complex of 1,600,000 metric tons per year. Of this amount, 1,200,000 metric tons or 75 percent would be allocated permanently among the individual species groups based upon a "best blend" yield estimate for each species group relative to the total groundfish complex as adjusted to reflect the current biological status of that species group, resulting in an initial TAC for each species group. Each initial TAC would be allocated each year between DAH and TALFF. The remaining 25 percent or 400,000 metric tons of the OY would constitute a reserve. Of this, 20,000 metric tons would go into a "special reserve" that would be available throughout the year for release by the Regional Director to rectify incidental catch problems of the foreign and domestic fisheries having insignificant biological consequences for the resource.

The remaining 380,000 metric tons would be allocated at the beginning of each fishing year among the various TAC's, depending on the biological and socioeconomic factors relevant to each species group for that year. Once allocated to TAC, this "normal" reserve would be released to DAH and TALFF according to the same schedule that was discussed above in connection with the first option. Excess DAH would similarly be released to TALFF at the beginning of August.

Rationale: The PDT believes that there is sufficient evidence that the Bering Sea/Aleutians groundfish complex constitutes a discrete unit of the ecosystem with mutually related elements that it should be treated as a single management unit. It suggests that the current practice of treating each species group as a management unit in relative isolation from other species groups ignores demonstrated interrelationships among the various groups, unjustifiably inflates the total MSY and ABC figures for the complex, and limits the managing agencies' ability to respond in a timely way to fluctuations within the groundfish complex. The release of 40 percent of the reserve in April, 40 percent in June, and 20 percent in August improve upon the current reserve release schedule by postponing releases until the progress of the United States fishery is known, but making them large enough to facilitate advance planning by foreign operators. A similar change in the release schedule has been proposed for the Gulf of Alaska groundfish FMP.

(2) Modify the restrictions on domestic trawling in the Bristol Bay Pot Sanctuary and Winter Halibut Savings Area (deleting the Misty Moon grounds from the latter); and specify a new area between 170°W and 172°W on the south side of the Aleutians and between 170°30'W and 172°W on the north side of the Aleutians where foreign trawling and longlining may take place seaward of three miles. The changes in the Bristol Bay Pot Sanctuary and Halibut Savings Area were actually first proposed by the Council at its January 1980 meeting. The FMP currently states that domestic trawling in the Pot Sanctuary is permitted only during open seasons of the Bering Sea crab fisheries; while trawling in the Savings Area between December 1 and May 31 was allowed only until the total domestic trawl catch from the area reached 2,000 metric tons, and long-lining in the same area landward of the 500 meter isobath was allowed only until the domestic longline catch including halibut reached 2,000 metric tons. The reason for these restrictions was a desire to reduce mortality of juvenile halibut while allowing some fishing for crab bait and some development of a domestic food fishery. The proposed amendment would delete the "Misty Moon" grounds south of the Pribilofs from the Savings Area and retain the domestic longline restriction. It would allow domestic trawling in the Pot Sanctuary year around on an experimental basis, to be monitored closely by observers. Between December 1 and May 31, domestic trawling would be allowed in the Savings Area on the same

of these species that they kill incidental to their Bering/Aleutians groundfish operations. These species would still have to be returned to the sea and could not be retained. The TAC's, based to varying extents upon estimates of the actual incidental catch in the Bering Sea and Aleutians in recent years, would be 1,500 metric tons of Pacific halibut; .0010 percent of the estimated red king crab population; .0018 percent of the estimated blue king crab population; 600 metric tons of golden king crab (or 920,000 crabs); .0040 percent of the estimated C. opilio population; .0106 percent of the estimated C. bairdi population; and 41,400 salmonid fish. Each TAC would be allocated between the domestic and foreign fisheries. Initially, the domestic percentage of each TAC would be twice the percentage that the total Bering/Aleutians groundfish DAH is of the total Bering/Aleutians groundfish OY, in order to compensate for the fact that foreign fisheries were not subject to a similar restriction at their developmental stages. When total Bering/Aleutians groundfish DAH exceeds 20 percent of the total Bering/Aleutians groundfish OY, the domestic percentage of each TAC will equal the percentage that DAH is of OY. The foreign share of each TAC would be allocated among the various foreign fishing nations. Upon attainment of the domestic or foreign share of any TAC, the entire domestic or foreign groundfishery in the Bering Sea and Aleutians would be closed for

terms: from June 1 to November 30, there would be no restrictions at all. The amendment would not change the restrictions currently provided by the FMP on foreign trawling in these areas.

The materials in Attachment A describe an area in the central Aleutians, described above, and designated as "Area F," in which trawling and longlining by foreign vessels is allowed seaward of three miles. I am not sure about the origin of Area F, but it does not appear in past versions of the FMP, and should therefore be treated as part of the amendment.

Rationale: The changes in restrictions on domestic trawling in the Pot Sanctuary and Savings Area were adopted in the wake of protests by domestic fishermen that the former provisions were unreasonable and would hinder development of the United States groundfishery. I am not aware of the justification for the addition of Area F.

(3) Establish total allowable catch (TAC) amounts for the prohibited species Pacific halibut, red king crab, blue king crab, golden king crab, Tanner crab (C. bairdi), Tanner crab (C. opilio), and salmonids; and impose a "mitigation fee" upon foreign vessels for the amounts of certain

the rest of the year. Upon attainment by any individual foreign nation of its allocation of any TAC, all groundfishing by that nation in the Bering Sea and Aleutians would cease for the rest of the year.

The "mitigation fee" to be paid by foreign vessels for the amounts of Pacific halibut, salmonids, king crab, and Tanner crab (C. bairdi) killed by those vessels would equal the average ex-vessel price paid to United States fishermen during the current year for the same amounts of those species. Mortality would be assumed to be 50 percent for longline-caught Pacific halibut and 100 percent for trawl-caught halibut and the other species. As a result, only half of the Pacific halibut taken incidentally to the Bering/Aleutian longline groundfisheries would be counted toward attainment of the TAC or for mitigation fee purposes.

Rationale: The PDT suggests that this proposed amendment would increase the incentive for participants, particularly foreign participants, in the Bering/Aleutians groundfisheries to minimize their incidental catch of prohibited species. It is also argued that the mitigation fee will compensate the United States for the loss to its fishermen of the opportunity to take these species.

(4) Provide for the incidental catch by foreign fishermen of Pacific Ocean perch, which is now fully utilized by United States fishermen. Largely because of the depleted state of the stocks, and their consequent low ABC's, Pacific Ocean perch in the Bering Sea and Aleutians is expected to be fully utilized by United States fishermen, with nothing available to apportion to TALFF. The PDT proposes that the foreigners be allowed an incidental catch of this species that would equal 10 percent of equilibrium yield and 50 percent of ABC. This would amount to 500 metric tons in the Bering Sea, and 1,300 metric tons in the Aleutians. It is not stated from what other part of the Bering/Aleutian groundfish OY this would come, though the "special reserve" would be a likely source. If it were, this amendment would seem to contradict the vesting of authority over the special reserve in the Regional Director that is a feature of proposed amendment (1).

Rationale: It is suggested that these incidental catch limits will prevent disruption of foreign groundfisheries while allowing Pacific Ocean perch stocks to rebuild.

(5) Substitute a new Appendix I summarizing the latest information on the condition of the various species groups, including MSY, EY, and ABC.

Rationale: This is the information upon which implementation of either the old or the new OY concept will be based. Its inclusion in the FMP is necessary to assure that conservation and management is based upon the best available scientific information.

(6) Substitute new annexes and text concerning domestic and foreign catch and capacity. (New figures on domestic catch and capacity have not yet been developed.)

Rationale: Inclusion of this information is necessary to assure that DAH, DAP, JVP, and TALFF are based upon the best available data.

(7) Prescribe authority under which the Regional Director could issue field orders imposing time/area restrictions upon foreign trawlers to prevent fishing grounds preemption or gear conflicts with domestic fixed gear users. The Regional Director could issue a field order closing an area to foreign trawling following confirmation of the existence of a gear conflict situation and refusal of the foreign vessels involved to depart voluntarily upon request. As in the case of the analogous proposed amendment to the Gulf FMP, it is unclear to what extent this authority could be used to address grounds preemption, as opposed to gear conflicts.

Rationale: It has been alleged that the 1979 confrontation near Kodiak between domestic crab fishermen and Polish trawlers demonstrated the need for authority like this in order that such disputes might be resolved more quickly and unilaterally.

(8) Add to the FMP the following statement concerning joint venture processing:

> "The Council finds that one method of implementing provisions of the Processor Preference Amendment (Pub. L. 95-354) requires that ocean areas in the vicinity of U.S. processing facilities be designated as closed areas to foreign processing operations in support of joint ventures.
>
> "The Fishery Management Plan therefore provides that the Regional Director, NMFS, Alaska Region, may, upon the recommendation of the Council, designate such areas within which foreign fishing vessels may not process U.S. harvested fish."

Rationale: This proposed amendment would facilitate the establishment of areas of the FCZ near shore-based domestic processors within which foreign processing vessels could not operate. This would make it more difficult for American fishermen fishing in those areas to participate in joint ventures, and thus tend to force them to sell to the protected domestic processors. It is argued that imposition of such direct limits

on the markets available to United States fishermen is within the scope of Public Law 95-354. The argument appears to be that Public Law 95-354 does not merely require NMFS to determine passively what portion of the DAH will be utilized by shore-based domestic processors, but also authorizes NMFS to act affirmatively to pressure United States fishermen to sell to such processors, thereby ultimately lowering the JVP.

(9) Provide the Regional Director the same authority that he has under the Gulf of Alaska FMP to issue field orders adjusting time/area restrictions for conservation reasons.

Rationale: This was omitted from the original version of the FMP through oversight. The Council had assumed that this authority had been granted, and it wasn't until the Secretarial review stage that it became apparent that a specific provision to this effect must be added to the FMP. The Council adopted this amendment at its January 1980 meeting.

(10) Raise the 1980 OY of Pacific cod from 58,700 metric tons to 88,000 metric tons.

Rationale: The original FMP listed the MSY, ABC, and OY of Pacific cod as 58,700 metric tons. New data indicates that the current ABC is 111,000 metric tons. although the MSY is probably still close to 58,700 metric tons. The Council, in light of this information, raised the OY to 88,000 metric tons. It declined to set OY equal to ABC in this case for two main reasons: (a) the total harvest of Pacific cod had never come anywhere near 111,000 metric tons in the past, and caution seemed appropriate until the new ABC estimate is verified by further study, to prevent any possibility of harm to the resource; (b) increasing the OY to 111,000 metric tons would greatly increase the TALFF, and it was feared that this and accompanying price decreases would undercut potential markets for this species, which is increasingly attractive to United States fishermen.

COMPLIANCE OF THE PROPOSED AMENDMENTS WITH THE NATIONAL STANDARDS

Before approving the proposed amendments pursuant to FCMA section 304(a)-(b), the Assistant Administrator would have to find that they are consistent with the seven "National Standards for Fishery Conservation and Management" set forth in FCMA section 301(a) ("National Standards"). This discussion will assess the extent to which the proposed amendments just described would comply with the National Standards.

National Standard 1: Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery.

Proposed amendment (1) would enhance the compliance of the FMP with this National Standard in two ways. First, it would introduce into the determination of allowable catch a consideration of the interrelationships among the various groundfish species, the absence of which may in the past have slightly inflated MSY, ABC, and OY figures. Second, the new reserve release schedule should help assure that OY is achieved by allowing domestic and foreign fishermen to finalize their fishing plans for the rest of the year at an earlier date.

Proposed amendment (2) should also have a positive effect on the FMP's compliance with this National Standard. There is evidence that the restrictions that formerly applied in the Pot Sanctuary and Savings Area would have significantly hindered the development of United States groundfisheries. The new measures thus help assure that OY will be achieved.

By allowing greater flexibility of response to unexpected resource conservation problems, proposed amendment (9) should help prevent overfishing.

Proposed amendment (3) raises serious questions under this National Standard. The TAC figures for the various prohibited species were based on estimates of recent actual catches of those species incidental to Bering/Aleutians groundfisheries. At the time this information was collected, the Bering/Aleutians groundfishery, particularly the trawl fishery which causes by far the greater portion of prohibited species mortality, was overwhelmingly foreign. It is proposed, however, that as United States fishermen take a greater and greater share of Bering/Aleutians groundfish resources, their share of the TAC will grow at double the rate of their harvest of groundfish, until the domestic share of the total fishery is 20 percent. The foreign share of the TAC would, correspondingly, decrease at double the rate that the foreign share of the total groundfishery was decreasing. Because the foreign groundfishery would, under the proposed amendment, have to be shut down completely when the foreign share of the TAC is reached, this depression of the permissible rate of incidental harvest of prohibited species below what are admitted to be historic levels raises the specter of the optimum yield for Bering/Aleutians groundfish not being attained due to premature closure of the foreign fishery. It should also be noted that, because of lack of information about the ability of United States fishermen to avoid the prohibited species for which TAC's would be set in the course

of groundfishery operations, there may also be a danger of premature closure of the domestic Bering/Aleutians groundfishery at the specified TAC levels even with the extra share of each TAC that would be allocated to United States fishermen. This simply compounds the likelihood of a failure to achieve OY if this measure is adopted. Thus, proposed amendment (3) in its current form runs a high risk of violating National Standard 1.

Special care should be taken in consideration of proposed amendment (4) to assure that the authorized foreign incidental catch of Pacific Ocean perch does not jeopardize rebuilding of the Pacific Ocean perch stocks. The allowable foreign catch under the proposed amendment would be 50 percent of ABC. If United States fishermen take more than 50 per cent of the ABC, this level of incidental catch could hinder the rehabilitation of this species. Under these circumstances, it may be that treatment of Pacific Ocean perch as a species prohibited to foreigners would be more appropriate.

Time/area closures imposed under proposed amendment (7) could reduce the ability of foreign fishermen to achieve TALFF and, if there were no countervailing increase in the United States harvest, OY might not be achieved.

National Standard 2: Conservation and management measures shall be based upon the best scientific information available.

Proposed amendments (1) and (5) would appear to enhance the compliance of the FMP with this National Standard by incorporating and basing management measures upon the latest reliable information about the Bering/Aleutians groundfishery. Some explanation of the adjustments made under proposed amendment (1) to "initial guideline TAC" in order to derive "initial TAC" would be helpful. The current incomplete state of proposed amendment (6) may jeopardize compliance with National Standard 2, although the necessary information on domestic catch and capacity appears not yet to be "available."

The probability and potential extent of time/area closures under proposed amendment (7) should be assessed to determine whether adjustments in OY, species group TAC's, or DAH and TALFF will be necessary to account for the reduced ability of the foreign fisheries to harvest to their capacity.

The MSY, EY, and ABC figures for Pacific cod provided for in proposed amendment (10) appear to conform to this National Standard. A question can be raised concerning the level of economic documentation

that is required to support the downward adjustment of ABC to derive OY, which is justified partially on economic grounds. The significance of this question may be mitigated by the fact that the reduction is also based partially on biological concerns.

National Standard 3: To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

The compliance of the FMP with this National Standard would be enhanced by approval and implementation of proposed amendment (1).

National Standard 4: Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

None of the proposed amendments seems to raise an issue under this National Standard directly. Any field order that might be issued under

proposed amendment (8) would, however, be subject to it. Because such field orders establishing areas closed to joint venture processing would almost inevitably deprive certain United States fishermen of a preferred market, thereby lessening their competitive advantage relative to other United States fishermen who did not have access to that market, difficult questions would undoubtedly be raised under this National Standard whenever a field order authorized by proposed amendment (8) came under consideration by the Council and the Regional Director.

National Standard 5: Conservation and management measures shall, where practicable, promote efficiency in the utilization of fishery resources, except that no such measure shall have economic allocation as its sole purpose.

Proposed amendment (3) would raise problems under this National Standard for the same reason that it would risk noncompliance with National Standard 1: the failure to achieve OY that it might cause would also be an inefficient utilization of the Bering/Aleutians groundfish resource. On the same basis, caution would have to be exercised in the issuance of field orders under proposed amendment (7).

Proposed amendments (1), (2), and (9) would probably promote the efficiency of utilization of Bering/Aleutians groundfish resources.

Any field order closing an area to joint venture processing that might be issued under proposed amendment (8) would have to comply with this National Standard. As illustrated by the controversy over the recently proposed Akutan/Akun closure, this could place a heavy burden upon proponents of such a field order, because this National Standard has been interpreted by NMFS to require that such a measure have a conservation purpose in addition to its more obvious purpose of allocating fishing opportunities from United States fishermen delivering to foreign processing vessels to United States fishermen delivering to domestic shore-based processors.

National Standard 6: Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

Proposed amendments (1), (7), and (9) would enhance the compliance of the FMP with this National Standard, while the other proposed amendments probably would not raise significant issues under it.

National Standard 7: Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

Proposed amendment (3) in its current form would probably violate this National Standard. The Foreign Fishing Regulations currently contain an absolute, unqualified requirement that foreign fishing vessels minimize their incidental catch of prohibited species. The apparent purpose of the proposed amendment would be to assist in the enforcement of this additional requirement by imposing specific sanctions upon the incidental harvest of prohibited species by foreign vessels. Unfortunately, the implementation of the proposed amendment would probably make enforcement of the existing requirement more difficult. Because of the current lack of enforcement and observer coverage of the foreign fisheries off Alaska, NMFS depends heavily upon voluntary reporting by foreign operators of their incidental harvest of prohibited species. It is well known that much of this reporting is untrue, and that foreign nations consistently underreport the actual levels of their incidental catches of prohibited species. By implementing the proposed amendment, which would shut down foreign fisheries completely when certain levels of incidental catch were reached, and impose financial charges for all prohibited species catches

that were reported or detected, NMFS would, however, simply be increasing the incentive of foreign operators to conceal such catches. In the absence of additional enforcement resources and observer coverage, therefore, the proposed amendment would not merely duplicate the current requirement that catches of prohibited species be minimized, but would actually frustrate implementation of that requirement. The imposition of additional costs provided for in the amendment upon foreign operators (among whom the ones submitting honest reports would bear the brunt) would not be justified, and the United States itself would probably incur additional costs in administering the new sanctions in the face of concerted non-compliance on the part of the foreigners. It should be noted that the proposed amendment assumes a high level of control by foreign fishermen over their catches of prohibited species, something about which there appears to be a great deal of controversy. Also worthy of mention is the fact that any "mitigation fees" received from foreigners for their incidental catches would, if the Office of Management and Budget follows its usual practice, end up in the General Fund of the United States Treasury, from which it would be subject to appropriation for any number of purposes other than fishery management. It would thus compensate the United States for the loss of the incidental species only in the most abstract sense.

United States fishermen would also be subject to the TAC limitations of proposed amendment (3), and the proposed amendment would suffer the same infirmities under this National Standard with respect to them.

Proposed amendment (1) would minimize the costs of regulation by scheduling reserve releases in a way that would increase the ability of fishermen to plan their efforts for the later part of the year.

Proposed amendment (2) would also enhance the compliance of the FMP with this National Standard. A more detailed justification should be formulated, however, for not extending these relaxations of trawl restrictions to foreign trawlers.

COMPLIANCE OF THE PROPOSED AMENDMENTS WITH OTHER PROVISIONS OF THE FCMA

Section 303(a)(3) of the FCMA requires the FMP to

> "Assess and specify . . . the maximum sustainable yield and optimum yield from the fishery."

The first option of proposed amendment (1) would, in my view, violate this requirement. It would give wide discretion for the establishment

of the annual final optimum yield anywhere within the range of 1,300,000-2,000,000 metric tons. This 700,000 metric ton range simply seems too large, in the absence of a formula, set of detailed criteria, or other device that would limit the decisionmaker's discretion in setting the final OY, to be considered to "specify" OY within the meaning of FCMA section 303(a)(3). Thus, of the two options presented for proposed amendment (1), only the second option, which would establish an OY for the groundfish complex of 1,600,000 metric tons, appears to be legally viable.

Proposed amendment (7), with its primary purpose of preventing gear conflicts and grounds preemption, raises the issue of the extent to which measures under the FCMA may be based on "health and welfare," rather than on conservation in the strictest sense. I understand that, in the past, regulations directed at prevention of gear conflicts and grounds preemption have been approved on the ground that they serve to prevent disputes and possible violence among resource users. The same purpose would be served by this proposed amendment, as a potentially violent situation did, in fact, develop in 1979 when Polish trawlers preempted the grounds of United States crab fishermen in the Kodiak area.

In dealing with proposed amendment (8), it is necessary to consider whether Public Law 95-354 authorizes NMFS to discourage participation by United States fishermen in joint ventures actively, rather than playing the more passive role of merely determining to whom United States fishermen will sell left to their own devices, and establishing DAP and JVP based on these passive observations. The Council appears to believe that the more active role is authorized, and NMFS appears to have acknowledged the appropriateness of such a role subject to major qualifications that were discussed above in connection with National Standards 4 and 5.

A strong argument could be made that the "mitigation fee" provided for by proposed amendment (3) is actually a civil penalty, and that its imposition in the guise of a "fee" would be an unlawful circumvention of the civil penalty procedures required by FCMA section 308. This measure would not appear necessarily to run afoul of the foreign fee provision of FCMA section 204(b)(10). Because of the many other legal problems with amendment (3) that were discussed above, these issues under FCMA sections 204 and 308 do not seem to require much attention at this time.

COMPLIANCE OF THE AMENDMENTS WITH OTHER APPLICABLE LAW

The proposed amendments are subject to the requirements of a number of other Federal laws and regulations. The National Environmental Policy Act and its implementing CEQ, DOC, and NOAA regulations, would seem to require a supplemental environmental impact statement, because the amendments would, if adopted, seem to change the FMP significantly in ways that could affect its environmental impacts. This would be particularly true if proposed amendments (1), (2), and (3).

Similarly, the proposed amendments are so far-reaching in their potential socioeconomic impact that they can only be considered "significant regulations" for purposes of Executive Order 12044 and its implementing regulations, and should therefore be the subject of a regulatory analysis.

Because of the interactions of marine resources within and beyond the three-mile limit, implementation of the proposed amendments will probably be a Federal action directly affecting the Alaska coastal zone, within the meaning of section 307(c)(1) of the Coastal Zone Management Act of 1972, and its implementing regulations. Either the Council or NMFS should, therefore, provide the State of Alaska with a formal determination of the consistency of approval and implementation of the

proposed amendments with the approved Alaska Coastal Management Program. The State has already concurred in finding the original FMP to be consistent with its Coastal Management Program. The Alaska Office of Coastal Management has expressed its willingness to perform its Federal consistency review of FMP amendments during the public comment period following their publication in the Federal Register.

Approval and implementation of the proposed amendments would be an action that "may affect" endangered or threatened species or their habitat within the meaning of the regulations implementing section 7 of the Endangered Species Act of 1973. Thus, formal consultation procedures under section 7 should be undertaken on the proposed amendments. NMFS has already produced a biological opinion on the original FMP following consultation concerning its effect on endangered whales. While the possibility of any effect of the FMP or the proposed amendments on the two endangered bird species of the Bering Sea and Aleutians appears to be negligible, it may be desirable for consultation on the proposed amendments to be undertaken with the Fish and Wildlife Service, as well as within NMFS.

ENFORCEABILITY OF THE PROPOSED AMENDMENTS

As was discussed above, proposed amendment (3) would, given current enforcement resources in the Bering Sea and Aleutians, be almost totally unenforceable. The other proposed amendments would not appear to raise serious problems of enforcement.

cc: F/AKR11 - Jim Brooks

Marine Resources Company

HEAD OFFICE:
4215 - 21st Avenue West
Suite 206
Seattle, Washington 98199
Phone: (206) 285-2701
Telex: 32-8041 MRC SEA

NAKHODKA OFFICE:
Verkhne - Morskaya, 134
Nakhodka 17
Primorski Krai
692900 U.S.S.R.
Telex: 213434 MRKNHDSU

July 17, 1980

Mr. Jim H. Branson
Executive Director
North Pacific Fishery Management Council
P. O. Box 3136 DT
Anchorage, AK 99510

Dear Jim:

The following information is being provided to bring the Council up to date on our fishing activities in the Bering Sea this year.

A. Pollock/cod - winter/spring

This fishery was terminated on 25 May due to reduced quality of certain species after spawning, other commitments for some of American trawlers to other fisheries and need to replace processors after 5 months operation. The total breakdown of catches delivered to our leased processors is as follows:

Food Grade Fish	MT
Herring	36.700
Pollock	3818.000
Pacific cod	3343.480
POP	4.700
Rock/flathead sole	15.800
Yellowfin sole	0.600
Atka mackerel	139.400
Sculpin	15.300
Subtotal:	7373.980

Fishmeal Grade Fish	
(primarily small pollock)	3997.550
Total:	11,371.530

Our totals may differ slightly from those of NMFS in that theirs are based on extrapolations from catch samples while ours are based on delivery estimates derived from production records. The significant point, though, is that even though we tried to direct our operation at cod, pollock was by far the dominant species (up to two-thirds of total catches if one assumes that the fishmeal fish was primarily pollock).

This developmental operation which was carried out entirely at the risk of the participants, was not what one would call a money maker in the true sense of the word for either ourselves or the fishermen involved. The experience gained, though, will enable us to improve the fishery in the future and to avoid making costly investment mistakes. Considered in this light, we feel that the fishery was certainly "profitable" to those involved and will help in the overall development of the domestic groundfish industry in Alaska.

It should be noted that what we are doing in the way of developing new fisheries on non-traditional species is consistent with the intent of the "Breaux Bill". We hope this fact will be kept in mind when evaluating the benefits from our operation.

B. Experimental Yellowfin sole fishery

Our experimental fishing operation on yellowfin sole began on 3 June. We initially started with five U.S. trawlers ranging in size from 60 to 83 feet and two BMRT-type processors. The third processor, MYS Prokofieva, was detained in Kodiak for more than two weeks and didn't arrive on the grounds until late June. We now are operating with five American trawlers and three processors.

The delay of our third processor forced us to put the U.S. fishermen on catch limits due to a lack of processing capacity. If we had been able to operate at full capacity, we would have taken about 500 tons additional fish. As it now stands, through July 12 we have received a total of 4533.4 MT of groundfish as follows:

Yellowfin sole (including incidental catch of other flounders)	2727.2 MT
Pacific cod	517.8
Fishmeal grade fish (mostly small yellowfin sole)	1288.4
Total:	4533.4 MT

It should be noted that so far the fishery has been quite clean. We understand that the incidence of juvenile halibut has been extremely low and tanner crab catches have only amounted to a few pounds per ton.

It is difficult to make an accurate projection of total deliveries by the time we wind down the fishery in late September. Based on our performance to date, though, I would expect total deliveries to be somewhere around 12,000 MT with yellowfin sole accounting for about 85 percent or 10,200 MT. In this regard we have some concern that the 7,900 MT yellowfin sole DAH, of which 6,700 MT is presently apportioned to JVP, will be insufficient to cover our operation, to say nothing of other "joint ventures" which are in existence or contemplated in the near future.

You will note in the attached letter to Bob McVey that we have requested that the 7814 MT of unallocated yellowfin sole TALFF be reapportioned into DAH and Reserve. Our Company and the fishermen delivering to us feel that this is a justified and reasonable request. In this regard we ask that the Council support our request by recommending to the National Marine Fisheries Service that they make the necessary PMP amendments to effect this change.

Thank you for your consideration.

Yours sincerely,

Wally

Walter T. Pereyra
Vice President and General Manager

WTP:kb

Enclosures

cc: Terry Leitzell
Robert McVey

ATTN: K.L. CASHDOLLAR
ATTENDING COUNCIL MEETING

U.S. PRESS RELEASE

U.S./JAPAN FISHERIES TRADE TALKS CONCLUDE ON COOPERATIVE NOTE

From J.C. Peice

The United States Government and the Government of Japan agreed today to substantive changes in the Japanese Import Quota System for fishery products which will enable U. S. producers to gain increased access to the large Japanese market for seafoods. The understanding was reached after a series of meetings in Washington between representatives of the Government of the United States and the Government of Japan. Richard A. Frank, Administrator of the National Oceanic and Atmospheric Administration (NOAA) and head of the U. S. delegation stated: "The positive approach taken by the Japanese Government to our requests should encourage increased harvesting and processing by the U. S. industry of currently underutilized fish in our 200-mile Fishery Conservation Zone."

Japan will modify the criteria for imports under its quota system, thus expanding the opportunities for U. S. exporters to sell to Japanese firms. Changes in the allotment of quotas for species such as pollock will enable U. S. producers and Japanese buyers to conclude transactions which in the past have been foreclosed. Because of the absence of that market, the U. S. industry has been reluctant to devote efforts to these fisheries. Frank noted, "Japan will expand the number of Japanese quota holders for herring imports for processing and will establish a new quota for herring to be used directly for food." He added that the Government of Japan will provide information on export

opportunities in Japan, assist in resolving problems in specific fisheries trade transactions, and assist U. S. firms with technical cooperation in harvesting and processing.

Earlier this week, Secretary of Commerce Philip Klutznick met with Japanese Ambassador Okawara at which time the Secretary informed the Ambassador of the Administrator's determination to develop the U. S. fisheries industry and to increase fisheries exports.

The U. S., in recognition of the Japanese offers, indicated that it will release immediately 40,000 metric tons of Alaskan pollock in the Eastern Bering Sea which had been withheld from Japan in the 1980 fishery allocations in the U. S. 200-mile zone. The U. S. Government also stated it would release to Japan a substantial portion of other currently unallocated fisheries surpluses.

The U. S. delegation to these discussions included representatives of the Department of State and the United States Trade Representative. The Japanese delegation was headed by Director-General of the Japan Fisheries Agency, Nobuo Imamura.

Japan is the largest market for U. S. seafoods, importing over $560 million worth in 1979. Most of these purchases were in high-value species such as salmon and crab. The talks, which started earlier this Spring in Tokyo, were designed to increase the amounts and to broaden the type of fish exported to Japan from the major U. S. resources within the 200-mile fishery

Conservation Zone, and by so doing to promote the development of U. S. harvesting and processing capacity in the currently under-utilized species. Administrator Frank also announced that the Japan Deep Sea Trawlers Association is seeking arrangements with U. S. vessels to provide fish at sea off Alaska, as well as with seafood processors willing to sell processed fish to their Association.

For further information please contact Terry L. Leitzell, Assistant Administrator of NOAA for Fisheries (Office: 202/634-7283; Home: 202/966-8534), or Martha O. Blaxall, Director of the Office of Utilization and Development, National Marine Fisheries Service (Office: 202/634-7261; Home: 202/232-0322).

July 21, 1980

To: Bert Larkins

From: Dick Major

Concur: H.A. Larkins

Subject: Incidental catch of salmon in the Bering Sea

The attached letter from Jim Branson advances some specific questions about the incidental catch of salmon in the Bering Sea. The questions and answers are as follows:

1. Question: Do we now have enough information to identify specific areas in the Bering Sea that can be closed to foreign trawling that will reduce the incidental take of salmon?

Answer: Table 1 (estimated incidental catch of salmon by foreign vessels by months and INPFC area in 1979) shows that the greatest salmon savings could be achieved by closing area 2 during the 1st and 4th quarters of the year. A less drastic approach-- that of identifying smaller, more specific areas-- is made difficult by the distribution of the catches over a wide area. This is best depicted by the catches made by large stern trawlers (first quarter of 1979 is shown in Figure 1; fourth quarter in Figure 2) and by small trawlers in the fourth quarter (Figure 3). In the first quarter, heavy catches (greater than 0.1 fish/metric ton) were recorded all along the 100 fathom contour from 55° 30' - 60° N. In the fourth quarter, heavy catches stretched from Unimak Pass northward to 60° N.-- again mainly along the 100 fathom contour.

The widespread distribution of the incidental capture of salmon observed in 1979 makes the designation of specific savings areas much more difficult than suggested by the 1978 data which showed that substantial savings could be achieved by enacting closures in the general area lying within 58°-59° 30'N. and 173°-179° 30' W.

2. Question: What projection can be made as to the number of salmon this has actually cost the western Alaska chinook fisheries (specifically)?

Answer: In 1979 as in 1978 most (93%) of the salmon taken incidentally in the trawls in the Bering Sea were chinook salmon. Chinook salmon then, are the main source of concern and accordingly, our projections of "cost" to western Alaska fisheries are for chinook salmon only. To round out the picture, complementary information would have to be worked up for the other species as time avails.

For chinook salmon: 93% of the total salmon taken in the Bering Sea were chinook ie., 100,129 fish. Our scale work from 1966-72 showed, in turn, that at least 93% of the chinook taken in the areas involved were from western Alaska (100,129 x .93 = 93,120 fish). Assuming that these would have returned to western Alaska 2.5 years later on the average and assuming an annual natural mortality rate of 25% (the best comparable observed data are 15% and 34%), 45,937 chinook would have eventually made it back to western Alaska.

3. Question: What was the economic loss to the people of western Alaska because of the incidental salmon catch by foreign trawlers?

Answer: At an average weight of 24 lbs the 45,937 salmon would have weighed 1,102,498 lbs upon return. Assuming a 70% catch rate, with the rest going for escapement, 771,749 lbs would have been harvested. At $1.00/lb-- the value reported for the lower Yukon gillnet fishery in May, 1980-- the "cost" of the incidental catch would be $771,749.

4. Question: What are the resource and economic implications to the foreign fishermen by trawl closures that would reduce the incidental takes of salmon.

Answer: This is, of course, fodder for a PhD thesis should one wish to pursue it. I would advance the contention, however, that foreign nations have the potential fishing power to harvest their respective shares of TALFF in the months of April-September even in the case of the most drastic closure. Resultant savings in fuel and operating costs would work to offset seasonal losses in quality/price. As to the disposition of the fleet during lay-up, the foreign fleets would have to sustain this in the same fashion that U.S. fleets do during slack periods. (Note: these are pretty much Low's thoughts and are probably quite recognizable to you).

As for the resource, the impact would be the same in terms of fish removed no matter what time of year they were removed. A TALFF fulfilled is a TALFF fulfilled.

5. Question: Can a specific foreign fishery be identified as the greatest contributor to the incidental take? Better yet, can the incidental take be apportioned between the foreign fisheries with data we have available.

Answer: Table 2 shows the estimated incidental catch of salmon in the Bering Sea/Aleutian fishery during 1979 by nation, vessel class and area. Of the 107,706 fish taken, 42.8% were by Japanese surimi trawlers, 29.4% by Korean trawlers, 15.9% by small Japanese trawlers and 7.9% by Soviet trawlers.

Table 3 gives the incidence rates of salmon from Japanese surimi and small trawlers, Korean trawlers and Polish trawlers for the first quarters of 1979 and 1980. The rate for the Japanese surimi trawlers was higher in 1980. Similarly for the Korean trawlers. Polish vessels did not fish during the first quarter of 1979 but exhibited a high incidence rate in 1980.

A preliminary estimate of the incidental catch of salmon by Japanese surimi trawlers, Japanese small trawlers and Korean trawlers during the first quarter of 1980 was 56,800 fish as compared to the all-nation and all-vessel catch of 62,261 fish a year ago. Barring a dramatic increase during the 4th quarter of 1980, the total number of incidentally caught salmon should be of the same order of magnitude this year as last.

6. Question: Does the observer data indicate any differential in catch rates of salmon by different types of trawls or trawling methods?

Answer: We have not undertaken such analyses on a broad scale but have looked at a couple of factors. During a brief period in March of 1979 and again during February and March of 1980, Korean vessels used mid-water gear to target on maturing pollock to obtain roe. During these periods the composition of the catch was 99-100% pollock with very few salmon. During past years, Soviet vessels using mid-water gear and targetting on pollock have also shown a lower incidence of salmon and other prohibited species as compared to the Japancese or Korean bottom trawl fishery for pollock. We are now examining the difference between the mid-water trawls and bottom trawls but have no definitive answers at the present.

A second factor which we are now taking a closer look at is a possible difference in the incidental catch in trawls made during daylight as opposed to darkness. A preliminary look at one cruise this past winter suggested that salmon catches may be higher during darkness.

Note: Russ Nelson provided the information in answers 1,5 and 6.

cc Marasco
Low
French/Nelson
Balsiger

North Pacific Fishery Management Council

Clement V. Tillion, Chairman
Jim H. Branson, Executive Director

Suite 32, 333 West 4th Avenue
Post Office Mall Building

Mailing Address: P.O. Box 3136DT
Anchorage, Alaska 99510

Telephone: (907) 274-4563
FTS 271-4064

July 10, 1980

Larkins
French
Hamilton

Mr. H. A. Bert Larkins
Northwest and Alaska Fisheries Center
2725 Montlake Boulevard East
Seattle, WA 98112

Dear Bert:

I just reviewed the 1979 estimates of incidental catch of prohibited species as conveyed in the memo to you from Bob French of June 16th. We are obviously in for a good deal of turmoil over the incidental catch of salmon in the Bering Sea. It was strenuous enough last year when the catch was less than half that of 1979.

I assume that the catch figures are probably fairly widely circulated by now. The one I have I understand was available at the last PDT meeting in Seattle, and I know there were a number of industry and association spectators present. It appears to me that we should try to answer some of the following questions as soon as possible, since we'll undoubtedly be asked to respond during the review period for the Bering Sea amendment package, which probably will start in mid-August.

1. Do we now have enough information to identify specific areas in the Bering Sea that can be closed to foreign trawling that will reduce the incidental take of salmon?

2. What projection can be made as to the number of salmon this has actually cost the western Alaska chinook fisheries (specifically)?

3. What was the economic loss to the people of western Alaska because of the incidental salmon catch by foreign trawlers?

4. What are the resource and economic implications to the foreign fisherman by trawl closures that would reduce the incidental take of salmon?

5. Can a specific foreign fishery be identified as the greatest contributor to the incidental take? Better yet, can the incidental take be apportioned between the foreign fisheries with the data we have available?

6. Does the observer data indicate any differential in catch rates of salmon by different types of trawls or trawling methods?

There's nothing very original about these questions. All of them surfaced at one time or another last year when we were discussing the problem. I would like to have the answers ready at hand this year without going through the months of serial preparation to respond that we did last time. If I can be of any help in responding to those questions, please let me know. I'd be glad to have Jim Richardson look at the economics of the salmon loss and potential groundfish loss once the numbers are available for quantities and countries.

You're going to miss all this over in the Lake Union office.

Best regards,

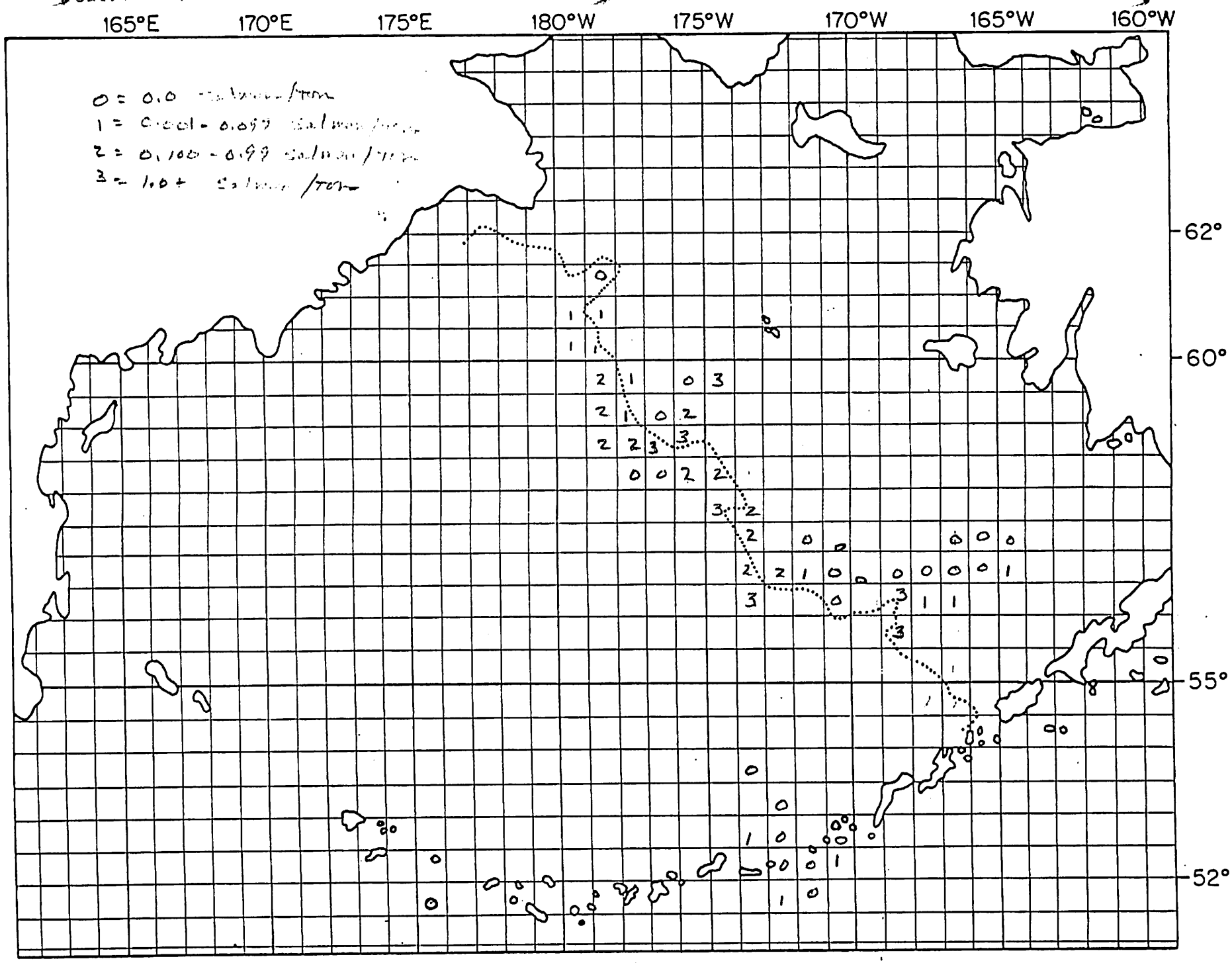
Jim H. Branson
Executive Director

cc: Bering Sea Groundfish PDT:
Richard Bakkala
Dr. Loh-Lee Low
Robert Stokes
Steve Hoag
Phillip Rigby

Jim A. Richardson

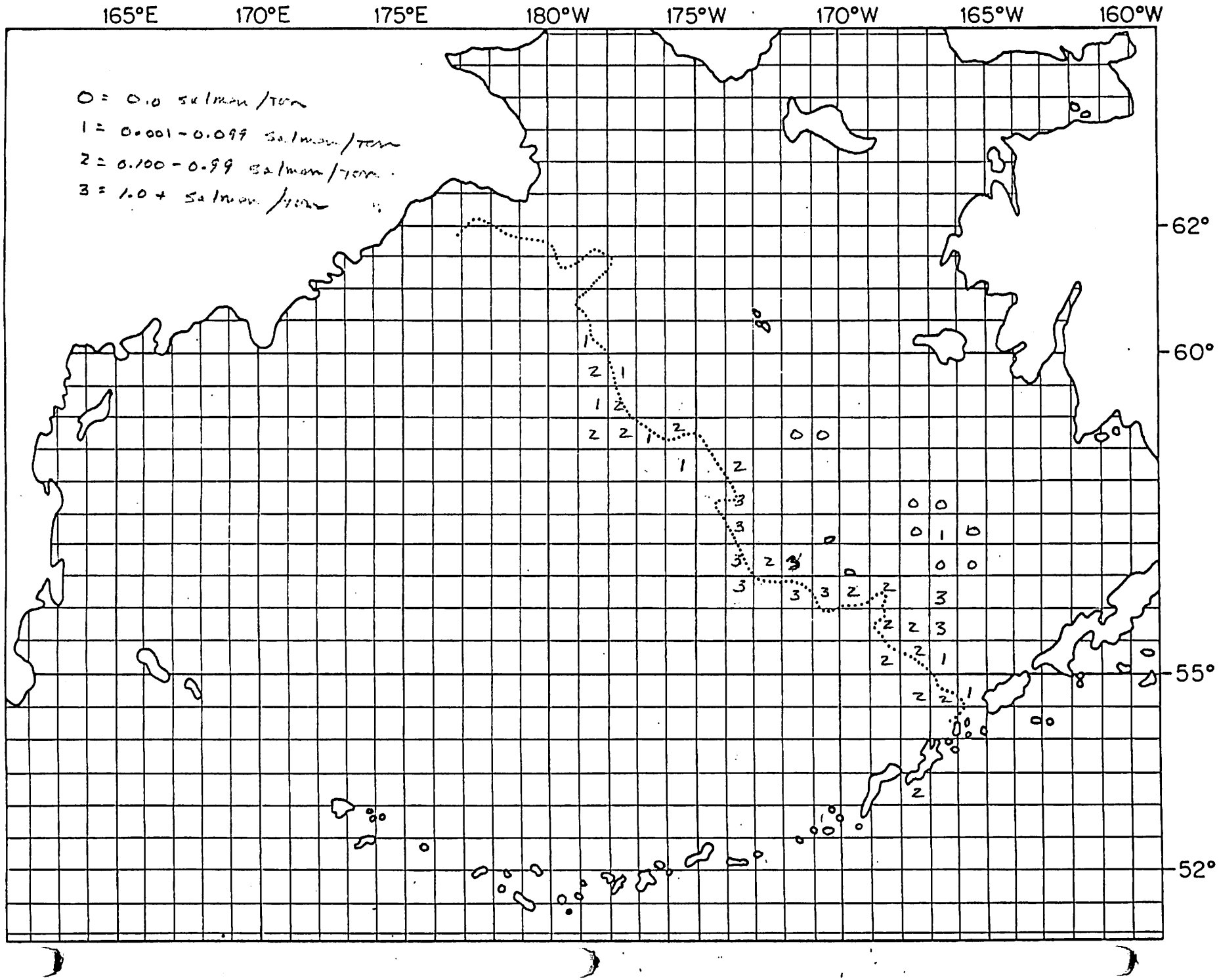
Table 1 : Estimated incidental catch of salmon^ in 1979 by foreign vessels by month and area in the Bering Sea/Aleutian Islands

Month	Area 1 (Nos.)	Area 2 (Nos.)	Area 3	Area 4 (Nos.)	TOTAL (Nos.)	% Month	% Quarter
Jan	127	14,326		1	14,454	13.4%	
Feb	178	42,269		2	42,449	39.4%	
Mar	2,636	5,666		11	8,313	7.7%	60.5
Apr	41	3,314		13	3,368	3.1%	
May	150	553		71	774	0.7%	
Jun	242	108		14	364	0.3%	4.1
Jul	193	25		8	226	0.2%	
Aug	554	788		22	1,364	1.3%	
Sep	1,488	836		14	2,338	2.2%	3.7
Oct	9,316	3,462		108	12,886	12.0%	
Nov	4,999	5,176		61	10,226	9.5%	
Dec	114	10,666		164	10,944	10.2%	31.7
TOTAL	20,028	87,159		489	107,706		
%	18.5	81.0		0.5	100.0	100.0	


165°E
170°E
175°E
180°W
175°W
170°W
165°W
160°W
62°
60°
55°
52°

Large Scale Mapping
Quarter 4

(FIGURE 2)



Small trawlers (FIGURE 3)
Quarter 4.

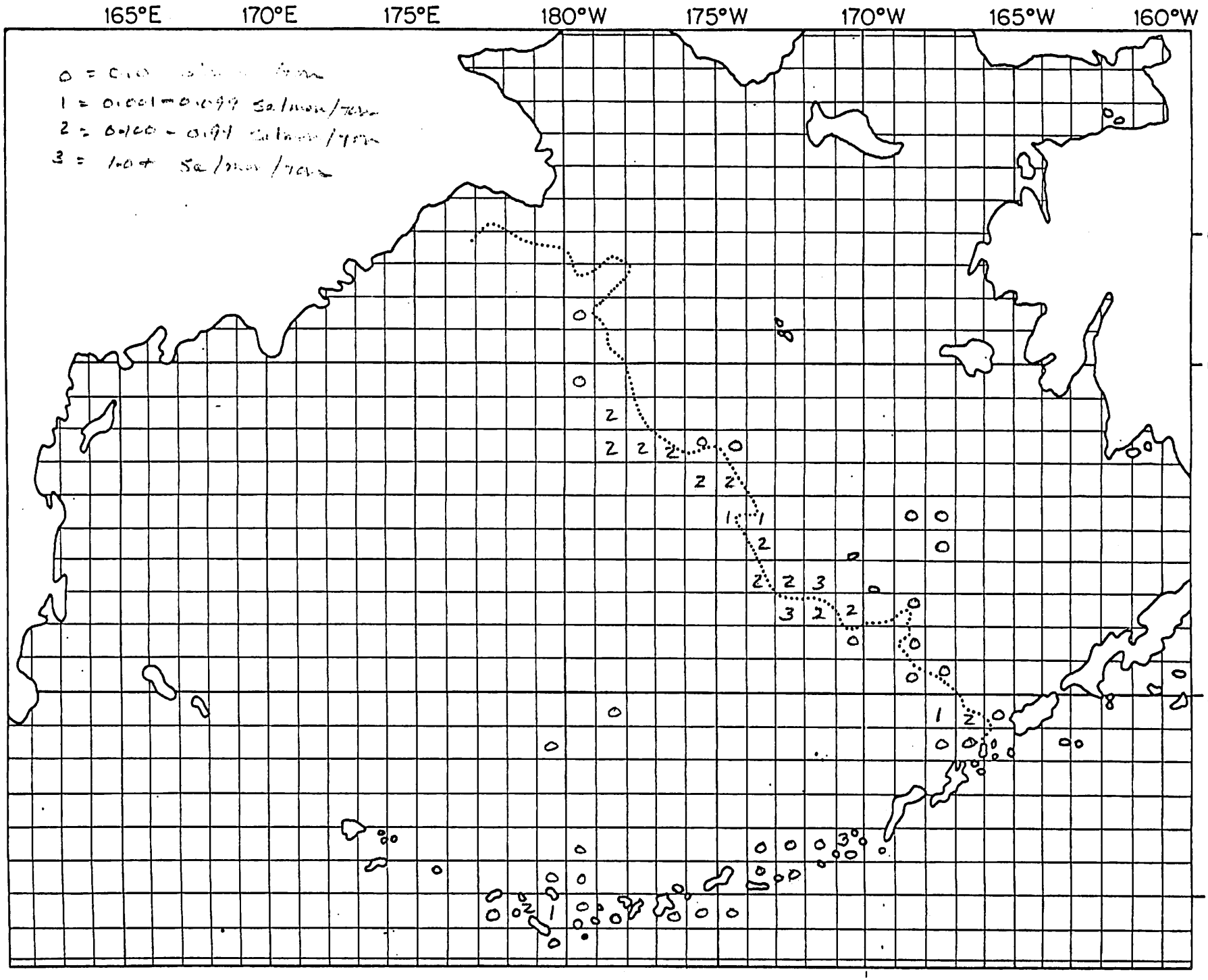


Table 7.--Estimated incidental catch of ~~Pacific~~ Salmon (Oncorhynchus spp.) in the Bering Sea and Aleutian Islands foreign groundfish fishery during 1979 by nation, vessel class, and area (U.S. observer data).

Nation	Vessel Class	Area 1 (Nos.)	Area 1 (mt)	Area 2 (Nos.)	Area 2 (mt)	Area 3 (Nos.)	Area 3 (mt)	Area 4 (Nos.)	Area 4 (mt)	Totals No's	Totals (mt)
Japan	Pollock mothership	0	0.0	105	1.0					105	1.0
	Yellowfin mothership	0	0.0							0	0.0
	Small stern trawler	1,181	4.3	15,655	44.0	0	0.0	352	1.6	17,188	49.9
	Large freezer trawler	2,140	8.3	1,293	2.8			101	0.2	3,534	11.3
	Large surimi trawler	12,498	44.1	33,556	94.7					46,054	138.8
	Longliner	31	0.1	0	0.0	0	0.0	0	0.0	31	0.1
USSR	Large freezer trawler	169	0.6	8,328	31.4			3	T	8,500	32.0
Republic of Korea	Large freezer trawler	3,803	13.9	27,841	91.0			33	0.1	31,677	105.0
	Longliner	0	0.0					0	0.0	0	0.0
Taiwan[1/]	Small stern trawler	6	T	183	0.6					189	0.6
Poland	Large freezer trawler	200	0.8	228	0.6					428	1.4
Annual Totals		20,028	72.1	87,189	266.1	0	0.0	489	1.9	107,706	340.1

1/ The mean incidence rates from small Japanese stern trawlers were applied to the Taiwanese catch.

T < 0.1 mt.

Table 3: Comparison of salmon incidence during January, February, and March of 1979 and 1980. (NS denotes no observer sampling and NF denotes no foreign fishing).

Nation / vessel class	month	year	Area 1	Area 2
Japan				
Small Trawler	Jan	1979	NS	NS
		1980	0.266	1.618
	Feb	1979	NS	0.665
		1980	0.011	0.007
	Mar	1979	0.206	0.035
		1980	0.000	0.000
Surimi Trawler	Jan	1979	NS	0.112
		1980	0.000	0.558
	Feb	1979	NF	0.552
		1980	NF	0.674
	Mar	1979	NS	0.109
		1980	NF	0.434
Korea				
Large Freezer Trawler	Jan	1979	NS	1.500
		1980	NS	0.562
	Feb	1979	NS	1.238
		1980	NF	0.010
	Mar	1979	6.154	0.214
		1980	NS	0.000
Poland				
Large freezer Trawler	Jan	1979	NF	NF
		1980	NF	NF
	Feb	1979	NF	NF
		1980	1.222	0.261
	Mar	1979	NF	NS
		1980	NS	0.000