M E M O R A N D U M

TO: Council, AP and SSC Members

FROM: Jim Branson
Executive Director

DATE: May 10, 1982

SUBJECT: Bering Sea/Aleutian Islands Groundfish

ACTION REQUIRED

Approve revisions to Amendment #1; approve Amendment #5 to protect chinook salmon in 1983; instruct the PMT on developing an amendment for a U.S. Fishery Development Zone; and discuss domestic trawling restrictions in the Bristol Bay Pot Sanctuary.

BACKGROUND

I. APPROVE REVISIONS TO AMENDMENT #1

Amendment #1, which will initiate a multi-species, ecosystem optimum yield management regime for groundfish in the Bering Sea has been under review by the Secretary since September 2, 1981. However, the review process was suspended because of problems with some of the operational concepts in the amendment so it could be reconsidered by the PDT. The PDT has rewritten Sections 11 and 14.

After the March meeting the revised amendment was mailed to the public for review until May 7th. Comments have been entered under this tab beginning with D-6(f).

The revised amendment was included in your March briefing books and is also included here as Agenda Item D-6(a). An explanation of the changes to the original Council approved version follows. The Council should approve the changes so that the amendment can be resubmitted to restart the Secretarial review.

1. The discussion of Allowable Biological Catch (ABC) of the Groundfish Harvest has been replaced by combining the discussions of ABC and Optimum Yield (OY).

   The PDT decided that the OY for the species complex would equal 85% of the Maximum Sustainable Yield (MSY) because the ecosystem management regime was better based on the relationship between MSY and OY. The

individual species' ABC's will still be estimated annually, and used as part of the determination of the individual species' Final Total Allowable Catches (FTAC's).

2. Section 11.3 on Initial Total Allowable Catch (ITAC), has been rewritten to include the following changes:

   A. The ITAC for the groundfish complex will be set in January at 1.0 million mt rather than 1.4 million mt.

   B. The ITAC allocations by species groups will still be based on the average long-term production factors. However, the production factors have been changed to more accurately reflect current stock conditions. Dr. Low of the Northwest and Alaska Fisheries Center is preparing a document which explains the derivation of production factors and their use in fishery management.

   C. A 100,000 mt reserve for correction of operational problems is established only for the January 1 to April 1 period of the fishery. The operational reserve for the remainder of the fishing year is eliminated.

   D. Initial allocations to the fishery are based on estimates of Domestic Annual Harvest (DAH), Joint Venture Processing (JVP), Domestic Annual Processing (DAP) and Total Allowable Level of Foreign Fishing (TALFF).

   The Reserve for the period April 1 to December 31 still equals 10% of each species' Final Total Allowable Catch (Final TAC).

3. A. The section on Final TAC's has been rewritten to explain that they will be based on yearly Resource Assessment Documents (RADs), rather than on Annex I to the FMP. The expected contents of the RADs are given in Section 11.4. Because Annex I is outdated, it has been eliminated from the amendment.

   B. A list of socioeconomic considerations used in setting the Final TAC is shown in Section 11.4.

4. The Final Reserves will not be apportioned to species or species groups in the Plan but rather in amounts and by species as the Regional Director determines appropriate.

5. Section 14., MANAGEMENT REGIME, has been changed as follows:

   A. Herring has been added to the categories of species groups as a prohibited species and an incidental species. The definitions used are from the Herring FMP.

   B. The restrictions on "domestic species ventures" in the Bristol Bay Pot Sanctuary have been dropped, primarily because the definition of a "species venture" is not clear enough to be enforceable. As this section of the amendment was written it would have had little practical effect in any case since it was very unlikely any U.S.

fisherman, or "species venture" would attain the catch limits specified before restrictions would come into effect to control the halibut by-catch.

C. Area "G", which allows foreign longliners to fish up to the territorial sea north of the Aleutian Islands between 170°00'W and 170°30'W has been eliminated. It was not necessary because foreign longliners may fish up to the territorial sea in all areas west of 170°00'W.

D. The revised version of Amendment #1 still includes a provision to limit domestic longliners to a 2,000 mt harvest in the Winter Halibut Savings Area (Area B) from December 1 to May 31.

This area is being increasingly utilized by U.S. fishermen for the salt cod fishery. Therefore, the Council may want to reconsider the winter harvest restriction.

Domestic trawling in the area is classified as an experimental fishery and not limited in the amounts which can be caught.

E. The provision giving the Regional Director authority to close areas by field orders to resolve foreign-domestic gear conflicts has been eliminated. A similar section in Amendment #8 to the Gulf of Alaska Groundfish FMP was recently disapproved by the Secretary. If the Council wants to give the Regional Director this kind of field order authority, the provision will have to be extensively rewritten.

F. Editorial changes from previous amendments have been included in the revised Section 14.

II. APPROVE AMENDMENT #5

Amendment #5 is a continuation of Amendments 1a and #3, already approved by the Council to protect prohibited species. Because Amendment #3 may not be implemented by January 1, 1983, we asked the National Marine Fisheries Service to draft Amendment #5, which will further limit the foreign incidental catch of chinook salmon to 45,500 fish in 1983 in accordance with the reduction schedule already approved by the Council.

A copy of the changes to the FMP is included in your briefing books as Agenda Item D-6(b).

III. INSTRUCT THE PMT ON WHETHER TO DEVELOP AN AMENDMENT FOR A U.S. FISHERY DEVELOPMENT ZONE

Dr. Low of the Northwest and Alaska Fisheries Center was unable to give you his report on possible alternative FDZs. Since the March meeting he has analyzed a third possible area, and rewritten his report. The report is included in your briefing books as Agenda Item D-6(c). Maps of the three areas are on page 7 of the report.

The PMT has no quantified information on the benefits of establishing a FDZ. Council members should consider if this kind of information is necessary to develop an amendment.

In any event, if the Council wishes to go ahead with a FDZ amendment, they should instruct the PMT to develop a draft for Council review at the July meeting.

Public hearings could then be scheduled for August and final Council approval for September. An amendment could be implemented by June 1, 1983 before foreign trawling would have started in the Winter Halibut Savings Area.

IV. INFORMATION ON RESTRICTIONS ON DOMESTIC FISHERIES IN AREA A, THE BRISTOL BAY POT SANCTUARY.

As mentioned above, the restrictions on domestic species ventures has been dropped from Amendment #1.

For your information the original species venture section is included as Agenda Item D-6(d). The Advisory Panel in January 1982 suggested a reworking of these restrictions as outlined in Agenda Item D-6(e).

BERING SEA/ALEUTIAN ISLANDS GROUNDFISH FMP REVISED AMENDMENT #1

11.0 OPTIMUM YIELD (OY)

11.1 Maximum Sustainable Yield (MSY) of the Groundfish Complex

The groundfish complex and its fishery are a distinct management unit of the Bering Sea. The complex has more than 10 commercially important species and many others of lesser or no commercial importance. This complex forms 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 the range of 1.7 to 2.4 million mt. This is calculated by summing the MSY's of individual species groups that are derived from species-by-species analysis. A reasonable verification of the MSY for the goundfish 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 to 2.4 million mt.

An ecosystem model of the Bering Sea developed by the Northwest and Alaska Fisheries Center (Laevastu and Larkins, 1981) shows that the mean exploitable biomass for the groundfish species covered by this FMP is about 9.3 million mt. This ecosystem model, the Prognostic Bulk Biomass (PROBUB) 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 mean exploitable biomass (9.3 million mt) suggests that the annual yield from it is probably much higher than the 1.7 to 2.4 million mt range estimated conservatively by the single species approach.

The ecosystem consideration also indicates that MSY of the groundfish complex may change if the present mix of species is altered substantially from the present period. Therefore, as changes take place, MSY for the complex may have to be re-examined.

11.2 Optimum Yield of the Groundfish Complex

The optimum yield (OY) of the groundfish complex is set equal to 85% of MSY or 1.4 to 2.0 million mt. This deviation from MSY reflects the combined influence of biological and socioeconomic factors. The important biological factors indicate that:

1. When considering condition of individual species within the complex, the OY range encompasses the summed ABC's of individual species for 1978-1981 (Low, et al. 1978; and Bakkala, et al. 1979, 1980, and 1981). This sum may be used as an indicator of the biological productivity of the complex, though not completely satisfactory, because multi-species/ecosystem interactions cannot be adequately taken into account. The 15% reduction of MSY further reduces the

risk associated with relying upon incomplete data and questionable assumptions in assessment models used to determine condition of stocks.

2. When considering multi-species/ecosystem models, the OY range is probably a conservatively safe level for the groundfish complex. The mean exploitable biomass of 9.3 million mt for the species groups (Laevastu and Larkins, 1981) suggests that the harvest level can be considerably higher than the OY range.

Although the multi-species/ecosystem models suggest that the harvest level can be higher than 2.0 million mt, it would only be so if the proper combination of exploitation rates by individual species commensurate to the natural balance of the groundfish complex are applied. This combination may not be desirable to the fishermen because the industry prefers only certain species. The recent catch history indicates that the present mix of species is socio-economically acceptable and that the groundfish complex should probably not be exploited at levels higher than 2.0 million mt at this time.

All of the socioeconomic considerations indicate that:

1. The OY range is not likely to have any significant detrimental impact on the industry. On the contrary, this range, when compared to the annual determination of OY, is more desirable because it creates a more stable management environment where the industry can consistently plan its activities with a minimum expectation of OY being equal to 1.4 million mt.

2. The OY range also covers actual catch levels during 1974-76 when the foreign fishery operated profitably before the MFCMA was implemented and is slightly higher than actual catches since then. It will allow the foreign fishery to operate near historic levels and yet offer considerable opportunities for domestic fishery expansion.

Therefore, the range of 1.4 to 2.0 million mt will be the OY of the Bering Sea/Aleutian Islands groundfish complex covered by this FMP unless the plan is amended. An amendment will be made when the status of the groundfish complex changes substantially from the present condition or when socioeconomic considerations dictate that OY should fall outside the present range. OY may also have to be re-examined if substantial change from the present mix of species occurs or is desired of the groundfish complex.

11.3 Initial Total Allowable Catch (Initial TAC)

The initial TAC for the groundfish complex is set at 1.0 million mt at the beginning of the year to get the fishery automatically started. This TAC will be revised upward to a minimum of 1.4 million mt (the low end of OY) by April 1 of each year when the final TAC is determined. This final TAC is determined with the latest information on biological condition of the stocks and socioeconomics of the fishery.

The initial TAC of 1.0 million mt is chosen because:

1. It is a large enough amount to assure that foreign and domestic fisheries can start their operations and sustain them for 3 months

or longer while the final TAC is determined. The initial TAC is only 9-29% below actual catches in 1977-81 and should not create any problems for operation of the fishing vessels. If problems should arise, an initial reserve of 100,000 mt has been established in addition to the initial TAC to resolve them (see section on Initial Reserves).

2. One million metric tons is well below the low end of OY, therefore, the initial allocations are unlikely to cause conservation problems while the final TAC is being determined.

The initial TAC is allocated to the fishery by species groups according to their average long-term production potential within the groundfish complex. This allocation is shown in Table 23-1 and will remain the same from year to year unless the production factors of the species mix are substantially changed from those shown. The determination of these long-term production factors for individual species groups within the groundfish complex is described by Low (1982).

In essence, a two-tier management system is created whereby catch limits are set (1) for the groundfish complex as a whole, and (2) for the individual species groups as interacting components of this complex. The limit set for the complex is the OY and cannot be exceeded, while those limits set for the components may vary depending on the species production potential and the socioeconomic importance of the species groups in any single year.

11.3.1 Initial Reserve

An initial reserve of 100,000 mt (or 25% of the difference between the low end of OY and initial TAC) is set aside at the beginning of the fishing year to be used for allocation to the fishery during the period before the final TAC is determined. This reserve is not designated by species group and is allocated in amounts and by species that are determined by the Regional Director when needed to correct operational problems. A species allocation from initial reserve and that from initial TAC should not total higher than the upper limit of ABC for the species group for the previous year nor should it cause a conservation problem.

11.3.2 Initial Allocations to Fishery

Before the beginning of each fishing year, the Regional Director shall establish initial domestic annual harvest (DAH) amounts for each species or species group. As described in Annex II these amounts shall equal the amount of those species harvested by domestic fishermen during the previous year plus any additional amounts the Regional Director projects to be necessary to satisfy the needs of the growing domestic fishery. These supplemental amounts will be based on projected increases in (1) U.S. processing capacity and/or intention to process, and (2) U.S. harvesting capacity and/or intention to harvest.

Initial allocations to the fishery are then determined at the beginning of the fishing year as follows (DAH = DAP + JVP):

1. Initial allocations to domestic annual processing (DAP) equals the initial DAP established by the Regional Director, or initial TAC, whichever is smaller.

2. Initial allocations to joint venture processing (JVP) equals the initial JVP amount established by the Regional Director or the remainder of initial TAC minus DAP, whichever is smaller.

3. Initial allocation to total allowable level of foreign fishing (TALFF) equals the initial TAC minus DAH.

The Regional Director may allocate part or all of the initial reserve to the above fisheries if initial allocations are insufficient for the orderly conduct of the fishery before final TAC is determined, so long as the additional amount allocated will not cause a conservation problem.

11.4 Final Total Allowable Catch (Final TAC)

The final TAC's for the groundfish complex and of its component species groups will be determined by the Alaska Regional Director of NMFS by April 1 of the fishing year. The final TAC for the complex shall be within the OY range of 1.4 to 2.0 million mt.

Prior to the Regional Director's determination, the Council will recommend final TAC's for the complex and its species groups to him based on the best available data concerning the stocks and the fisheries. The Council's recommendations shall be based upon the following types of information:

1. Biological condition of the stocks -- resource assessment documents will be prepared for the Council by January 1 by the Northwest and Alaska Fisheries Center of NMFS, other agencies, or scientists. These documents shall provide information on:

    a. historical catch trend;
    b. estimate of MSY of the groundfish complex and its component species group;
    c. estimates of ABC of the individual species groups and assessments on their condition of stocks;
    d. assessments of the multi-species and ecosystem impacts of harvesting the groundfish complex according to species ABC's, including considerations of rebuilding depressed stocks; and
    e. alternative harvesting strategies of the component species groups;

2. Socioeconomic considerations that are necessary for U.S. fishery development as:

    a. the need to promote efficiency in the utilization of fishery resources, including minimizing costs;
    b. the need to manage for the optimum marketable size of a species;
    c. the impact of groundfish harvests on prohibited species and the domestic target fisheries which utilize these species;
    d. the desire to enhance depleted stocks for the benefit of the U.S. fishery;
    e. the seasonal access to the groundfish fishery by domestic fishing vessels;

f. the commercial importance of a fishery to local communities;
g. the importance of a fishery to subsistence use; and
h. the need to promote utilization of certain species even if such action is to the detriment of other species.

When the final TAC's for the complex and the species groups are determined, the initial TAC, initial reserve, DAH, and TALFF are updated.

11.4.1 Final Reserves

By April 1 of the fishing year, the initial reserve is replaced by the final reserve amount for the groundfish complex. This amount is equal to the sum of 10% of each species or species group's final TAC (or 10 percent of the total final TAC).

The final reserve is not designated by species or species groups and will be apportioned to the fishery during the remainder of the year by the Regional Director in amounts and by species that he determines to be appropriate. The apportionment of the reserve must be consistent with the most recent assessments of resource conditions and should not be detrimental to various components of the groundfish complex unless the Regional Director can support his determination that the socioeconomic considerations listed in Section 11.4 or overall fishery operational problems dictate otherwise. The Regional Director may also withhold reserves for conservation reasons.

11.4.2 Final Allocations to Fishery

As described above when the final TAC is determined, it is reduced by 10 percent to form the final reserve. The remaining 90 percent of the final TAC minus the allocations to the fishery prior to the determination of the final TAC is then apportioned to DAP, JVP, and TALFF (in that order) as deemed appropriate by the Regional Director, after consultation with the Council.

11.4.3 Reapportionment of Final Reserve and Unneeded DAH

At any time, the Regional Director may assess the DAP and JVP components of DAH and apportion to DAH any amounts from the final reserve that are needed for the domestic fishery.

As soon as practicable after April 1, June 1, and August 1, and on such other dates as he determines necessary, the Regional Director may apportion to TALFF any portion of DAH or the final reserves that he determines will not be needed by United States fishing vessels during the remainder of the fishing year.

Table 23-1. Bering Sea/Aleutians groundfish MSY, ABC, OY, and initial TAC in metric tons.

MSY	=	1.7 - 2.4 million mt
OY (85% MSY)	=	1.4 - 2.0 million mt
Initial TAC	=	1.0 million mt
Initial Reserve	=	100,000 mt

Species	Areas[1/]	Production Factor x 1,000,000	=	Initial TAC
Pollock	I+II+III	0.6534		653,400
	IV	0.0378		37,800
Pacific Ocean Perch	I+II+III	0.0021		2,100
	IV	0.0015		1,500
Other Rockfish	I+II+III	0.0052		5,200
	IV	0.0066		6,600
Sablefish	I+II+III	0.0019		1,900
	IV	0.0007		700
Pacific Cod		0.0605		60,500
Yellowfin Sole		0.0684		68,400
Turbots		0.0385		38,500
Other Flatfish		0.0328		32,800
Atka Mackerel	IV	0.0233		23,300
Squid		0.0183		18,300
Other Species		0.0490		49,000
TOTAL		1.0000		1,000,000

1/ Fishing areas of the Bering Sea/Aleutian region, unless stated otherwise. See figure 26a.

Initial Total Allowable Catch (TAC), Domestic Annual Harvest (DAH) and Total Allowable Level off Foreign Fishing (TALFF) (metric tons)

Species Group	Areas[1/]	Initial TAC[2/]	Initial DAH[3/]	Initial TALFF[4/]
Pollock	I+II+III	653,400	19,550	633,850
	IV	37,800	--	37,800
Pacific Ocean Perch	I+II+III	2,100	1,380	720
	IV	1,500	1,380	120
Other Rockfish	I+II+III	5,200	775	4,425
	IV	6,600	775	5,825
Sablefish	I+II+III	1,900	930	970
	IV	700	470	230
Pacific Cod		60,500	43,265	17,235
Yellowfin Sole		68,400	26,200	42,200
Turbots		38,500	1,075	37,425
Other Flatfish		32,800	4,200	28,600
Atka Mackerel	IV	23,300	100	23,200
Squid		18,300	50	18,250
Other Species		49,000	2,000	47,000
TOTAL		1,000,000	102,150	897,850

1/ Fishing areas of the Bering Sea/Aleutian region, unless stated otherwise. See figure for map.

2/ From Section 11.4 and Table 23.1

3/ To be determined, figures are examples only, see Annex II

4/ To be determined, figures are examples only, see Annex III

3-1a

AMENDED 81-1

13.0 ALLOCATIONS BETWEEN FOREIGN AND DOMESTIC FISHERMEN

13.1 Reserve

U.S. participation in the fishery in the near future is expected to consist of a relatively modest catch for crab bait, a growing Pacific cod fishery, joint ventures for yellowfin sole, pollock, and Atka mackerel and limited efforts for other bottomfish production.

In order to prevent OY from being exceeded without preventing unexpected domestic fishery development; i.e., an unanticipated increase in U.S. catching capability and intent, 10% of final TAC will be held in reserve, as described in Section 11.4.

The reserve for domestic fishery expansion will be released by the Regional Director in accordance with Section 11.4.3

13.2 Total Allowable Level of Foreign Fishing (TALFF)

The initial TALFF for each species shall be determined by the equation: Initial TALFF = Initial TAC - Initial DAH.

The final TALFF for each species shall be determined by the equation: Final TALFF = Final TAC - Reserves - Final DAH.

Initial DAH is prescribed in Annex II and initial TALFF is prescribed in Annex III.

7. Replace Section 14.0, MANAGEMENT REGIME, with the following:

14.0 MANAGEMENT REGIME

14.1 Management Objectives

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

A. Provide for rational and optimal use, in a 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 governs:

14.2.1

Fishing by foreign and United States vessels in 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 up to the U.S.-Russian Convention Line of 1867, and of the Eastern Bering Sea (See Figure 26).

The FMP area is divided into four fishing areas as shown in Figure 26a and described in Appendix III.

14.2.2

All stocks of finfish and marine invertebrates except salmonids, shrimps, scallops, snails, king crab, Tanner crab, Dungeness crab, corals, surf clams, horsehair crab, lyre crab, Pacific halibut, and herring which are distributed or are exploited in the area described in 4.2.1, above.

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

1. Prohibited Species -- those species groups the harvest of which must be avoided and which must be immediately returned to the sea when caught and brought aboard. Records of catch of each species must be maintained. These include salmonids, shrimps, scallops, snails, king crab, Tanner crab, Dungeness crab, corals, surf clams, horsehair crab, lyre crab. Herring will be considered a prohibited species when the offshore herring allocation, if any, is caught and the allowable incidental catch (AIC) has been caught, as described in the Fishery Management Plan for Bering-Chukchi Sea Herring.

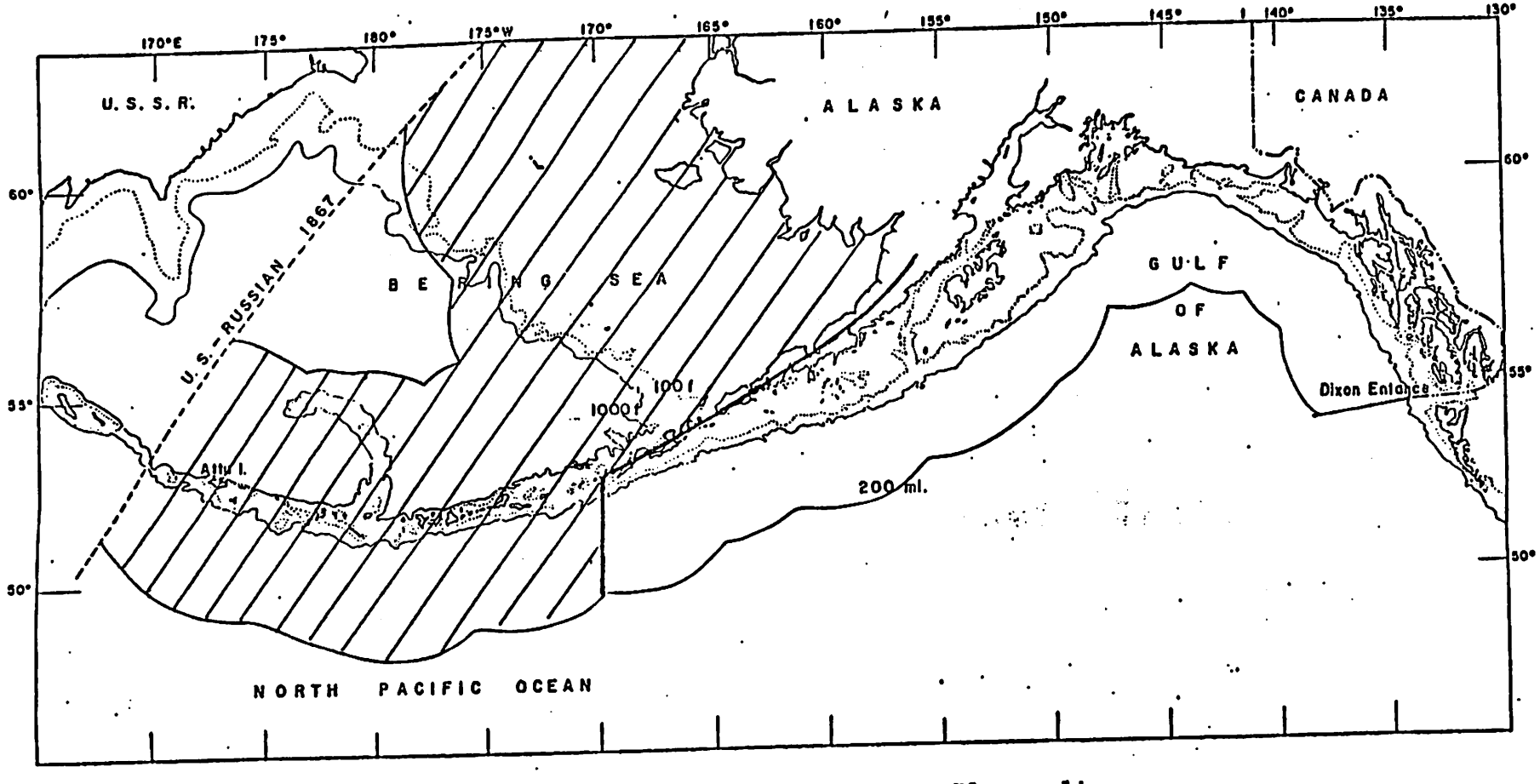

Figure 26.--Area (diagonal lines) over which this Fishery Management Plan applies.

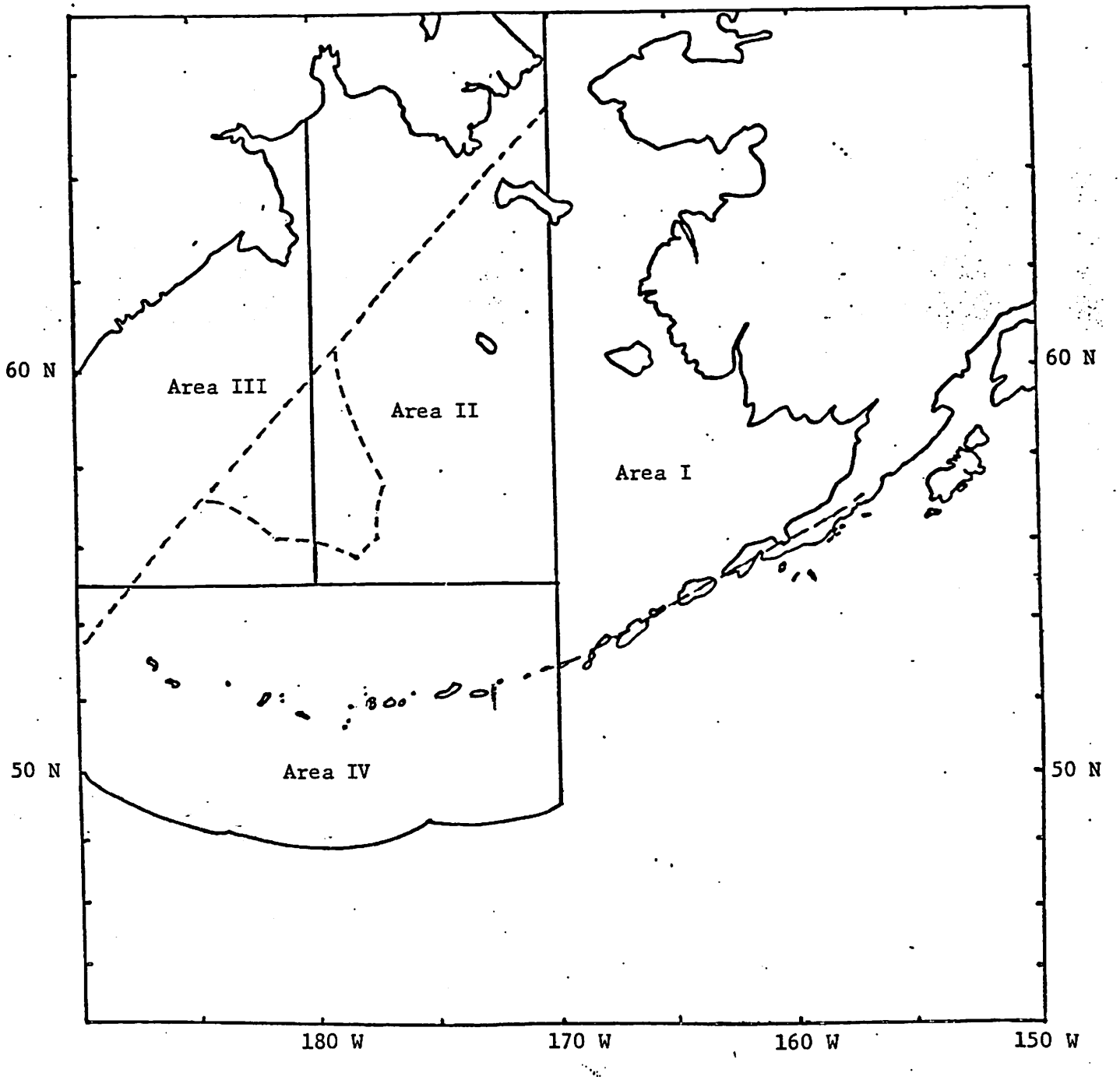

Fig. 26a Fishing areas in the Bering Sea and Aleutian Islands. (See Appendix III for geographical coordinates.)

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. Records of catch of each species group must be maintained.
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 which are important ecosystem components, but sufficient data are lacking to manage each separately. Accordingly, a single TAC 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 or foreseeable economic value taken in the fishery only as an incidental by-catch to target fisheries. These include all finfish and marine invertebrates, except those listed in 1-3, above. Virtually no data exist 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 OY for this category is the amount which is taken incidentally while fishing for target species, whether retained or discarded. If retained, records must be kept. (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 through amendment of the plan.)
5. Incidental Species -- those species groups which are taken incidentally to United States and foreign groundfish fisheries. An Allowable Incidental Catch (AIC) is calculated annually and allocated to groundfish Domestic Annual Harvest (DAH) and Total Allowable Level of Foreign Fishing (TALFF), in accordance with the relative amounts of DAH and TALFF for groundfish species. Currently the only species in this category is Pacific herring (Clupea harengus pallasi), for which the AIC shall be calculated and allocated according to procedures described in the Fishery Management Plan for Bering-Chukchi Sea Herring.

14.3 Fishing Year

The fishing year shall be the calendar year (January 1 -December 31). Should this FMP be implemented at a date other than January 1, fish allocations will be prorated as if implementation had begun the previous January 1.

14.4 Management Measures -- Domestic Fishery

14.4.1 Permit Requirements

All U.S. vessels harvesting and retaining groundfish or engaging in support activities in that part of the fishery conservation zone governed by 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

United States vessels must minimize their incidental harvest of Pacific halibut, salmon, Tanner crab, and any other species the fishery for which in the area governed by this FMP is restricted by another FMP, and shall return those species to the sea promptly if they are taken.

14.4.3 Fishing Area Restrictions

14.4.3.1 General

None

14.4.3.2 Trawl Fishery

1. Area A -- "Bristol Bay Pot Sanctuary" (as described in Appendix III and Figure 27) -- Reserved.

2. Area B -- "Winter Halibut Savings Area" (as described in Appendix III and Figure 27):
   a. December 1 - May 31 -- domestic trawling will be permitted on an experimental basis and monitored closely by observers.
   b. June 1 - November 30 -- 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 the traditional crab-bait trawl fishery and the development of a domestic groundfish fishery for human consumption.

3. Other Areas -- no closures

14.4.3.3 Longline Fishery

1. Area B - Winter Halibut-Savings Area (as described in Appendix III and Figure 27):
   a. 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.
   b. June 1 - November 30 -- 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.

2. Other Areas -- no closures

14.4.3.4 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

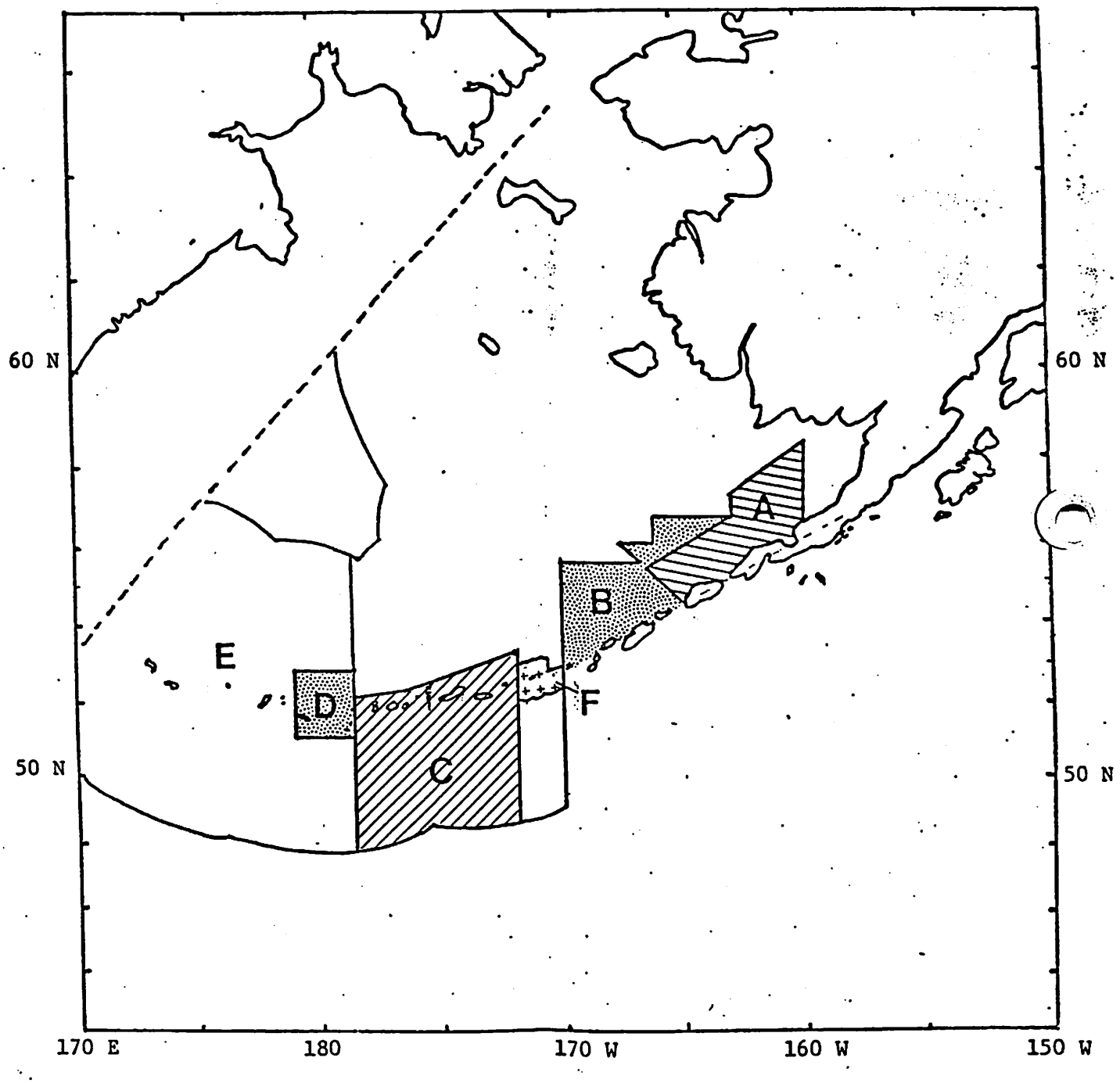

Fig. 27 Areas with special restrictions on foreign and/or domestic fisheries in the Bering Sea and Aleutian Islands Groundfish Plan area. (See Appendix III for geographical coordinates.)

close fishing areas, or parts thereof, and fishing seasons based upon the following considerations:

1. the amount of fish actually harvested compared to the Final Total Allowable Catch established for that fishing season;
2. the effect of overall fishing effort within a fishing area or part thereof;
3. catch-per-unit of effort and rate of harvest;
4. relative abundance of stocks within the area in comparison with pre-season expectations;
5. the proportion of prohibited species being caught;
6. general information on the condition of stocks within the area;
7. information pertaining to the State of Alaska guideline harvest level for species within a fishing area or part thereof; or
8. any other factors necessary for the conservation and management of the groundfish resource.

Rationale -- The TAC figures adopted under the procedures and standards presented 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 not be realizable without harm to the fishery resource, in light of stock conditions which are revealed in the course of the fishery. Under such circumstances it is appropriate, for conservation purposes only, that the Regional Director in close coordination with the Commissioner of the Alaska Department of Fish and Game, take immediate action by issuing field orders adjusting time and/or area restrictions.

It is expected that the actual area opening and closing dates prescribed in this plan will be adjusted by the Regional Director pursuant to the authority described in this section. Such action is not emergency action that would require amendment of the plan, but an inherent feature of the management regime prescribed in this plan itself.

14.4.4 Gear Restrictions

None

14.4.5 Statistical Reporting Requirements

1. 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 fishing 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, the State of Alaska, and other states in which landings of catch from this fishery are likely.

2. Processor Reports

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

3. Joint Venture Reports

Persons delivering U.S. caught groundfish to foreign processing vessels shall report information required for periodic reassessment of that portion of DAH to be delivered by United States vessels to foreign processors at sea in "joint ventures" (JVP). The joint venture processor will be responsible for reporting the catch statistics required of domestic trawlers since the entire catch is delivered in cod ends to the joint venture processor, making inventory of the catch by the United States vessel unfeasible. The regulations implementing this plan shall specify the information to be reported and the time schedule for reporting.

4. Non-Processed Fish Reports

Persons catching or delivering non-processed fish for use as bait or for direct consumption shall report information necessary for periodic reassessment of Domestic Non-Processed catch (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 is not currently necessary for the Bering Sea/Aleutians groundfish fishery. 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 overcapitalized.

14.5 Management Measures -- Foreign Fisheries

14.5.1 Permit Requirements

All foreign vessels operating in this management unit shall have on board a permit issued by the Secretary of Commerce pursuant to the Magnuson Act.

14.5.2 Prohibited Species

1. General

The prohibited species listed in Annex VI may not be retained, and their taking must be minimized in the course of foreign groundfish fishing operations.

2. Conservation of Chinook Salmon

Amendment #1-a established a prohibited species catch (PSC) for chinook salmon of 55,250 fish for 1982. Procedures to distribute the PSC will be updated to conform this section to the system for distributing Initial TAC and Final TAC under Amendment #1.

14.5.3 Fishing Area Restrictions

1. General

1. No harvesting year-round within 12 miles of the baseline used to measure the territorial sea, except as specified below.

   Rationale -- To prevent conflicts with U.S. fixed gear and small inshore fishing 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 the 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.

2. The area covered by this FMP (or an individual sub-area where a specific catch limit applies) 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; and Greenland turbot.

   Rationale -- To discourage foreign fleets from covertly targetting on a species after the allowed catch for it has been taken.

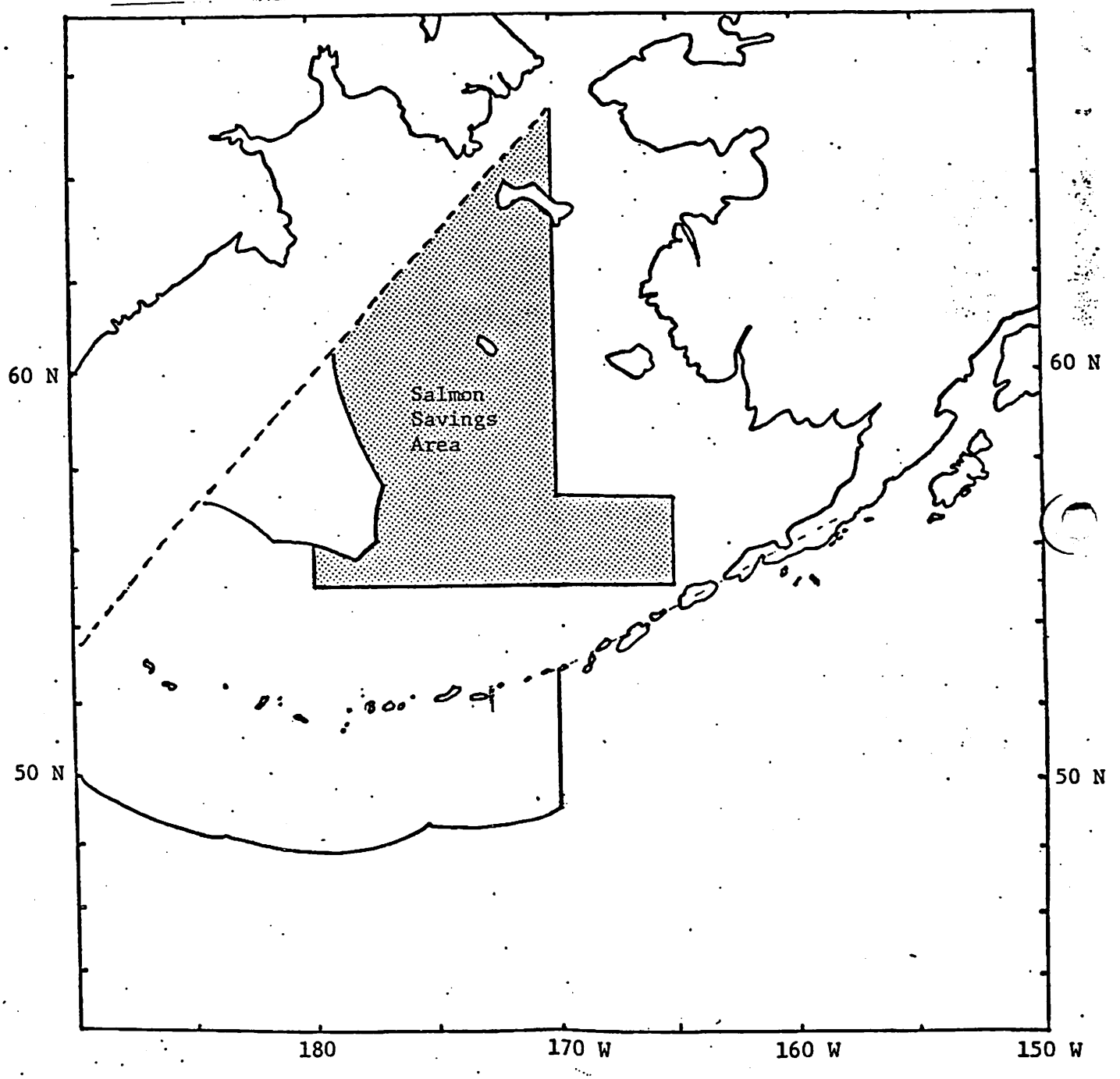

Fig. 28 Salmon Savings Area of the Bering Sea and Aleutian Islands Groundfish
(See Appendix III for geographical coordinates.)

2. Trawl Fishery

1. 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.

2. Area B -- No trawling from December 1 to May 31 in the Winter Halibut Savings Area (as described in Appendix III and Figure 27).

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

3. 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 occurred in this longline sanctuary area.)

4. 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 indicate 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 by preserving harvestable crabs from the rigors of a trawl effort during the softshell or moulting period.

5. Area E -- No trawling within 12 nautical miles of the baseline used to measure the U.S. territorial sea 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.

6. Area F -- Trawling permitted seaward of three nautical miles from the baseline used to measure the U.S. territorial sea in Area F (as described in Appendix III and Figure 27).

3. Longline Fishery

1. Area B -- Winter Halibut Savings Area (as described in Appendix III and Figure 27).
   a. December 1 - May 31 -- no longlining landward of the 500 m isobath.
   b. 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 170-00'W, longlining is permitted seaward of three nautical miles from the baseline used to measure the U.S. territorial sea.

4. 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 as noted in Section 14.4.3.4.

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.

8. Add the following to Section 18.0, REFERENCES:

Granfeldt, E. 1979. Marine ecosystems 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. of Commerce, NOAA, NMFS, NWAFC, Seattle, WA. Unpubl. manuscr. (Submitted to INPFC)

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.

9. Replace Appendix III with the following:

Appendix III

1. Specific regulation areas opened or 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
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 between three and twelve nautical miles from the baseline used to measure the U.S. territorial sea bounded by 170°30'W and 172°00'W on the north side of the Aleutian Islands and by 170°00'W and 172°00'W on the south side of the Aleutians.

2. Fishing areas governed by this Fishery Management Plan and shown in Figure 26a are defined as follows:

Area I -- The area north of the Aleutian Islands and east of 170°W longitude.

Area II -- The area north of 55°N latitude and between 170°W longitude and 180° longitude.

Area III -- The area north of 55°N latitude and west of 180° longitude.

Area IV -- The area west of 170°W longitude, bounded on the north by 55°N latitude and on the south by the limit of the Fishery Conservation Zone south of the Aleutian Islands.

3. The Salmon Savings Area shown in Figure 28 is defined as follows:

Fishing Area II and that portion of Fishing Area I lying between 55°N and 57°N latitude and 165°W and 170°W longitude.

NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

Bering Sea/Aleutian Islands Groundfish
Fishery Management Plan

Amendment #5

Changes to the FMP

The North Pacific Fishery Management Council (NPFMC) proposes the following change to the Bering Sea/Aleutian Islands Groundfish Fishery Management Plan (FMP) as amended by Amendment 5.

In Section 14, PROPOSED MANAGEMENT REGIME, replace Part 14.3.2.2., Prohibited Species, with the following:

14.3.2.2 Prohibited Species

A. General

The prohibited species listed in Annex VI may not be retained, and their taking must be minimized in the course of foreign groundfish fishing operations.

B. Conservation of Chinook Salmon

A prohibited species catch (PSC) for chinook salmon (Oncorhynchus tshawytscha) has been established of 45,500 fish.

A foreign nation's share of the chinook salmon PSC at the beginning of a fishing year is in the same proportion to the total chinook salmon PSC as its initial groundfish allocation is to the initial groundfish TALFF plus reserves, and is automatically established by the following equation:

> Nation's Initial Chinook Salmon PSC equals Total Chinook Salmon PSC multiplied by the Nation's Initial Groundfish Allocation divided by Total Initial Groundfish TALFF plus Reserves.

At the beginning of the fishing year, a portion of the chinook salmon PSC will not be distributed to nations because groundfish reserves will not be apportioned and some of the initial TALFF may not be allocated. This remaining portion of the chinook salmon PSC will be subsequently distributed to nations in proportion to increases in their groundfish allocations which result from the apportionment of the initial unallocated TALFF or groundfish reserves.

During any fishing year the salmon savings area, as described in Appendix III and shown as Figure 28, shall be closed for the remainder of the periods January 1 through March 31 and October 1 through December 31, to trawling by vessels of any nation whose vessels have intercepted that nation's portion of the PSC of chinook salmon.

CREATION OF A UNITED STATES FISHERY DEVELOPMENT AREA IN THE BERING SEA/ALEUTIANS REGION AS PROPOSED BY BART EATON--EFFECT ON FOREIGN CATCHES AND CATCH DISTRIBUTION

by

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April 1982

CREATION OF A UNITED STATES FISHERY DEVELOPMENT AREA IN THE BERING SEA/ALEUTIANS REGION AS PROPOSED BY BART EATON--EFFECT ON FOREIGN CATCHES AND CATCH DISTRIBUTION

(April 1982)

INTRODUCTION

An area in the Bering Sea for the exclusive use by the developing domestic groundfish fishery was proposed by Council member Bart Eaton to the North Pacific Fishery Management Council at the December 1981 meeting. This area would lie just north of Unimak Pass (Figures 1 and 2, designated as Development Area A) and incorporate parts of the following existing regulatory areas: 1) The southeast corner of the Winter Halibut Savings area, closed 12/1-6/1; 2) the Northwest corner of Davidson Bank, closed year-round; and 3) the southwest corner of the Bristol Bay Pot Sanctuary, closed year-round. To evaluate the possible effects of this closure on foreign fisheries, the Bering Sea time-area closure model (Low et al. 1981)[1/] was queried to determine the potential resource available from this area and how the catch by the foreign fishery would be redistributed if displaced from the area.

Since the developing domestic groundfish fishery is primarily interested in harvesting Pacific cod, the model was also used to evaluate possible effects of 3 potential fishery development areas (see Figures 1 and 2):

Area A (as proposed by Bart Eaton)

Area B (expanded area, northward by 30 minutes latitude and westward to 170°W longitude)

Area C (smaller area than proposed)

This paper reports only on the possible redistribution of groundfish and prohibited species catches by the foreign fisheries as a result of their exclusion from an area. When an area is closed, it is assumed that the foreign

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1/ Low, L., B. Gibbs, and R. Narita. 1981. Bering Sea time area closure model In Reducing the incidental catch of prohibited species by foreign groundfish fisheries in the Bering Sea. North Pacific Fishery Management Council. Council Doc. 13.

nations will increase their fishing effort outside the closed area and/or period to make up their "lost" catches in a manner that is directly proportional to the historical (1977-80) fishing pattern in the open areas. The simulation on how the effort will be increased and the resultant pattern of catches by amount, species, area, and time period are evaluated by the Bering Sea time-area closure model (Low et al., 1981)1/ that was previously used to determine the effect of time-area closures associated with the drafting of the FMP Amendment #3 on prohibited species.

The paper, therefore, reports on possible effects on foreign groundfish and prohibited species catches but not the effects on domestic fisheries nor the potential catches of prohibited species by domestic vessels that would operate in the reserved area.

EFFECT ON GROUNDFISH CATCH

Development Area A (as proposed by Bart Eaton)

Groundfish catches taken by foreign fisheries inside the proposed Development Area A during 1977-80 are given in Table 1. Total groundfish caught in the area averaged 11% (137,600 t) of the Bering Sea/Aleutian catch during 1977-80. Of these catches, the dominant species were pollock (121,600 t, 88%); flatfishes (5,800 t, 4%); Pacific cod (5,100 t, 4%); Pacific ocean perch (400 t, 0.3%); and sablefish (320 t, 0.2%).

Table 1 also summarizes the model calculations of catches inside and outside Development Area A for (a) a year-round closure, and (b) a 6-month June-November closure. The model shows that despite a year-round closure, groundfish quotas would most likely be achieved. No nation seems to be in serious danger of a premature closure of its entire fishery due to an early achievement of a species quota. If it does, it is assumed that the nation can adjust its fishing

pattern in order to avoid early quota achievement of a minor species. The results of a half-year closure from June through November are essentially the same because of the winter Halibut Savings Area closure.

Development Area B (expanded proposed area of Bart Eaton)

Groundfish catches taken by foreign fisheries inside the expanded Development Area B during 1977-80 are given in Table 1. The total catch averaged 16% (204,900 t) of the Bering Sea/Aleutians catch during 1977-80 and are, therefore, not much higher than those taken in the smaller Development Area. The dominant species composition of the catch was pollock (180,500 t, 88%); flatfishes (10,200 t, 5%); Pacific cod (7,400 t, 4%); Pacific ocean perch (550 t, 0.3%); and sablefish (680 t, 0.3%). The data indicate that more Pacific cod were taken in the expanded Development Area (7,400 t versus 5,100 t).

Table 1 also summarizes the model calculations of catches inside and outside Development Area B for (a) a year-round closure, and (b) a 6-month June-November closure. The results show that despite a year-round or 6-month closure it is likely that groundfish quotas will still be achieved. No nation seems to be in serious danger of a premature closure of its entire groundfish fishery due to an early achievement of a quota species. If it does, it is assumed that the nation can adjust its fishing pattern in order to avoid early quota achievement of a minor species.

Development Area C (smaller area proposed by Council)

Groundfish catches taken by foreign fisheries inside the reduced Development Area C during 1977-80 are given in Table 1. The average total groundfish catch was 6% (73,046 t) of the Bering Sea/Aleutian catch during 1977-80, approximately half of that taken in Area A. The percentage breakdown by major species was pollock, 87% (63,713 t); Pacific cod, 4% (2,942 t); flatfishes 4% (2,889 t);

Pacific ocean perch, 0.4% (290 t); and sablefish, 0.2% (156 t). About 57% of the Pacific cod catch of Area A was taken within Area C (5,100 t vs 2,900 t).

Table 1 also summarizes the model calculations of catches inside and outside Development Area C for (a) a year-round closure, and (b) a 6-month June-November closure. The results show that in the case of either closure, it is likely groundfish quotas will still be achieved. No nation seems to be in serious danger of a premature closure of its entire groundfish fishery due to early achievement of a species quota. It is assumed that a nation can adjust its fishing pattern in order to avoid early quota achievement of a minor species.

EFFECT ON PROHIBITED SPECIES CATCH

Development Area A (as proposed by Bart Eaton)

The average incidental catch of prohibited species by the foreign fisheries in the entire Bering Sea/Aleutians region were 3,400 t of Pacific halibut, 1.6 million king crab, 17.1 million Tanner crab, and 96,500 salmon, as shown in Table 2. Finer details of this table are given in Table 3.

Within the proposed Development Area A, the catch of prohibited species was 374 t of halibut, 74,500 king crab, 750,000 Tanner crab, and 5,300 salmon. If this Area was vacated by the foreign fleet, it is assumed that the fleet will catch its groundfish outside this area and, therefore, intercept prohibited species in the process.

If the Development Area A is closed the entire year, the resultant pattern of prohibited species catches would be: 2% decrease for halibut (75 t), 2% increase for king crab (27,300 crabs), 5% increase for Tanner crab (834,000 crabs), and a substantial 20% increase for salmon (19,200 salmon).

A 6-month June-November closure would have essentially the same result as the year-round closure.

Development Area B (Expanded Proposed Area of Bart Eaton)

Within the expanded Development Area B, the catch of prohibited species was 475 t of halibut, 97,800 king crab, 1.3 million Tanner crab, and 16,800 salmon (Table 3). If this Area was closed to the foreign fleet for the entire year, the anticipated change in prohibited species catches is: 1% decrease for halibut (-33 t), 4% increase for king crab (57,600 crab), 6% increase for Tanner crab (1 million crab), and 14% increase for salmon (13,300 salmon). If the closure was for 6 months (June through November), the changes in prohibited species catches are almost similar.

Development Area C (smaller area proposed by Council)

Within the proposed Development Area C, the catch of prohibited species was 200 t halibut, 60,800 king crab, 332,900 Tanner crab, and 3,100 salmon. If this area were closed for the entire year, the average change in prohibited species catches would decrease less than 1% for halibut (<1 t), increase less than 1% for king crab (3,000 crabs), increase 3% for Tanner crabs (549,900 crabs), and increase 9% for salmon (9,158 salmon). Similar changes in prohibited species catches are expected if the area is closed for 6 months (June through November).

CONCLUSION

If a fishing sanctuary for the exclusive use by the developing domestic groundfish fishery is desired, the development area proposed by Council member Bart Eaton is a good choice. The foreign fisheries took 11% of its groundfish catch during 1977-80 in this area and if they are excluded from the area, it appears that they can make up their groundfish catches elsewhere in the Bering Sea. There is a potential 20% increase of salmon incidental catch, but this presumably would not take place because of the prohibited species amendments.

If the foreign fisheries were excluded from the Bart Eaton-proposed area, the domestic fisheries would be assured a good cod fishing ground where more than 5,000 t of cod were taken previously. More cod are presumably available for harvest by the domestic vessels because they can operate in the portions of the Winter Halibut Savings Area and the Bristol Bay Pot Sanctuary Area that are excluded to foreign fishermen.

If the Bart Eaton-proposed area was extended northward and westward to include more cod grounds, the impact on foreign fisheries would be more adverse. The foreign fisheries would have to make up 16% of its total catch in the rest of the Bering Sea. It would virtually eliminate opportunities for foreign longliners to operate along the Aleutians. However, this expanded area yielded 7,400 t of cod to the foreign fisheries as opposed to 5,100 t in the smaller, Bart Eaton-proposed area. Therefore, the domestic fisheries may benefit from a larger cod ground. Also, interception of salmon will be lowered from a 20% increase to 14% increase if the expanded development area is created instead of the smaller Bart Eaton-proposed area.

If only the eastern half of the Bart Eaton-proposed area were closed (Area C), foreign fishing would only have to make up 6% of the total groundfish catch in the rest of the Bering Sea. Within this area, almost 3,000 t of Pacific cod were caught and would be made available to domestic fishermen. About three-fifths of the 5,000 t taken in the Bart Eaton-proposed area came from this smaller area.

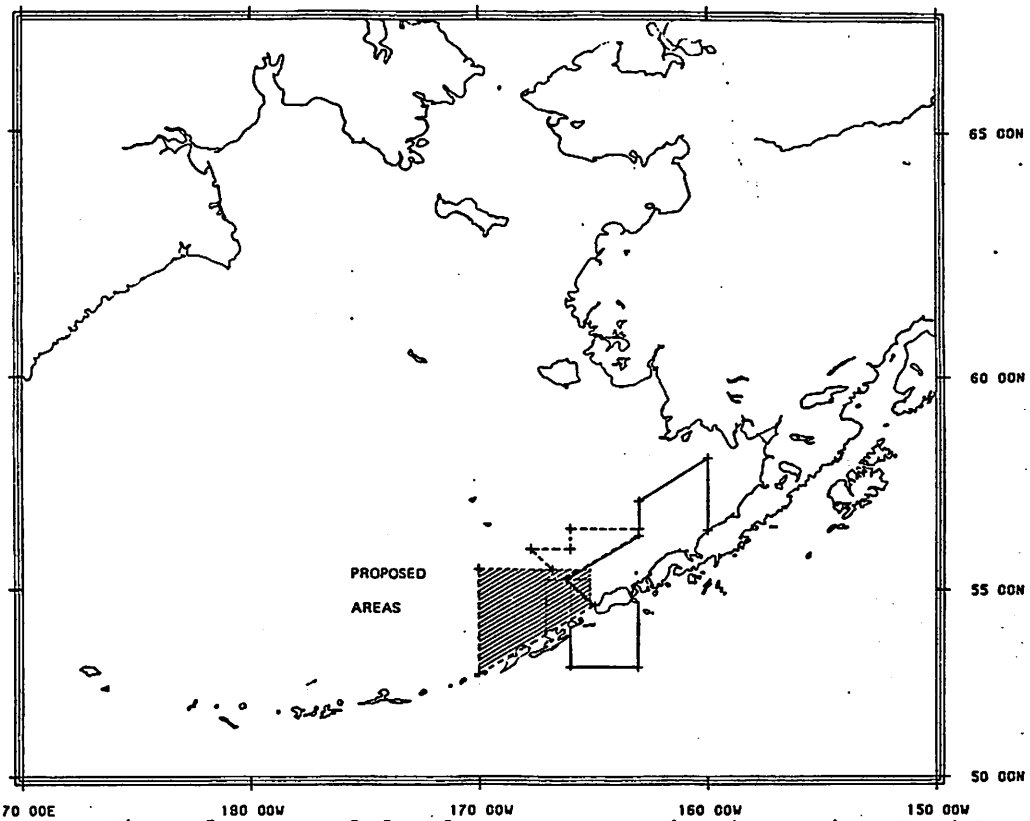

Figure 1.--Location of proposed development areas in the Bering Sea/Aleutian region.

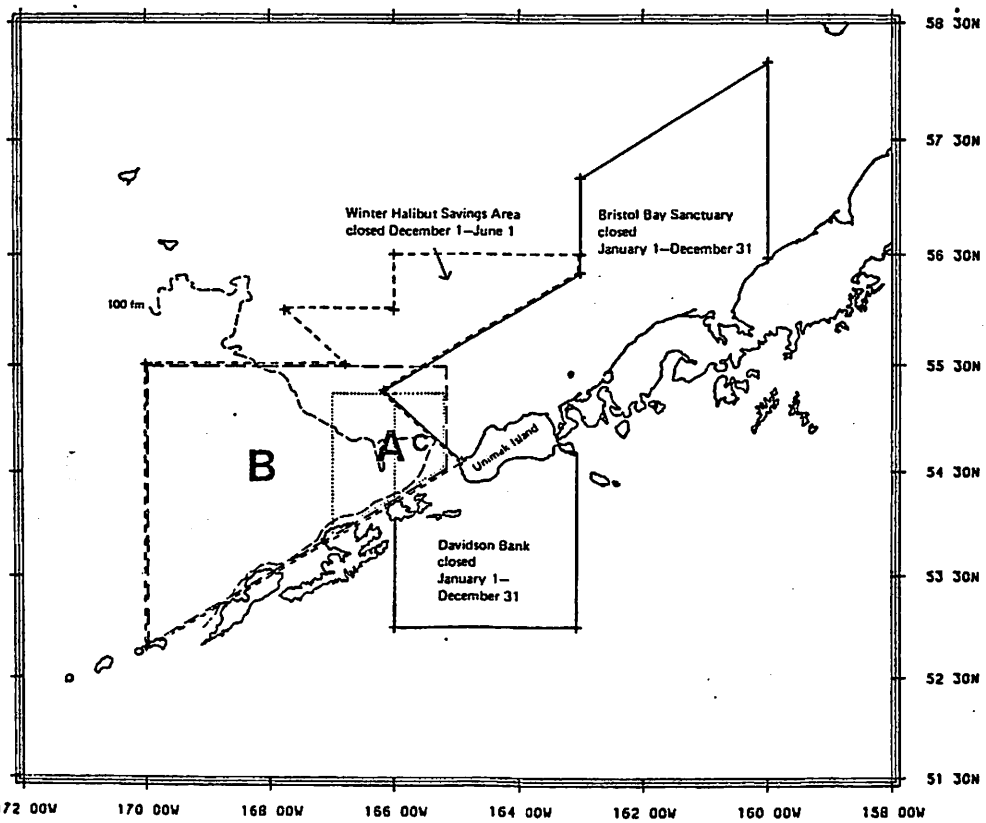

Figure 2.--Location of proposed development areas A, B, and C in relation to existing restricted areas.

Table 1.--Foreign catch of groundfish in the Bering Sea/Aleutian region, 1977-80 averaged. Amount taken (t) inside and outside of Development Areas A, B, and C.

Year	Area	Total groundfish (t)	Pollock	Pacific cod	Yellowfin sole	Turbots	Other Flounders	Sable-fish	Atka Mackerel	POP	Rockfish	Others
A. Development Area A (as proposed by Bart Eaton)												
(1) No closure												
1977-80	In	137,606	121,636	5,117	1,436	726	3,670	320	1,319	421	110	2,857
	Out	1,129,123	818,274	33,426	85,818	9,664	76,566	2,372	22,258	6,573	10,364	55,780
	Comb.	1,266,729	939,910	38,543	87,253	10,390	80,236	2,691	23,577	6,994	10,474	58,637
(2) Year-round closure												
1977-80	In	0	0	0	0	0	0	0	0	0	0	0
	Out	1,266,729	938,566	37,160	89,749	10,310	80,998	5,844	22,953	7,135	10,674	59,194
(3) June-November closure												
1977-80	In	1,687	104	1,036	0	21	239	148	0	0	2	138
	Out	1,265,042	934,007	36,654	89,745	10,291	80,437	5,717	22,953	7,135	10,673	59,086
	Comb.	1,266,729	934,111	37,690	89,745	10,312	80,676	5,865	22,953	7,135	10,675	59,214
B. Development Area B (expanded area)												
(1) No closure												
1977-80	In	204,893	180,463	7,394	2,178	1,102	6,913	684	1,379	544	208	132
	Out	1,061,836	759,446	31,149	85,075	9,289	73,323	2,007	22,198	6,450	10,265	58,465
	Comb.	1,266,729	939,910	38,542	87,253	10,391	80,236	2,691	23,577	6,994	10,473	58,637
(2) Year-round closure												
1977-80	In	0	0	0	0	0	0	0	0	0	0	0
	Out	1,266,729	935,511	37,231	91,363	10,254	80,439	5,757	23,082	7,331	10,863	60,092
(3) June-November closure												
1977-80	In	3,198	475	1,406	0	43	575	316	0	28	6	308
	Out	1,263,531	934,918	36,336	91,353	10,219	79,494	5,452	23,082	7,388	10,841	59,827
	Comb.	1,266,729	935,393	37,742	91,353	10,262	80,069	5,768	23,082	7,416	10,847	60,135
C. Development Area C (smaller area)												
(1) No closure												
1977-80	In	73,046	63,713	2,942	648	423	1,818	156	1,161	290	31	1,858
	Out	1,193,684	876,197	35,601	86,606	9,968	78,418	2,535	22,415	6,704	10,442	56,779
	Comb.	1,266,729	939,910	38,543	87,253	10,390	80,236	2,691	23,577	6,994	10,414	58,637
(2) Year-round closure												
1977-80	In	0	0	0	0	0	0	0	0	0	0	0
	Out	1,266,729	939,788	37,400	88,727	10,337	80,404	2,687	22,982	6,951	10,587	58,562
(3) June-November closure												
1977-80	In	1,124	67	749	0	15	130	79	0	0	0	82
	Out	1,265,605	911,727	37,073	88,717	10,330	80,080	2,598	22,983	9,451	10,587	58,513
	Comb.	1,266,729	911,792	37,822	88,717	10,345	80,210	2,677	22,983	9,451	10,587	58,595

Table 2.--Incidental catch of prohibited species by foreign fisheries associated with Development Areas A, B, and C in Bering Sea/Aleutians region, 1977-80 averaged.

	Halibut (t)	King crab (nos.)	Tanner crab (nos.)	Salmon (nos.)
I. DEVELOPMENT AREA A (as proposed by Bart Eaton)				
Within sanctuary area	374	74,476	749,315	5,287
Entire Bering Sea	3,353	1,562,819	17,142,055	96,522
Change due to closure for 12 months				
Percentage change	-2%	+2%	+5%	+20%
Amount of change	-74	+27,281	+833,744	+19,156
Change due to closure for 6 months (June-November)				
Percentage change	-1%	+2%	+5%	+20%
Amount of change	-24	+24,888	+831,612	+19,012
II. DEVELOPMENT AREA B (expanded area)				
Within sanctuary area	475	97,829	1,311,889	16,811
Entire Bering Sea	3,353	1,562,819	17,142,055	96,522
Change due to closure for 12 months				
Percentage change	-1%	+4%	+6%	+14%
Amount of change	-33	+57,578	+1,046,906	+13,319
Change due to closure for 6 months (June-November)				
Percentage change	+1%	+3%	+6%	+14%
Amount of change	+18	+47,322	+1,045,358	+12,984
III. DEVELOPMENT AREA C (smaller area)				
Within sanctuary area	200	60,816	332,927	3,082
Entire Bering Sea	3,353	1,562,819	17,142,055	96,522
Change due to closure for 12 months				
Percentage change	-0.1%	+0.2%	+3%	+9%
Amount of change	-0.42	+3,007	+549,940	+9,158
Change due to closure for 6 months (June-November)				
Percentage change	+0.6%	-0.5%	+3%	+9%
Amount of change	+20	-746	+548,044	+9,168

Table 3.--Foreign incidental catch of prohibited species in the Bering Sea/ Aleutian region, 1977-80 averaged. Amount taken (t) inside and outside of Development Areas A, B, and C.

Year	Area	Total groundfish (t)	Halibut (t)	King crab (no.)	Tanner crab (no.)	Salmon (no.)
A. Development Area A (as proposed by Bart Eaton)						
(1) No closure						
1977-80	In	137,606	374.5	74,477	749,313	5,287
	Out	1,129,123	2,978.0	1,488,342	16,392,743	91,235
	Comb.	1,266,729	3,352.5	1,562,819	17,142,055	96,522
(2) Year-round closure						
1977-80	In	0	0.0	0	0	0
	Out	1,266,729	3,277.9	1,590,100	17,975,797	115,678
(3) June-November closure						
1977-80	In	1,687	64.7	4	351	2
	Out	1,265,042	3,264.4	1,587,703	17,973,315	115,532
	Comb.	1,266,729	3,328.1	1,587,707	17,973,666	115,534
B. Development Area B (expanded area)						
(1) No closure						
1977-80	In	204,893	474.8	97,829	1,311,889	16,811
	Out	1,061,836	2,877.8	1,464,990	15,830,166	79,711
	Comb.	1,266,729	3,352.5	1,562,819	17,142,055	96,522
(2) Year-round closure						
1977-80	In	0	0.0	0	0	0
	Out	1,266,729	3,320.0	1,620,397	18,188,960	109,841
(3) June-November closure						
1977-80	In	3,198	77.0	1,577	2,887	186
	Out	1,263,531	3,294.7	1,608,564	18,184,527	109,320
	Comb.	1,266,729	3,371.3	1,610,141	18,187,414	109,506
C. Development Area C (smaller area)						
(1) No closure						
1977-80	In	73,046	199.2	60,711	331,940	3,077
	Out	1,193,684	3,178.4	1,502,108	16,809,865	93,445
	Comb.	1,266,729	3,377.5	1,562,819	17,142,805	96,522
(2) Year-round closure						
1977-80	In	0	0.0	0	0	0
	Out	1,266,729	9,366.7	1,547,247	17,662,857	105,188
(3) June-November closure						
1977-80	In	1,124	33.7	2	53	1
	Out	1,265,605	3,353.0	1,544,034	17,661,176	105,199
	Comb.	1,266,729	3,386.7	1,544,036	17,661,229	105,200

Appendix 4

Estimated Joint Venture Processing and Domestic Annual Processing for 1981 and 1982.
(Data submitted by Sue Salveson)

A. Joint Venture Processing

Nation/Species	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Total	1982*
Japan												
Pollock				1,762.4	202.7							
Pacific cod				8.7	8.7							
YFS				8.9	3.9							
Sablefish				0.8	0.4							
Total Catch				1,784.4	217.5						2,001.9	4,000
German												
Pollock						867.8	255.3	41.8				
Pacific cod						70.8	312.1	75.1				
Sablefish						1.0	0.3	-				
Total Catch						967.0	611.9	121.8			1,700.7	3,400
Korean												
Pollock			67.5	764.4	589.1	997.2	3,662.3	2,066.5	2,443.9			
Pacific cod			2.0	114.7	0.7	0.4	156.1	85.9	10.0			
YFS			0.2	528.9	1.1	-	-	4.3	0.4			
Sablefish				-	-	-	-	8.3	2.5			
Herring				-	-	-	71.9	56.6	-			
Total Catch			69.7	1,785.2	614.3	998.1	3,890.7	2,234.6	2,461.7		12,054.8	24,100
Polish												
Pollock					84.0	1,177.3	709.1	253.3		22.0		
Pacific cod					-	1.5	0.1	0.9		1.1		(probably
Total Catch					84.0	1,179.7	709.8	254.2		23.1	2,250.8	0)
Soviet												
Pollock	848.4	5,313.9	7,681.5	17.2	195.7	199.9	84.1	111.1				
Pacific cod	7.9	31.1	32.8	817.9	2,415.5	925.2	849.1	1,629.2				
Total Catch	856.3	5,345.0	7,714.3	835.1	2,611.2	1,125.1	933.2	1,740.3			21,160.5	15,000**
All Nation												
Pollock	848.4	5,313.9	7,749.0	2,544.0	1,071.5	3,242.2	4,710.8	2,472.7	2,443.9	22.0	30,418.4	
Pacific cod	7.9	31.1	34.8	941.3	2,424.9	997.9	1,317.4	1,791.1	10.0	1.1	7,557.5	
YFS			0.2	537.8	5.0	-	-	4.3	0.4	-	547.7	
Sablefish			-	0.8	0.4	1.0	0.3	8.3	2.5	-	13.3	
Herring			-	-	-	-	71.9	56.6	-	-	128.5	
Total Catch	856.3	5,345.0	7,784.0	4,405.2	3,527.0	4,269.9	6,145.6	4,350.9	2,461.7	23.1	39,168.7	46,500

*Assuming double 1981; **No rate increase - start in April

Appendix 4 (cont.)

B. Domestic Annual Processing

Source	Expected no. boats 1982	Million 1981 production	Pounds expected 1982 production
Alaska Shell (Floater)	10	6.0	10.0
Trans Pacific (Catcher/Processor)	1	15.0	20.0-25.0
Sea Pro/Sea Freeze (Shore plant)	?	No info	20.0
Sea Alaska (Floater)	12	No info	20-25.0
Trident Seafoods (Shore plant)	12	No production	20.0
Jangaard (Floater & Shoreplant)	15	10.0	20.0-25.0
Universal Seafood (Floater)	6	No info	20.0
Clipperton Fisheries (Floater)		No production	0.5-1.0 (shakedown only)
Sea West (Catcher processor)	1	No production	"will only use Eaton FDZ if foreign trawlers excluded"
Pelican Cold Storage		No production	No production
Sea Klipp (Shore plant)		-------- no information ---------	
Summary	57+		130.5-146.0 million pounds or 60,000-66,000 mt

ORIGINAL SPECIES VENTURE SECTION

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. Those domestic vessels fishing for a "species venture" will be subject to the following restrictions:

   a. Definition of Species Venture.

      A species venture is defined to be any one of the following:

      (1) joint ventures using a foreign processor of a particular flag and controlled by either a particular American partner or a foreign entity directly;
      (2) individual factory trawler operations;
      (3) domestic joint ventures with at sea processing by a particular processor/buyer;
      (4) trawl-caught deliveries to a particular buyer.

   b. For each species venture domestic trawling will be permitted until the annual incidental interception of Pacific halibut exceeds the guideline level as determined by the appropriate analysis of relevant data.

      The guideline level shall be one percent by line weight of the total harvest of each species venture. Each species venture's harvest shall be monitored on a current time basis by observers or other appropriate means. At the initial 10,000 metric ton level, the incidental catch of Pacific halibut shall be determined. Upon achieving a 20,000 mt catch, if a species venture's incidental catch of Pacific halibut exceeds one percent by weight of total catch, the species venture shall be restricted to pelagic trawl gear for the remainder of the fishing year when trawling in Area A. If a species venture's incidental catch of Pacific halibut is one percent or less, then the species venture may continue bottom trawling subject to the one-percent incidental catch of Pacific halibut restriction for each additional 20,000 mt catch level achieved.

      Domestic fishermen trawling in Area "A" shall provide appropriate data and observation from their own records relevant to the nature of their fishing efforts, and shall cooperate with personnel assigned for scientific study of fishing activity in Area "A".

      The Council will consider relevant data on all prohibited species accumulated and analyzed from Area A and will take appropriate action as necessary.

Chairman Clem Tillion
North Pacific Fishery Management Council
P.O. Box 3136 DT
Anchroage, Alaska 99510

Chairman Clem Tillion:

It has come to the attention of the below signed organizations that that portion of the ammendment #1 to the Bering Sea and Aleutian Island Groundfish Plan regarding domestic trawling and its effect on halibut in the Pot Sanctuary area was thrown out by the Commerce Department and the Council due to the complexity of writing the restirction. The pot sanctuary area is very important as a halibut nursery ground as well as an area of high abunance of tanner and king crab. The below signed organizations request that the following two proposals be sent out for council action as ammendments to the Bering Sea Groundfish Plan.

1. Trawling will be permited in the Pot Sanctuary with Pelagic gear only.

2. A pelagic gear restriction will be enforced in the Pot Sanctuary area if the incidental catch of halibut exceeds .6 % or the incidental catch of crab exceeds .8 % (tanner or king).

Fishing Vessel Owners Association

Petersburg Fishing Vessel Owners Association

Alaska Longline Fishermens Association

Deep Sea Fishermens Union of the Pacific

UNITED STATES DEPARTMENT OF COI
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 1668
Juneau, Alaska 99802

ACTION	ROUTE TO	INITIAL
	Exec. Dir.	
	Deputy Dir.	4
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	
	Secretary	

May 4, 1982

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

Dear Jim:

We wish to make a number of comments on the revised sections of Amendment 1 to the Fishery Management Plan for the Groundfish Fishery of the Bering Sea and Aleutian Islands Area (FMP) that was distributed for public review and comment on March 31, 1982.

Under Section 11.3.2 of the FMP, as revised by Amendment 1, a procedure is established for the determination of DAP, JVP, and TALFF at the beginning of each fishing year. Under the proposed procedure, DAH = DAP + JVP, which excludes one of the current components of DAH termed "domestic non-processed catch" (DNP). We support the elimination of the separate allocation category established for DNP and recommend that Section 14.4.5.4 of the FMP, as amended by Amendment 1, be likewise deleted. This section stipulates that U.S. fishermen catching or delivering nonprocessed fish for use as bait or for direct consumption shall report necessary information for periodic reassessment of DNP.

We support the elimination of DNP as a separate allocation category for three reasons: (1) the current total DNP amount of 1,500 mt was originally established in the FMP without prior knowledge or record of the present or anticipated amount of groundfish actually used by domestic fishermen for crab bait or personal consumption and in all likelihood does not truly reflect the amount of groundfish used for these purposes, (2) monitoring of the small amounts designated as DNP is not practicable and is not done, and (3) in our view, those amounts of groundfish which are used for the above purposes can be considered to be "processed" on board U.S. vessels and should be included under DAP rather than as a separate DNP category.

Our second comment relates to the tables in the revised amendment package which stipulate initial TAC, DAH, and TALFF figures for the major groundfish species or species groups. In these tables, the initial TAC established for Atka mackerel applies only to the Aleutian Islands area (fishing area IV), even though foreign catch reports show a significant amount of this species is caught in other areas of the eastern Bering Sea. We suggest, therefore, that the initial TAC for Atka mackerel be applied to all fishing areas covered by the FMP. We also recommend that a footnote be added to these tables to clarify that the TAC for "Non-specified Species" equals the amount of those species caught during the fishing year.

Another suggestion we would like to make for your consideration is to delete all reference to the Fishery Management Plan for Bering-Chukchi Sea Herring in Section 14.2.2 of the FMP as revised by Amendment 1. Reference to the proposed management regime for herring in Amendment 1 could be awkward and the FMP can be later amended to conform with the Fishery Management Plan for the Bering-Chukchi Sea Herring when the latter becomes effective.

Our last comment concerns the January 1 through June 30 closure of Petrel Bank to foreign trawling that is currently stipulated under Section 14.5.3 of the FMP as amended by Amendment 1. The rationale for this closure is to avoid gear conflicts during the conduct of the domestic king crab fishery and to avoid the incidental catch of king crab in foreign trawl operations.

Currently, the domestic king crab fishery in the Adak area is conducted from November 1 through February 15. Thus, the current restrictions on the foreign trawl fishery do not prevent potential gear conflict or ground preemption problems in the Petrel Bank area during the first two months of the domestic king crab fishery.

In order to avoid these potential problems, we suggest the restrictions on foreign trawling be changed so that Petrel Bank would be closed to foreign trawling from seven days before the opening of the domestic king crab fishery through June 30. This closure would (1) provide the flexibility necessary to accommodate any changes in the king crab fishing season without having to amend the FMP to support changes in regulations, (2) maintain protection against gear conflict and ground preemption problems in the growing domestic Tanner crab fishery which currently operates from January 15 through June 15 in the western Aleutian Islands area, and (3) mitigate the trawl mortality of king crab during their soft shell or moulting period which occurs during spring months.

We feel that the above changes to Amendment 1 would improve and facilitate the management of the Bering Sea and Aleutian Islands area groundfish fishery. We also feel that the amounts of Pacific cod and "other species" designated as DNP under the Fishery Management Plan for Groundfish of the Gulf of Alaska should be redesignated as DAP as soon as it is feasible.

Sincerely,

for Robert W. McVey
Director, Alaska Region

MAY 10 1982

JAY D. HASTINGS
ATTORNEY AT LAW

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ACTION	ROUTE TO
	Exec. Dir.
	Deputy Dir.
	Staff Asst. 1
	Staff Asst. 2

May 7, 1982

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

Re: Comments on Revisions to Amendment #1 of the Bering Sea/Aleutian Islands Groundfish Fishery Management Plan

Dear Jim:

I am submitting these comments on behalf of the Japan Fisheries Association and the Japanese fishing industry on the revisions to Amendment #1 of the Bering Sea/Aleutian Islands Groundfish Fishery Management Plan (FMP). Your letter of March 31 states that Sections 11 and 14 of the Amendment have been rewritten by the Plan Development Team (PDT) because of concerns raised during the Secretarial review. However, our comments address revisions which we believe have little if any relationship to the technical concerns raised by the Secretary. These revisions, which first came to our attention during the March meeting, represent substantive changes to the Amendment.

Section 11.3.2 Initial Allocation to Fishery

The revisions to this section clarify that the initial domestic annual harvest (DAH) set aside for the first three months of the fishery is equal to the projected DAH for the entire year. We anticipate both unnecessary and avoidable future disruptions to the foreign fishery from this allocation scheme. As the projected annual DAH increases, a point in time will be reached when the initial total allowable level of foreign fishing (TALFF) will either have to be eliminated or reduced significantly to an unuseable level during January, February and March in order to accomodate both the projected annual DAH and the initial reserve.

We would have no basis for comment upon this point if it could be reasonably anticipated that either the projected annual DAH would be entirely harvested during the first three months or the final total allowable catch (TAC) would equal little or no more than the initial TAC. However, neither event is likely to occur. The Council has sufficient information upon which to estimate the domestic harvest during the months of January through March and our scientific

knowledge on the biological condition of the stocks demonstrates a fairly stable resource in the Bering Sea from year to year. There is little if any reason to allocate the entire DAH from the initial TAC during the first three months of the fishery.

In view of the anticipated disruptions to the foreign fishery, we would recommend and request that the initial DAH be set at a level no greater than either the estimated domestic harvest during the first three months or one fourth of the projected annual DAH, whichever amount if greater. An estimate of the initial domestic catch can be easily calculated based upon previous catch records. Should the initial DAH be exceeded, additional fish can be allocated to DAH from the 100,000 mt initial reserve. We believe this approach to be reasonable and it would avoid any unnecessary disruptions in foreign fishing operations as the projected annual DAH approaches the initial TAC level.

11.4 Final Total Allowable Catch

The revisions to this section of the Amendment would eliminate one of the most important steps in the management process: public participation in the final TAC decision making process. As compared to the original version of the Amendment, the new revision makes no mention of the rulemaking procedures to be followed by the Regional Director in reaching his final decision. Yet the revised Amendment now includes a list of socioeconomic factors upon which the final determination is to be based. Many of these factors relate to the Act's underlying management concept of "optimum yield" which must take into account the economic well-being of the fishermen and the welfare of the nation and its consumers. Certainly full opportunity for public input is necessary to a final TAC decision based upon one or more of these socioeconomic considerations.

Furthermore, the attempt to list in the FMP itself a number of socioeconomic considerations which the PDT believes to be relevant under the Act to the refinement of a particular biological yield does not seem proper. To my knowledge no other management plan attempts to precisely identify which socioeconomic considerations may or may not be relevant to a final decision. This is understandable. First, there are no legislative, administrative, or legal guidelines for identifying what factors may be considered relevant in the refinement of a biological yield. And it certainly does not seem proper for a single FMP to presuppose what those factors may be under any and all circumstances in any fishery. Second, refinements in the management process to promote the economic well-being of the fishermen and the welfare of the nation and its consumers should be determined on a case-by-case basis depending upon the particular problems in the fishery or region at that time.

We would recommend that section 11.4 be replaced with language

to reflect the original intent of the Amendment. Proposed language could read as follows:

> "The final TAC's for the groundfish complex and of its component species groups will be determined by the Alaska Regional Director of NMFS by April 1 of the fishing year through his rulemaking authority. Prior to the Regional Director's determination, the Council will recommend final TAC's for the complex and its species groups to him based on the best available data concerning the stocks and the fisheries. In order for the Council to make these recommendations, resource assessment documents (RAD's) will be prepared for the Council by January 1 by the Northwest and Alaska Fisheries Center of NMFS, and other agencies or scientists. These RAD's will form the basis for determining species or species group ABC's as explained in Annex I. Data may include commercial fishery and research survey data and information from scientific meetings with foreign and U.S. scientists.
>
> "The Regional Director may adopt the ABC's from the RAD's as the final TAC's or, through his rulemaking authority, modify them for socioeconomic reasons that are supported by reliable data and analysis, and are recommended to him by the Council."

Annex I Derivation of Acceptable Biological Catch

The revised Amendment proposes to eliminate Annex I and substitute it with yearly RAD's. We understand the administrative difficulties in updating the stock assessment studies in the Annex on an annual basis and would support the proposed substitution of the stock assessments with the RAD's as a means to simplify the process. However, we would recommend that the Annex still be maintained in the FMP as a reference to identify the RAD's and explain the data and information to be used in assessing the biological condition of the stocks. This Annex will help to ensure consistency in the RAD's and assessment of the stocks.

11.4.1 Final Reserves

To our surprise the original reserve system has been revised substantially. After giving full support to the reserve concept as an equitable means to accommodate unanticipated expansion in the domestic fishery throughout the year, the Japanese industry has worked hard with the Council and the federal government to implement a reserve system that is fair to all fishermen and functions efficiently. The original structure for the reserve system in the Amendment represented the culmination of these efforts. It was an

excellent system and totally supported by the Council and the fishermen affected. And now it has been totally revised.

First, the final reserve is not designated by species or species groups. No reason has been given for this change, either biological or otherwise. Biological information developed over the years has provided an excellent measure of acceptable biological harvest levels for individual species. These harvest levels have been reasonably stable over the past few years and there is no reason to suggest why they cannot be projected with reasonable accuracy on an annual basis for the purpose of a designated reserve.

The final reserve is potentially very large. A designation of the reserve by species provides fishermen with a better measure of available fish in planning their yearly operations and more accurately reflects the purpose and intent of the reserve concept. We recommend that the original designated reserve be reinstated.

Second, the Final Reserve for Correction of Operational Problems has been eliminated. This reserve, which was set at 1% of the midpoint of the OY range, or 17,000 mt, was undesignated and was to be used at the discretion of the Regional Director to correct any unanticipated operation problems encountered in the fishery. We believe this concept to be an excellent management approach to avoiding operational problems and do not understand why it was eliminated. In the absence of any reason for eliminating this reserve, we would request and recommend that it be reinstated.

Third, the revisions to the final reserve would permit the Regional Director to withhold reserves for conservation reasons. This revision undermines the entire purpose and intent of the reserve concept. The reserve system was established to provide a buffer against unexpected expansion in the domestic fishery. Depending upon the progress of the U.S. fishery, the reserves are released to either the domestic fishermen or the foreign fishermen to ensure efficient utilization. During the course of the fishing year there is no reason to fear a situation whereby reserves would have to be withheld to prevent overfishing under the management framework of this Amendment. The status of the resource is updated on an annual basis with RAD's and the TAC's are adjusted accordingly. Should a conservation issue arise with respect to any fishery resource, sections 14.4.3.4 and 14.5.4 of the Amendment specifically authorize the Regional Director to issue field orders as may be necessary to correct any problem. Furthermore, emergency provisions are also available in the MFCMA for the same purpose. It is therefore unnecessary to introduce biological considerations into what is basically an allocation mechanism.

11.4.3 Reapportionment of Final Reserve and Unneeded DAH

The revisions to this section substantially alter the release

mechanism of the original reserve system. First, the apportionment of reserves to TALFF has been made discretionary as opposed to mandatory as originally required. Second, the original schedule of release dates has lost its meaning by the inclusion of any other dates the Regional Director may determine necessary. Third, the percentages of the reserve subject to release on each of the scheduled dates have been eliminated. Fourth, the apportionment of unneeded DAH to TALFF has been made discretionary as opposed to mandatory. And finally, the original date set for evaluation of unneeded DAH has been eliminated. No reasons have been offered for any of these changes. Yet once again these changes completely undermine the underlying purpose and intent of the reserve concept and all the work that has gone into developing a fair and workable reserve system. All consistency in the system would be lost under these revisions. The original version of this section should be reinstated.

CONCLUSION

We have no disagreement with the technical changes to the Amendment resulting from the concerns raised during the Secretarial review. Our comments are concerned only with a number of substantive changes to provisions of the Amendment upon which we worked so hard for approval during the initial approval by the Council. We hope the Council will give careful consideration to these proposed revisions.

Should you have any questions or care to discuss our comments with me further prior to the Council meeting, please feel free to give me a call.

Sincerely,

Jay D. Hastings

ACTION	
	Exec. Dir.
	Deputy Dir.
	Admin. Off.
	[illegible]
	[illegible]
cc	[illegible]
	[illegible]
	[illegible]
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	Sec./Typ'st
D-6 Supplement	

FISHING VESSEL OWNERS' ASSOCIATION
INCORPORATED
ROOM 232, C-3 BUILDING
FISHERMEN'S TERMINAL
SEATTLE, WASHINGTON 98119

(206) 284-4720

May 10th, 1982.

Mr. Jim Branson, Director
North Pacific Fisheries Management Council
P.O. Box 3136 D.T.
Anchorage, Alaska 99510

Mr. Branson:

I was reading the analysis by Dr. Low of Captain Bart Eaton's proposed U.S. economic developement zone. This proposal as assessed by Dr. Low is nothing as I recall the original proposal to have been. My memory, which not always is accurate, of the proposal went something as follows.

Establish a zone where foreign participation would be prohibited unless purchases of fish in that zone is done in forms of joint ventures or through U.S. shoreside facilities. If the zone normally produced 200,000 metric tons of fish this amount could not be pick up by the foreigners by increased fishing pressure outside the established zone. The current proposal as assessed by Dr. Low would allow the foreign fleet to increase fishing pressure outside any established zone to make up any loss of poundage denied to them. I fail to see what this would do for the United States fleet. I am against the foreigners being able to increase fishing pressure elsewhere and request that the council request the PMT to assess an an economic develepement zone whereby the foreigners would not be able to increase their pressure elsewhere .

Very Truly Yours,
FISHING VESSEL OWNERS ASSOCIATION

Robert D. Alverson, Manger

ICICLE SEAFOODS, INC.
4241-21ST AVE., WEST
SEATTLE, WA 98199

ALASCOM

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1-034877M130 05/10/82 TLX ICICLE SEA AHGB
01 SEATTLE, WASHINGTON MAY 10, 1982

NORTH PACIFIC MANAGEMENT COUNCIL
ATTN: JEFF DOVOLNY
P O BOX 3136 DT
ANCHORAGE, ALASKA 99510

OUR COMPANY, ICICLE SEAFOODS, INC., WISHES TO GO ON RECORD AS STRONGLY SUPPORTING THE 'FISHERY DEVELOPMENT ZONE' IN THE BERING SEA.

WE ARE OF THE OPINION THAT EVERY OPPORTUNITY SHOULD BE GIVEN TO THE AMERICAN PROCESSOR AND FISHERMEN TO HELP MAKE THE BOTTOMFISH INDUSTRY A SUCCESS.

THIS CONCEPT IS SIMILAR TO THE ''WINDOW CONCEPT'' WHICH WAS INTRODUCED BY ICICLE AND ENDORSED BY THE COUNCIL IN 1980.

RESPECTFULLY,
ICICLE SEAFOODS, INC.

ROBERT M. THORSTENSON
CHAIRMAN OF THE BOARD

RMT:PBL

TELEX NO: 328832

ANSWERBACK: PFICICLE SEA

Form L-01342 1601557

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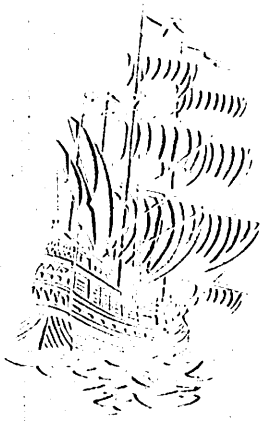

clipperton INC.

AGENDA D-6 Suppl.
MAY 1982

MAY 17 1982

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	Staff Asst. 1	
	Staff Asst. 2	
	Staff Asst. 3	
	Econ. Analyst	
	Sec./Clerk	
	Sec./Typist	

May 12, 1982

Mr Jeff Povolny
North Pacific Management Council
Box 3136 DT
Anchorage, Alaska 99510

I urge the council to favorably consider Bart Eaton's proposal for fishing sanctuaries in the Bering Sea.

Our company has been processing cod in Akutan Harbor since March and there is already some indication that the cod population has declined in size and quantity. We only buy from two small boats.

In fact, I think that when all the bottomfish operations now under construction are operating, you will be considering very substantial reductions in total foreign fishing quotas. This should be apparent later this year

Please don't wait for a decline in population to act,

Yours very truly,

A Jerome Anderson

A Jerome Anderson
President

1959 N.W. Dock Place • Seattle, Washington 98107 U.S.A. • 206/789-1002 • TWX: 910-444-4048

JOHANSEN/SEAPRO
Captain's Bay Plant
P.O. Box 129
Unalaska, Alaska 99685
(907) 581-1676

ACTION	ROUTE TO	INITIAL
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	Con. Asst.	
	Secy. Typist	

May 12, 1982

Mr. Jeff Povolny
North Pacific Fisheries Management
Council
P.O. Box 3136 DT
Anchorage, Alaska

Dear Mr. Povolny,

MAY 17 1982

Our company is currently processing Cod at Captain's Bay. ~~(Shore Plant).~~ We have made a considerable commitment and are totally dependent on the close proximity of an abundant Cod/Pollack resource.

Johansen/Seapro requires 20 to 30 million lbs. of round Cod for 1982. We are currently receiving Cod from 6 boats, but in insufficient daily volumnes. It is anticipated this seasonal situation will improve. However, there will be a sizeable effort out of Dutch Harbor and Akutan on Cod this year.

Without protection, at least from foreign processors, the shore based plants will ultimately be displaced. Obviously, we need protection of the type proposed by Bart Eaton's "U.S. Fishing Sanctuary". Please call me for any additional information. I will be at Captain's Bay at least thru the 15th.

Sincerely Yours,

William F. Manning

William F. Manning
Chairman

AGENDA D-6 Suppl.
MAY 1982

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JEFF POVOLNY
P.O. BOX 3136 DT
ANCHORAGE AK 99510

MAY 17 1982

SEAWEST SUPPORTS BART EATON'S PROPOSAL ON FISHERIES DEVELOPMENT ZONE.

JERRY TILLEY
SEAWEST, 152623

1746 EST

MGMCOMP MGM

Form L-01342 1601557

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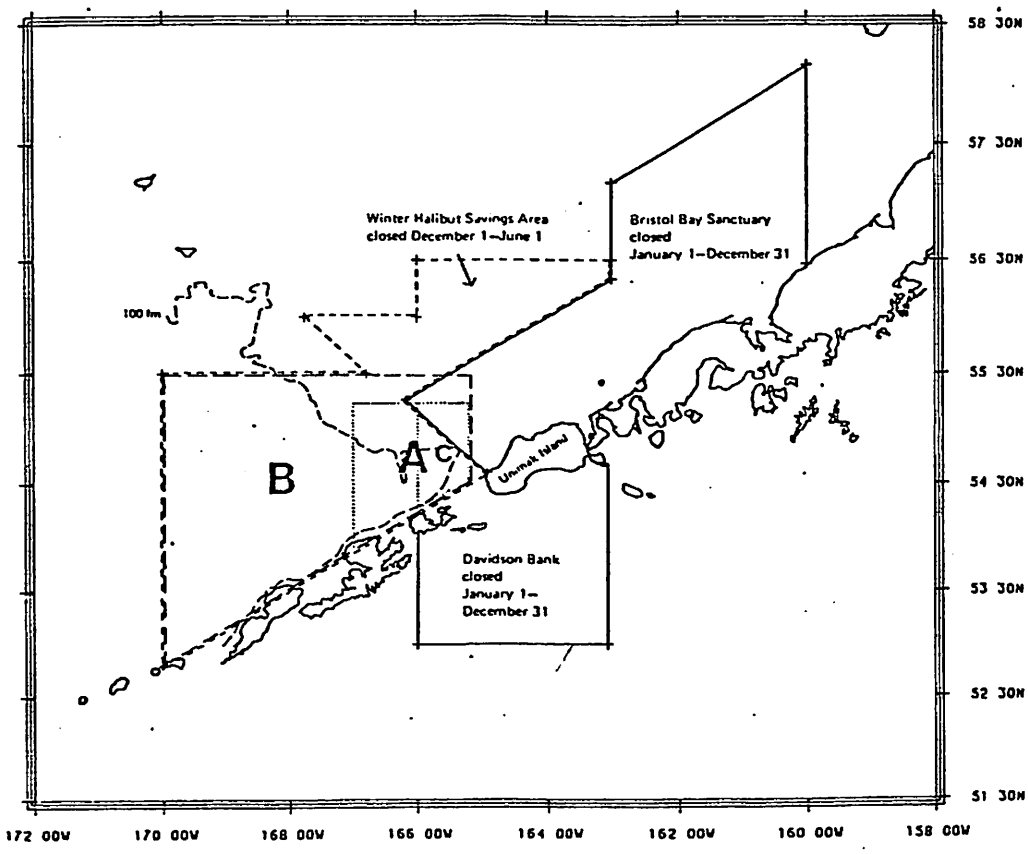


Figure --Location of proposed development areas A, B, and C in relation to existing restricted areas.

Foreign Groundfish Catch (t) in Sanctuary Areas, 1977-80 averaged

	Groundfish	Pollock	Cod	Flatfish	POP	Sablefish
Area A	137,000	121,600	5,100	5,800	400	320
Area B	204,900	180,500	7,400	10,200	550	680
Area C	73,000	63,700	2,950	2,900	290	160

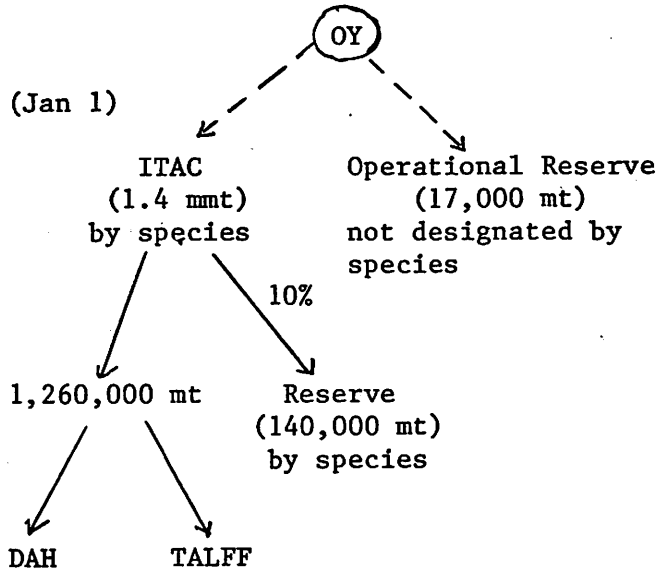
Overall Changes in Prohibited Species Catches Due to Year-round Closure

		Halibut	King Crab	Tanner Crab	Salmon
Area A	% Change	-2	+2	+5	+20
	Amount	-74	+27,300	+833,700	+19,200
Area B	% Change	-1	+4	+6	+14
	Amount	-33	+57,600	+1,047,000	+13,300
Area C	% Change	0	+0.2	+3	+9
	Amount	0	+ 3,000	+ 550,000	+ 9,160

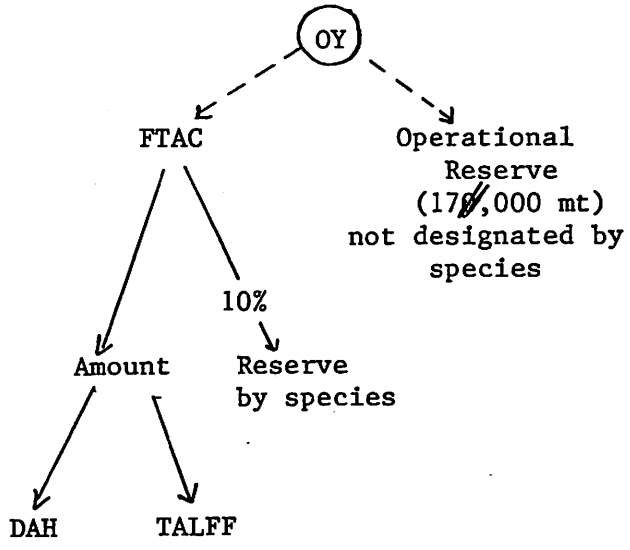
SUMMARY
AMENDMENT #1---BERING SEA/ALEAUTIANS GROUNDFISH FMP

MSY = 1.7 to 2.4 million metric tons
↓
OY = 85% MSY = 1.4 to 2.0 mmt

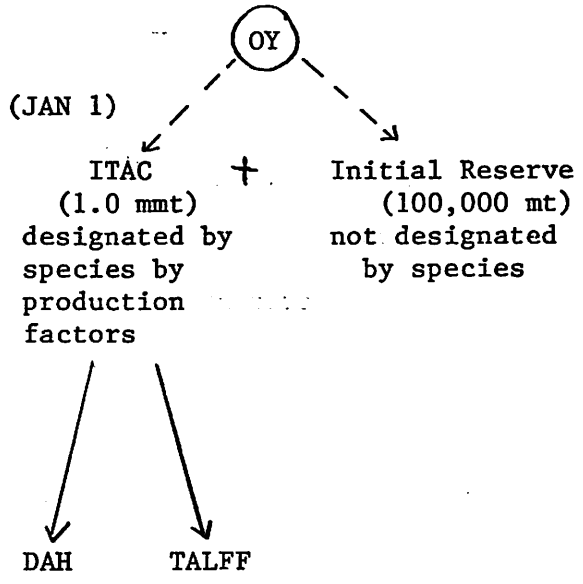
ORIGINAL AMENDMENT #1



(April 1)

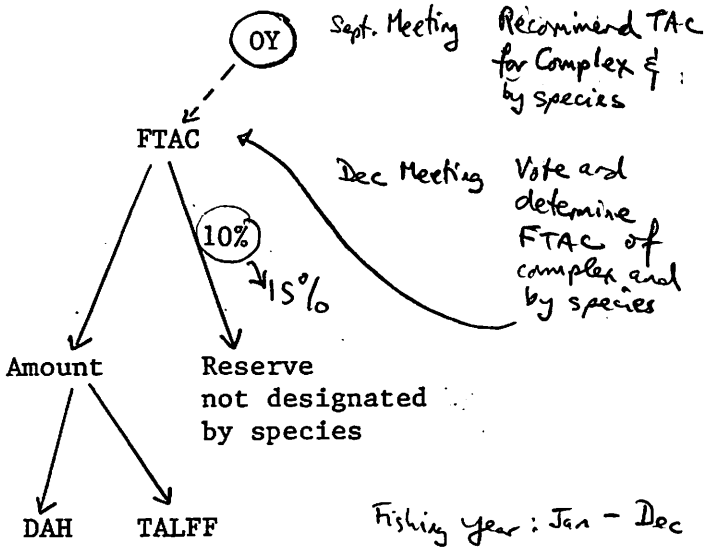


REVISED AMENDMENT #1



July 1 RAD ready

(April 1)



Fishing year: Jan - Dec

11.0 OPTIMUM YIELD (OY)

11.1 Maximum Sustainable Yield (MSY) of the Groundfish Complex

The groundfish complex and its fishery are a distinct management unit of the Bering Sea. The complex has more than 10 commercially important species and many others of lesser or no commercial importance. This complex forms 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 the range of 1.7 to 2.4 million mt. This is calculated by summing the MSY's of individual species groups that are derived from species-by-species analysis. A reasonable verification of the MSY for the goundfish 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 to 2.4 million mt.

An ecosystem model of the Bering Sea developed by the Northwest and Alaska Fisheries Center (Laevastu and Larkins, 1981) shows that the mean exploitable biomass for the groundfish species covered by this FMP is about 9.3 million mt. This ecosystem model, the Prognostic Bulk Biomass (PROBUB) 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 mean exploitable biomass (9.3 million mt) suggests that the annual yield from it is probably much higher than the 1.7 to 2.4 million mt range estimated conservatively by the single species approach.

The ecosystem consideration also indicates that MSY of the groundfish complex may change if the present mix of species is altered substantially from the present period. Therefore, as changes take place, MSY for the complex may have to be re-examined.

11.2 Optimum Yield of the Groundfish Complex

The optimum yield (OY) of the groundfish complex is set equal to 85% of MSY or 1.4 to 2.0 million mt. This deviation from MSY reflects the combined influence of biological and socioeconomic factors. The important biological factors indicate that:

1. When considering condition of individual species within the complex, the OY range encompasses the summed ABC's of individual species for 1978-1981 (Low, et al. 1978; and Bakkala, et al. 1979, 1980, and 1981). This sum may be used as an indicator of the biological productivity of the complex, though not completely satisfactory, because multi-species/ecosystem interactions cannot be adequately taken into account. The 15% reduction of MSY further reduces the

risk associated with relying upon incomplete data and questionable assumptions in assessment models used to determine condition of stocks.

2. When considering multi-species/ecosystem models, the OY range is probably a conservatively safe level for the groundfish complex. The mean exploitable biomass of 9.3 million mt for the species groups (Laevastu and Larkins, 1981) suggests that the harvest level can be considerably higher than the OY range.

Although the multi-species/ecosystem models suggest that the harvest level can be higher than 2.0 million mt, it would only be so if the proper combination of exploitation rates by individual species commensurate to the natural balance of the groundfish complex are applied. This combination may not be desirable to the fishermen because the industry prefers only certain species. The recent catch history indicates that the present mix of species is socio-economically acceptable and that the groundfish complex should probably not be exploited at levels higher than 2.0 million mt at this time.

All of the socioeconomic considerations indicate that:

1. The OY range is not likely to have any significant detrimental impact on the industry. On the contrary, this range, when compared to the annual determination of OY, is more desirable because it creates a more stable management environment where the industry can consistently plan its activities with a minimum expectation of OY being equal to 1.4 million mt.

2. The OY range also covers actual catch levels during 1974-76 when the foreign fishery operated profitably before the MFCMA was implemented and is slightly higher than actual catches since then. It will allow the foreign fishery to operate near historic levels and yet offer considerable opportunities for domestic fishery expansion.

Therefore, the range of 1.4 to 2.0 million mt will be the OY of the Bering Sea/Aleutian Islands groundfish complex covered by this FMP unless the plan is amended. An amendment will be made when the status of the groundfish complex changes substantially from the present condition or when socioeconomic considerations dictate that OY should fall outside the present range. OY may also have to be re-examined if substantial change from the present mix of species occurs or is desired of the groundfish complex.

11.3 Total Allowable Catch (TAC)

The TAC's for the groundfish complex and of its component species groups will be determined by the Alaska Regional Director of NMFS by the end of the preceding fishing year. The TAC for the complex shall be within the OY range of 1.4 to 2.0 million mt.

Prior to the Regional Director's determination, the Council will hold public hearings and recommend TAC's for the complex and its species groups to him based on the best available data concerning the stocks and the fisheries. The Council's recommendations shall be based upon the following types of information:

Biological condition of the stocks -- resource assessment documents will be prepared for the Council by July 1 by the Plan Development Team with the assistance of the Northwest and Alaska Fisheries Center of NMFS, other agencies, or scientists. These documents shall provide information on:

a. historical catch trend;
b. estimate of MSY of the groundfish complex and its component species group;
c. estimates of ABC of the individual species groups and assessments on their condition of stocks;
d. assessments of the multi-species and ecosystem impacts of harvesting the groundfish complex according to species ABC's, including considerations of rebuilding depressed stocks; and
e. alternative harvesting strategies of the component species groups;

The Council's recommendation of TAC's for the complex and its' species groups shall also be based on socioeconomic considerations that are to the overall benefit of the nation, such as:

a. the need to promote efficiency in the utilization of fishery resources, including minimizing costs;
b. the need to manage for the optimum marketable size of a species;
c. the impact of groundfish harvests on prohibited species and the domestic target fisheries which utilize these species;
d. the desire to enhance depleted stocks;
e. the seasonal access to the groundfish fishery by domestic fishing vessels;
f. the commercial importance of a fishery to local communities;
g. the importance of a fishery to subsistence use;
h. the need to promote utilization of certain species; and
i. any other factors deemed appropriate.

11.3.1 Reserves

When the TAC for the groundfish complex is determined by the Council, 15% of the TAC is set aside as a reserve. This reserve is used for (a) unexpected expansion of the domestic fishery, (b) correction of operational problems of the fishing fleet, (c) unexpected adjustments of species TAC's according to the condition of stocks during the fishing year, and (d) allocations.

The reserve is not designated by species or species groups and will be apportioned to the fishery during the fishing year by the Regional Director in amounts and by species that he determines to be appropriate. The apportionment of the reserve must be consistent with the most recent assessments of resource conditions and should not be detrimental to various components of the groundfish complex unless the Regional Director can support his determination that the socioeconomic considerations listed in Section 11.3 or overall fishery operational problems dictate otherwise. The Regional Director may also withhold reserves for conservation reasons.

11.3.2 Allocations to Fishery

As described above when the TAC is determined, it is reduced by 15 percent to form the final reserve. The remaining 85 percent of the TAC is then apportioned to DAP, JVP, and TALFF (in that order) as deemed appropriate by the Regional Director, after consultation with the Council.

11.4 Derivation of DAH and TALFF Amounts

Amounts of DAH (= DAP + JVP) for each species or species group established for the beginning of the fishing year shall equal the amount of those species harvested by domestic fishermen during the previous year plus any additional amounts the Regional Director projects to be necessary to satisfy the needs of the growing domestic fishery. These supplemental amounts will be based on projected increase in (1) U.S. processing capacity and/or intention to process and (2) U.S. harvesting capacity and/or intention to harvest. The TALFF amounts for each species or species group will be established from the following equation: TALFF = TAC - DAH - Reserve (see Table 23-1).

11.5 Reapportionment of Reserve and Unneeded DAH

At any time, the Regional Director may assess DAH and apportion to DAH any amounts from the reserve for domestic fishery expansion that are needed in order to prevent a closure of the domestic fishery. As soon as practicable after April 1, June 1, August 1, and on such other dates as he determines necessary, the Regional Director shall apportion to TALFF any portion of DAH or the reserve for domestic fishery expansion that he determines will not be harvested by United States fishing vessels during the remainder of the fishing year.

When the Regional Director determines that apportionment is required on dates other than those scheduled and that immediate action is necessary to increase a TALFF or DAH amount, he may decide that such an adjustment is to be made without affording a prior opportunity for public comment. Public comments on the necessity for, and the extent of the apportionment, shall then be submitted to the Regional Director for a period of 15 days after the effective date of such action.