AGENDA D-4
FEBRUARY 1984

M E M O R A N D U M

TO: Council, AP and SSC Members

FROM: Jim H. Branson
Executive Director

DATE: January 24, 1984

SUBJECT: Gulf of Alaska Groundfish

ACTION REQUIRED

I. Consider the sablefish by-catch limit on joint venture permits.

II. Reaffirm restriction on bottom trawls in the foreign pollock fishery.

BACKGROUND

I. Consider the sablefish by-catch limit on joint venture permits.

At the December 1983 meeting the Council was asked to raise the sablefish by-catch limit on joint venture permits from 1.5% to 5%. Action on the request was scheduled for this meeting in order to give the public time to comment. A change in the limit can be implemented administratively by NMFS upon a Council recommendation.

We have the following information on this subject: sablefish by-catch rates in 1983 Gulf of Alaska joint venture fisheries; 1984 Gulf of Alaska sablefish apportionments and amounts of sablefish necessary for planned 1984 joint ventures at different by catch rates.

A. Sablefish by-catch rates in 1983 Gulf of Alaska joint venture fisheries.

The NMFS observer program has furnished sablefish by-catch rates in four 1983 joint venture fisheries:

1. Shelikof Strait Winter Pollock Fishery (midwater trawl)

Target Species	% composition (by wt.) of total catch
pollock	99.6%
sablefish by-catch	0.003%

2. Shelikof Strait-Summer Fishery (bottom trawl)

Target Species	% composition (by wt.) of total catch
Pacific cod	44.01%
pollock	25.39%
flounders	16.83%
sablefish by-catch	4.75%

3. Kodiak Summer/Fall Fishery (east of 154°W Long.)(bottom trawl)

Fishery A

Target Species	% composition (by wt.) of total catch
flounders	51.28%
Pacific cod	22.95%
pollock	11.92%
sablefish by-catch	0.59%

Fishery B

Target Species	% composition (by wt.) of total catch
pollock	55.97%
flounders	25.48%
Pacific cod	12.97%
sablefish by-catch	2.50%

4. Western Gulf Summer/Fall Fishery (W. of 154°W. long.)

Target Species	% composition (by wt.) of total catch
All rockfish	46.97%
Atka mackerel	12.74%
pollock	8.9%
Pacific cod	7.96%
sablefish by-catch	3.67%

B. 1984 Sablefish Apportionments

Table 1 shows the sablefish OY, DAP, JVP, Reserves and TALFF as established at the December 1983 meeting.

Table 1

1984 Gulf of Alaska Sablefish Apportionments (mt)

Area	OY	Reserve	DAP	JVP	TALFF
Western	1,670	334	300	50	986
Central	3,060	612	1,541	110	797
W. Yakutat	1,680	336	1,344	0	0
E. Yakutat	1,135	0	1,135	0	0
Southeast outside	1,435	0	1,435	0	0
Southeast inside	500	0	500	0	0
Totals	9,480	1,282	6,255	160	1,783

C. Amounts of sablefish necessary for joint ventures at different by-catch rates.

Table 2 shows the amounts of sablefish necessary for joint ventures based on different by-catch rates. The amounts are based on an estimated catch of 30,426 mt of groundfish to be caught with bottom trawls in 1984 joint ventures. Gulf-wide sablefish JVP is currently set at 160 mt.

Table 2

Sablefish Amounts Required at Different By-catch Rates in JVPs

By-catch rate	Sablefish (mt)
1.5%	456
2.0%	608
2.5%	761
3.0%	913
3.5%	1,065
4.0%	1,217
4.5%	1,369
5.0%	1,521

Note:

1984 sablefish TALFF = 1,783 mt
Reserves = 1,282 mt
1984 potential sablefish foreign catch = 2,065 mt

D. We have received a number of letters on this item. They are included here for your reference as Agenda Items D-4(a) through D-4(e).

II. Reaffirm restriction on bottom trawls in the foreign pollock fishery.

At the December 1983 meeting, the Council discussed a restriction on the use of bottom trawl gear by foreigners to take any total allowable level of foreign fishing (TALFF) for pollock above 100,000 mt. With the pollock OY increased by the Council to 400,000 mt for 1984, TALFF will likely increase

Table 1

Tube Drift of Black Bellied Hyperlinnaeus (pc)

Area	OY	Reserve	TAE	JVP	Tally
Western	1,910	134	900	50	956
Central	3,080	612	1,124	110	707
U. Kaloosa	1,080	336	1,344	0	0
L Yakuba	1,135	0	1,125	0	0
Southeast outside	1,413	0	1,439	0	0
Southeast inside	500	0	500	0	0
Totals	9,000	1,272	6,255	160	1,763

c. Amounts of subsidy necessary for joint ventures at different by-reach rates.

Table 2 shows the amounts of subsidy necessary for joint ventures based on different by-reach rates. The amounts are based on an estimated depth of 93,42' ft of groundfish to be caught with bottom trawls in 1986 joint ventures. Gulf-wide pubic-fish JVP is currently set at 160 mt.

Table 2

Subsidy Amounts Required at Different By-reach Rates in JVPs

By-reach rate	Subsidy (mt)
1.5%	450
2.0%	608
2.5%	761
3.0%	913
3.5%	1,065
4.0%	1,217
4.5%	1,369
5.0%	1,521

Note:

1986 subsidies TALF = 1,783 mt
Reserve = 1,262 mt
1985 potential subsidies foreign vatch = 2,045 mt

b. We have received a number of letters on this item. They are included here for your reference as Agenda Items D-4(a) through D-4(e).

7. Specific restriction on harvest levels in the foreign policies fishery.

In the December 1982 meeting, the Council directed a restriction on the use of bottom trawl gear by foreigners to make any total allowable level of foreign fishing (TALF) for periods above 100,000 mt. When the policy is increased by the Council to 400,000 mt for 1984, TALF will likely increase

and the halibut by-catch could increase to unacceptable levels. A ceiling for the foreign fishery of 100,000 mt of pollock taken by bottom trawls would probably prevent the incidental halibut catch from increasing above current levels.

At the Council's request, the Environmental Assessment/Initial Regulatory Flexibility Analysis to Amendment 13 (where the pollock OY was increased and the Western and Central Regulatory Areas were combined), was expanded to include discussion of the halibut by-catch problem, the need for a restriction, and the regulatory alternatives. Four alternatives for a bottom trawl restriction were discussed and analyzed. They are: (1) permit only 100,000 mt of pollock to be taken by foreign bottom trawl gear; (2) allow no more than 1,200 mt of halibut to be incidentally taken by the foreign bottom trawl fishery for pollock; (3) permit only 100,000 mt of pollock or 1,200 mt of incidentally caught halibut by the foreign bottom trawl fishery for pollock; and (4) maintain the status quo (no restriction). The expanded EA was sent out for public review on January 23 and the review period is scheduled to end at this meeting. Following a review of public comments, the Council needs to reaffirm their desire to impose a restriction on foreign bottom trawling for pollock and select a preferred alternative.

and the height breached would increase to unacceptable levels. A ceiling for foreign fishery of 100,000 mt of pollock taken by bottom trawls would probably prevent the incidental herring catch from increasing above current levels.

If the Council's request, the Environmental Assessment/Initial Regulatory Flexibility Analysis in Amendment 13 (where the pollock OY was increased and the Western and Central Regulatory Areas were combined), was expanded to include discussion of the halibut bycatch problem, the need for a reduction, and the regulatory alternatives. Four alternatives for a bottom trawl restriction were developed and analyzed. They are: (1) permit only 100,000 mt of pollock to be taken by foreign bottom trawl gear; (2) allow no more than 1,200 mt of halibut to be incidentally taken by the foreign bottom trawl fishery for pollock; (3) permit only 100,000 mt of pollock or 1,200 mt of incidentally caught halibut by the zone in bottom trawl fishery for pollock; and (4) maintain the status quo (no restriction). The expanded EA was sent for public review on January 25 and the review period is scheduled to end at this meeting. Following a review of public comments, the Council needs to establish their desire to impose a restriction on foreign bottom trawling for pollock and select a preferred alternative.

January 20, 1984

DRAFT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT/ INITIAL REGULATORY FLEXIBILITY ANALYSIS FOR AMENDMENT #13 TO THE FISHERY MANAGEMENT PLAN FOR GROUNDFISH OF THE GULF OF ALASKA

INTRODUCTION

The domestic and foreign groundfish fishery in the 3-200 mile fishery conservation zone of the Gulf of Alaska is managed under the Fishery Management Plan for the groundfish fishery of the Gulf of Alaska (FMP). This FMP was developed by the North Pacific Fishery Management Council (Council), approved by the Assistant Administrator for Fisheries, NOAA (Assistant Administrator) on February 24, 1978, and implemented by a final rule, effective December 1, 1978 (48 FR 52709, November 14, 1978). A final environmental impact statement was prepared for the FMP and is on file with the Environmental Protection Agency. Since that time, eleven FMP amendments have been implemented. Amendment 11 (48 FR 43044, September 21, 1983) included a measure that increased the optimum yield (OY) for pollock in the Central Regulatory Area from 95,200 mt to 143,000 mt. Also, on the basis of Council action in July 1983 an interim emergency rule to raise the pollock OY in the Central Regulatory Area from 143,000 mt to 183,000 mt was implemented, but was effective only through December 31, 1983.

At the Council meeting in September 1983 the plan maintenance team (PMT) for Gulf of Alaska groundfish reported that the exploitable biomass of pollock and amount of pollock potentially available for harvest had increased substantially for the Western and Central Regulatory Areas (see Figure 1). Based on this new scientific information the Council raised the pollock OY in the Western and Central Regulatory Areas at the December 1983 meeting. The Council also amended the FMP to combine the pollock OY in the Western and Central Regulatory Areas, since new surveys and data indicated the pollock resource is probably a single unit in these two areas. Both the OY increase and the combination of the Western and Central Regulatory Areas constitute Amendment 13.

With an increased pollock OY, an increase in foreign fishing is expected and a concurrent increase in the incidental catch of Pacific halibut. Therefore, the Council is considering a limitation on foreign catches with bottom trawls to prevent an increase in the incidental halibut catch in the foreign pollock fishery. If approved the limitation will be added to Amendment 13. The limitation on foreign bottom trawling is the subject of this supplemental environmental assessment. Copies of the draft environmental assessment on Amendment 13, circulated for public review last November, are available from the Council office.

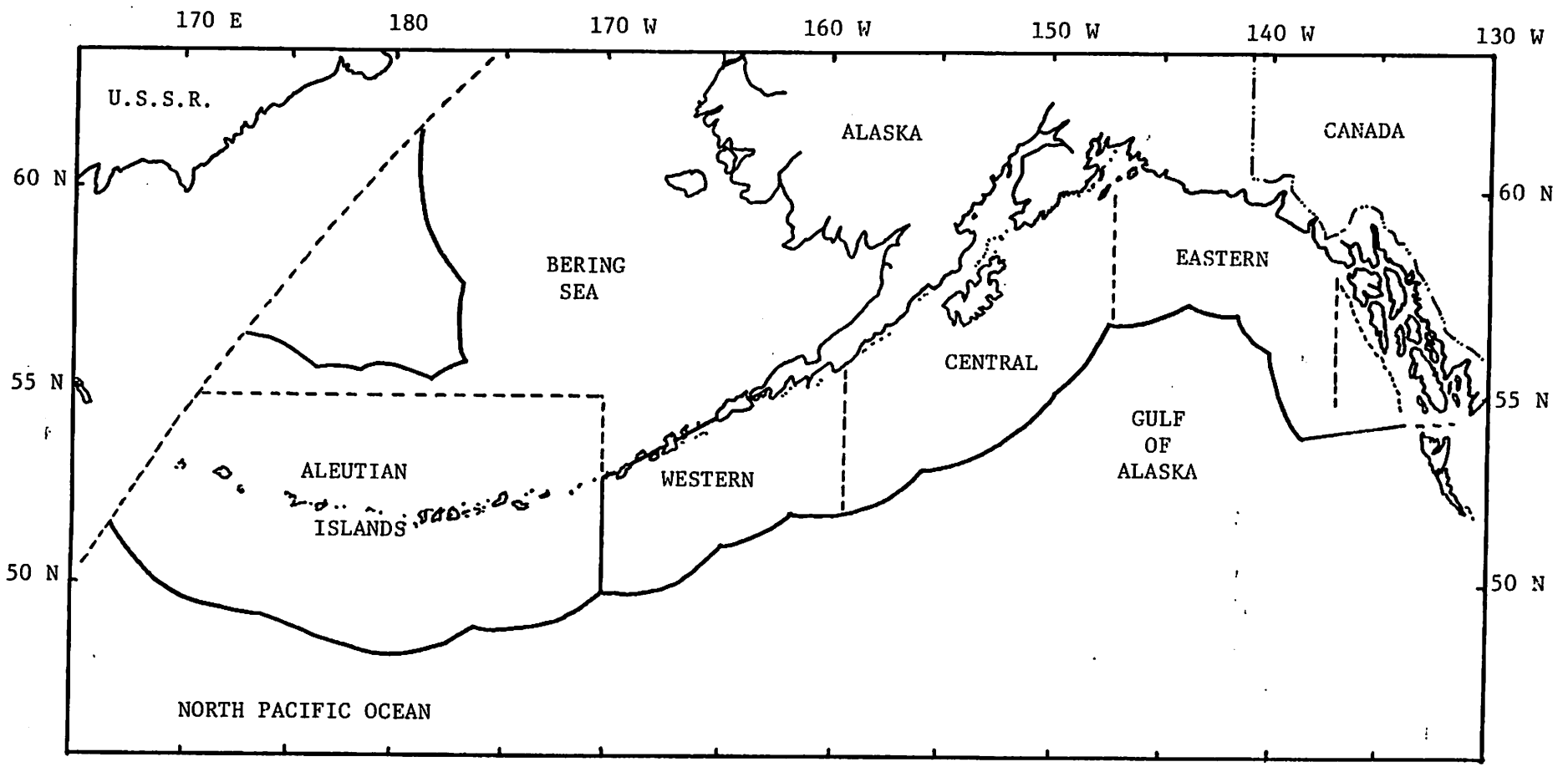

Fig. 1 Major regulatory areas of the Bering Sea and Aleutian Islands Groundfish and Gulf of Alaska Groundfish Fishery Management Plans.

The U.S. fishery for pollock in these areas is expected to take approximately 77,000 mt more in 1984 than it did in 1983, but those fish will be taken almost entirely in the winter/spring fishery in Shelikof Strait. That fishery is conducted with pelagic (midwater) trawls and takes only trace amounts of halibut, salmon and crab, therefore the increase in U.S. catches of pollock is not considered in this environmental assessment.

This supplemental environmental assessment is prepared under Section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA) and its implementing regulations to determine whether an environmental impact statement must be prepared on a possible amendment to the FMP to restrict foreign bottom trawling to prevent an increase in halibut by-catch in the foreign pollock fishery.

DESCRIPTION OF NEED FOR THE POSSIBLE AMENDMENT

A description of the need for the possible amendment follows:

Prevent an increase in the foreign incidental halibut catch.

The Council wants to prevent an increase in the Pacific halibut by-catch in the foreign pollock fisheries.

The draft environmental assessment for Amendment 13 discusses increasing the pollock OY in the Western and Central Regulatory Areas from 200,000 mt to as high as 450,000 mt. Results of resource assessment surveys since 1975 and recent scientific analyses of other data indicate the pollock stocks in the Gulf of Alaska have increased in terms of total exploitable biomass and in the amount of pollock available for harvest. If OY is increased beyond what U.S. fishermen will harvest the total allowable level of foreign fishing (TALFF) will also increase. Any increase in pollock TALFF could result in greater harvests of prohibited species, particularly Pacific halibut.

Pacific halibut are often caught by foreign and domestic vessels fishing for pollock using bottom trawl gear. The Gulf of Alaska Groundfish FMP requires that foreign vessels operating in this fishery must minimize their incidental catch of halibut and may not retain halibut. The latter is intended to prevent covert targeting on halibut. The FMP does not specifically prohibit domestic groundfish fishermen from retaining halibut, but does state that the FMP will be "in accordance with existing state and federal statutes." These statutes prohibit the retention of halibut in all but the directed halibut fishery and other domestic hook and line fisheries which occur during openings of the halibut fishery.

Although retention is prohibited, halibut are often caught and the released individuals may not survive. Thus, the incidental catch of halibut is a source of mortality and a loss in potential yield in the domestic halibut fishery. Since 1977, the estimated annual incidental halibut catch of foreign and domestic fisheries in the Gulf of Alaska has ranged from 3,100 mt to 5,000 mt. The high levels of incidental catch that are estimated to have occurred suggest that present restrictions may not be adequate.

Until 1980, over 90% of the foreign halibut catch was taken by the trawl fishery; their by-catch averaged 1,702 mt between 1977-1982, and ranged from a high of 2,365 mt in 1979 to a low of 1,138 mt in 1982. Since 1979, the incidental catch of halibut by the foreign trawl fishery has decreased, but an increase in pollock OY would allow it to rise unless restrictive measures are applied. By 1982, only 43% of the incidental halibut catch was taken by foreign trawl vessels, almost all the rest by foreign longline ships. The decline in the trawl incidental catch can be partially attributed to the prohibition in the use of bottom trawl gear during the winter months, selective time-area closures, and different fishing patterns.

With pollock OY alternatives ranging from 200,000 mt to 450,000 mt, 1/ potential TALFF values (if reserves were released to foreign fishing) could range from 0 mt to 215,340 mt. Recent foreign pollock harvests have averaged 98,000 mt. Recent annual incidental catches of halibut by foreign trawlers fishing for pollock have averaged 1,166 mt. In December 1983 the Council selected a pollock OY of 400,000 mt for 1984. This OY will likely increase foreign pollock harvests (assuming reserves are released to the foreign fishery) by about 65,000 mt over recent levels. Given current foreign fishing patterns and gear types, such an increase in pollock harvests will increase the incidental catch of halibut.

The halibut resource in the Gulf of Alaska, while improving, is still below historical optimum levels. The improvement in stock status is in part due to a determined stock rebuilding program, and any additional halibut caught by the foreign pollock fishery would undermine this effort.

DISCUSSION OF ALTERNATIVES

The Council is currently developing a prohibited species amendment to the Gulf of Alaska Fishery Management Plan to control the crab and halibut by-catch by all fisheries in the Gulf of Alaska. One of the objectives of the amendment will be to hold the total crab and halibut by-catch in all trawl fisheries at approximately the 1981-82 average level. The preparation of such a comprehensive amendment is a long and time-consuming process and will not be completed until late 1984. Rather than wait for a comprehensive prohibited species amendment, the Council is considering an interim measure for the pollock fishery to prevent the foreign incidental halibut catch from increasing but still allow an opportunity for other nations to fish for any pollock surplus to U.S. needs.

Three alternatives and the status quo may be considered in limiting the halibut by-catch in the foreign Gulf of Alaska pollock fishery.

1/ Draft Environmental Assessment on Amendment 13 to the Fishery Management Plan. Groundfish of the Gulf of Alaska, November 14, 1983.

A. (Alternative 1) Permit only 100,000 mt of pollock to be taken by foreign bottom trawl gear.

This alternative would respond to the problems identified in the Statement of Need, above, that led to the formulation of the amendment. The 100,000 mt ceiling on foreign pollock harvest taken by bottom trawls was selected as the level that would hold the incidental halibut catch at current levels. Recent catches of pollock and halibut by the foreign trawl fishery have averaged 98,000 mt and 1,166 mt respectively. A foreign harvest of pollock of 100,000 mt would allow approximately 1,200 mt of halibut to be caught given historic foreign fishing patterns and gear. Bottom trawl gear catches more halibut than other types of trawl gear. Bottom trawl gear has traditionally been used by most foreign nations fishing for pollock. Prohibiting the use of bottom trawl gear for harvesting pollock after the 100,000 mt ceiling has been reached should keep the incidental halibut catch at historic levels while providing foreign fleets the opportunity to harvest additional pollock TALFF by switching to pelagic trawl gear.

The disadvantage of this alternative is it is based on the assumption that halibut by-catch rates in the foreign pollock fishery will continue at the present level. If by-catch rates increase because of increased halibut abundance, a change in fishing technique, or environmental conditions, more halibut would be caught prior to the 100,000 mt pollock ceiling triggering the prohibition of bottom trawl gear. That would be contrary to the Council's objective of preventing an increase in the halibut by-catch. Conversely, a decrease in halibut catch rates could unnecessarily restrict foreign vessels to 100,000 mt of any pollock TALFF using bottom trawl gear, when they could possibly continue to use bottom trawls without any increase in the total incidental catch of halibut.

B. (Alternative 2) Allow no more than 1,200 mt of halibut to be incidentally taken by foreign bottom trawl gear.

This alternative would also respond to the problems identified in the Statement of Need, that led to the formulation of the amendment. The 1,200 mt ceiling on foreign incidental halibut catch in the pollock fishery was selected as the level which best approximates current foreign trawl halibut by-catch levels. The Council's objective to hold halibut catches at current levels would be met with this alternative. Bottom trawl gear would be prohibited when the 1,200 mt halibut by-catch ceiling had been reached.

As with the preceding alternative, this alternative is based on the assumption that incidental halibut catch rates by foreign trawlers will continue at approximately the present level. However, unlike Alternative 1, if the catch rate should increase, no more than 1,200 mt of halibut would be allowed in the bottom trawl fishery for pollock. Once the 1,200 mt halibut ceiling is reached, foreign vessels, regardless of the amount of pollock they had already taken, would have to switch to a different gear type. If the incidental halibut catch rate should decrease, foreign vessels would be allowed to harvest pollock with bottom trawl gear until either 1,200 mt of halibut or their full allocation of pollock had been caught.

C. (Alternative 3) Permit only 100,000 mt of pollock or 1,200 mt of incidentally caught halibut by foreign bottom trawl gear.

Alternative 3 combines Alternatives 1 and 2. It too would respond to the problems identified in the Statement of Need.

This alternative proposes establishing a dual ceiling for bottom trawl catches of either 100,000 mt of pollock or 1,200 mt of halibut. Upon reaching any one of these two levels, foreign vessels would not be able to catch any more pollock with bottom trawl gear. The advantages of Alternatives 1 and 2, would exist under this alternative. However, unlike Alternative 1 halibut catch rates would not effect the total allowable level of incidentally caught halibut. If halibut catch rates should increase, no more than 1,200 mt of halibut would be allowed in a foreign bottom trawl fishery for pollock. The disadvantage of this alternative is the same as Alternative 1. Even if halibut by-catch rates should decrease foreign vessels would only be allowed to use bottom trawl gear until 100,000 mt of pollock was harvested. Any additional pollock TALFF that remains could only be fished with pelagic trawl gear. This alternative may unnecessarily restrict foreign trawl operations. However, if halibut catch rates decrease, it would permit an actual reduction in overall halibut by-catch. It should be noted that both the 100,000 mt pollock level and the 1,200 mt halibut by-catch level reflect the approximate catch of these two species by foreign trawlers in recent years.

D. (Alternative 4) Maintain the status quo.

Under this alternative, any increase in pollock TALFF would result in an increase in incidental halibut catch. Recent halibut incidental catch rates in foreign bottom trawl fisheries have been about one metric ton of halibut captured for every 92 mt of pollock, or .011 mt of halibut for every one metric ton of pollock. With pollock OY alternatives ranging from 200,000 mt to 450,000 mt,[2/] potential TALFF values (if reserves were released to foreign fishing) could range from 0 mt to 215,340 mt. Given the recent halibut catch rates, incidental by-catch could range from 0 mt to 2,341 mt.

In light of the current efforts to rebuild the Gulf of Alaska resource and the uncertainty as to what the incidental halibut catch would be in the foreign pollock fishery, this alternative is unacceptable.

POSSIBLE ENVIRONMENTAL IMPACTS

The management measure proposed in this section is a relatively minor adjustment to the current management regime for pollock management, the implementation of which will not have significant impacts on the biological and physical environment. The prohibition against the use of bottom trawl gear should prevent an increase of incidental halibut catch over recent levels. No significant impacts or changes on the biological and physical environment are expected.

2/ Set at 400,000 mt by Council in December 1983. Estimated TALFF will be 165,340 mt in 1984.

IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT

I. Costs and benefits of changes in OY and the level of foreign fishing.

Costs

Impact on Consumer Prices. The variation in foreign catch which is expected under the range of alternatives for a bottom trawl restriction is about 94,000 mt, or about 8% of the 1982 combined U.S. and foreign pollock catch off Alaska of 1,180,470 mt, and only 2% of the total world wide pollock catch of about 3.9 million mt. Only about 5% of foreign-caught pollock from FCZ waters returns to U.S. markets. The amount of pollock made available by an OY increase is likely far too small to influence prices for U.S. consumers. If this action did affect price of the consumer level, it would tend to cause downward pressure on price, since any changes in supply would be increases, rather than reductions, compared to foreign catches of pollock from the Gulf in recent years.

Impact on Prohibited Species. Certain species of fish and shellfish taken incidentally in foreign operations are commercially important to U.S. fishermen who target on them. While only insignificant amounts of these species are caught by the U.S. joint venture fisheries discussed, large amounts may be caught by foreign fisheries and U.S. fisheries for sole or Pacific cod. These species are Pacific halibut, king crab, Tanner crab, and salmon which, when caught by trawlers, must be sorted from the catch and returned immediately to the sea regardless of their condition. Mortality from handling is thought to be fairly high for animals caught in trawls.

Based on an analysis of average catch rates of these species during 1982 by foreign trawl fisheries, the impact on the U.S. salmon, crab, and halibut fisheries can be estimated for the various levels of TALFF plus reserves associated with the preferred management alternative and any OY options. However, it is the halibut and salmon resources which could be most severely affected by foreign trawling in the Gulf of Alaska, and so only the effects on those resources are analyzed below.

The technique for evaluating the loss to domestic fishermen from the foreign halibut by-catch is illustrated below (details are found in Marasco and Terry) using the proposed OY of 400,000 mt, and assuming that reserves are caught by foreign nations:

TALFF + Reserves	165,340 mt	
* Halibut Loss (mt)[1/]	1,488-1,984	
Halibut Loss (fish)	187,488-249,984	
* Annual Natural Mortality	20%	
* Years to Target Fishery	4	
Net Loss to Target Fisheries (fish)	76,795-102,393	
* Domestic Utilization	100%	
* Av. Dressed Wt.	36 lbs.	
Net Loss (mt)	1,254-1,672	
* Real Ex-Vessel Price (@$1.13/lb.)	$2,492/mt	
* Real Discount Rates	5%	10%
Discounted Ex-Vessel Losses	$2,545,306-3,393,741	$2,050,292-2,733,722

1/ *0.009-0.012 mt halibut/mt pollock
*Average weight at incidental capture = 17.5 lbs.

* Denotes assumptions used in this analysis.

Using the same methodology, applied to salmon by-catches by foreign fleets, estimates of the discounted gross ex-vessel loss due to salmon interception were about $168,000, or about $17 per fish. Key assumptions in the analysis for salmon are:

(1) Foreign catch is 165,000 mt (corresponding to an OY of 400,000 mt)

(2) Salmon by-catch rate is 0.06 salmon/mt pollock in bottom trawl fisheries

(3) Annual natural mortality rate is 10%.

(4) Years to target fishery is 1.7 for chinook salmon, 0.5 for chum salmon.

(5) Utilization by domestic fishermen is 100%.

(6) Average round weight at capture in a target fishery is 24 lb. for chinook; 7 lb. for chum.

(7) Species mix of salmon in foreign incidental catch is 85% chinook, 15% chum.

(8) Real ex-vessel prices are $1.15 per lb for chinook, $0.55/lb. for chum.

(9) Real Discount Rate is 10%.

Benefits

Ex-Vessel Value to U.S. Fisheries. The management measures being considered here are not expected to interfere with domestic fleets or their catches, since only the amount of foreign harvest is expected to vary. Thus, there are no impacts on U.S. ex-vessel value.

Foreign Fees. The U.S. Government charges a tonnage fee for groundfish caught by the foreign fisheries off Alaska to compensate the government for the cost of managing the fishery. The fee for pollock in 1984 is $28/mt. It is expected that with the 1984 OY at 400,000 mt and TALFF plus reserves equal to about 165,000 mt, $4.62 million would be collected. The foreign fees collected at the beginning of the fishing year are supposed to be calculated only to cover the cost of managing the foreign fishery, according to NOAA policy, and so, if there is not a foreign fishery for pollock, there should be no associated costs to the United States. Because of the current policy, it is questionable whether foreign fees represent a benefit to the U.S.

Comparing the gross ex-vessel halibut loss with the benefit derived from foreign fees. This is somewhat questionable, especially since the foreign fees collected under current NOAA policy do not represent any long-term net benefit at all. In the short term, though, unanticipated shortfalls or surpluses in fee collecting resulting from policies which change the level of foreign harvest must be considered as net gains or losses, since the fee setting system is not responsive enough to adjust to such changes over periods shorter than a year.

A real problem with such a comparison is that in the halibut fishery benefits accrue not only at the producer level (the fisherman) but also at the processing, marketing and consumer levels. These benefits have not been quantified, but do exist and are probably substantial. Therefore, while there are benefits of raising the pollock to a level which provides enough fish for the U.S. fisheries, it cannot be determined that providing more fish to allow a directed foreign fishery results in a quantifiable net benefit.

There may be other non-quantifiable benefits associated with a pollock OY level which permits a directed foreign fishery. These may be policy considerations, such as the desire to encourage foreign investment in the U.S. fishing industry, or to encourage over-the-side purchases.

II. Institution of a bottom trawl prohibition.

As can be seen in the calculation on p. 10, the projected incidental catch of halibut by foreign trawlers in the Central and Western Gulf is roughly 1,500-2,000 mt, considerably higher than the historic levels of about 1,170 mt. The Council was quite concerned about this level of halibut incidental catch, and wished to examine several alternatives designed to keep the halibut incidental catch at no more than current levels.

Each of these alternatives, discussed earlier, involves placing a bottom trawl prohibition on foreign fleets when either pollock or halibut by-catches reach certain levels. Once the triggering point of the bottom trawl prohibition is reached, foreign fleets may only continue fishing for pollock with off-bottom gear, which will ensure that no further halibut interception occurs. However, because pollock may continue to be harvested in the water column, there appears to be some risk of higher salmon interception.

It is useful to examine the implications of each alternative for reducing halibut by-catch in light of its expected effects on salmon by-catch and total pollock harvest. To do so, it is necessary to consider two important factors: (1) what is the likely foreign fleet reaction to a bottom trawl prohibition, and (2) what is the expected rate of halibut by-catch?

Foreign pollock fisheries in the Central and Western Gulf have predominantly used on-bottom gear, so it is not easy to predict what foreign fleets will do in response to a restriction on use of bottom trawls. One response which is thought to be likely is for foreign fleets to simply stop fishing and go home. Japanese and Korean fleets, which take the preponderance of the pollock catch currently, have rarely used pelagic gear, so it is conceivable that they might conclude re-gearing and fishing with the off-bottom gear is not desirable. However, other fleets (notably the Poles) have fished for pollock with pelagic gear in the Gulf of Alaska, and they might step in and take advantage of a fishing opportunity should the Japanese or Koreans quit fishing. Foreign fleet response to the bottom trawl prohibition is important to predicting the total foreign pollock catch and the level of any increases in salmon incidental catch.

Another variable of concern is the incidence rate for halibut interception. Environmental factors or fleet behavioral responses could influence this, and it in turn influences the amount of halibut caught, when a bottom trawl prohibition would be triggered, and the amount of pollock harvest using off-bottom gear (if any) and the resulting salmon catch.

To help evaluate the alternatives for reducing halibut by-catch, Table 1 was prepared. The effect of each of the alternatives on halibut, salmon and pollock catch by foreign fleets is considered for three different halibut catch rates and two assumptions about foreign fleet responses to the bottom trawl prohibition. The halibut catch rates encompass the range of observed rates in foreign fisheries in recent years, from about .004 mt halibut per metric ton of pollock to about .017 mt halibut per mt of pollock, with a mean of roughly .011 mt halibut per metric ton of pollock.

One factor which might lead to a lower than average halibut by-catch rate is changes in fishing strategy, particlularly if the incentive were an increased pollock harvest, which could be the case under management Alternative 2. On the other hand, halibut abundance has been increasing in recent years, and it is possible that the by-catch rate for 1984 will be higher than average, all other things being constant. If neither tendency predominated, an average by-catch rate might be expected.

Table 1. Implications of management alternatives for expected foreign catches of pollock, halibut, and salmon, under different conditions of halibut by-catch rate and foreign fleet response to bottom trawl prohibition.

Management Alternative	Halibut by-catch rate (mt halibut/ mt pollock)	Foreign Fleet Response to Bottom Trawl Prohibition					
		Discontinue Fishing			Continue Fishing		
		Pollock (mt)	Halibut (mt)	Salmon (# fish)	Pollock (mt)	Halibut (mt)	Salmon (# fish)
(1) Pelagic gear when pollock = 100,000 mt	low (.004)	100,000	400	6,000	165,000	400	32,000
	avg. (.011)	100,000	1,100	6,000	165,000	1,100	32,000
	high (.017)	100,000	1,700	6,000	165,000	1,700	32,000
(2) Pelagic gear when halibut = 1,200 mt	low (.004)	165,000	660	9,900	165,000	660	9,900
	avg. (.011)	109,000	1,200	6,500	165,000	1,200	28,900
	high (.017)	71,000	1,200	4,300	165,000	1,200	41,900
(3) Pelagic gear when pollock = 100,000 mt or halibut = 1,200 mt	low (.004)	100,000	400	6,000	165,000	400	32,000
	avg. (.011)	100,000	1,100	6,000	165,000	1,100	32,000
	high (.017)	71,000	1,200	4,300	94,000	1,200	41,900
(4) Status quo: no bottom trawl prohibition	low (.004)	165,000	660	9,900	165,000	660	9,900
	avg. (.011)	165,000	1,815	9,900	165,000	1,815	9,900
	high (.017)	165,000	2,805	9,900	165,000	2,805	9,900

The two extremes of fleet responses to a bottom trawl prohibition are chosen for illustration. In one case, foreign fleets are assumed to discontinue fishing when the prohibition goes into effect, while in the other case considered, foreign fleets are assumed to continue fishing with pelagic gear until the full amount of TALFF + reserves (about 165,000 mt) are taken.

The status quo has been defined for this analysis to be a foreign harvest equal to TALFF plus reserves, or about 165,000 mt with a 400,000 mt OY. It is assumed that in the absence of any bottom trawl prohibition, all the pollock will be caught on bottom, with a resulting incidental catch of halibut. This catch of halibut is expected to range from 660 mt with a low (.004) incidence rate to 2,800 mt with a high (.017) incidence rate; at average incidence rates (.011), about 1,800 mt of halibut would be caught. Historical data suggests that in foreign bottom trawl fisheries, salmon are intercepted at a rate of about 0.06 salmon per metric ton of groundfish. Thus, the status quo salmon catch would be expected to be about (165,000 mt pollock)(0.06 salmon/mt pollock) = 9,900 salmon. Small numbers of crab are taken by foreign fleets with bottom trawls, but the amounts are so small that they can be assumed to be constant for all policies evaluated here, including the status quo.

Each management alternative is compared against this baseline, in terms of its effects in the catch of pollock, halibut and salmon.

Under Alternative 1, the bottom trawl prohibition would go into place when foreign pollock catches reached 100,000 mt; the amount of halibut by-catch would depend on the by-catch rate observed in the fishery.

Alternative 1 has the disadvantage that if halibut by-catch rates are high, the foreign halibut by-catch could be as much as 500 mt higher than current levels. Under this alternative, if the foreign fleets discontinued fishing when the gear restriction went into place, total pollock catch would be only 100,000 mt irrespective of halibut catch. The 65,000 mt of combined TALFF plus reserves would not be taken. Should foreign fleets decide to continue fishing with pelagic gear, it should be possible to catch the entire pollock quota, but it would probably come at the expense of higher salmon interceptions. It has been assumed for this analysis that salmon are intercepted at a rate of 0.4 fish/mt of pollock in pelagic fisheries, a figure which corresponds to the 1978-81 catches by a Polish fleet using pelagic gear during the period October - February. Thus, approximately (65,000 mt pollock)(0.4 salmon/mt pollock) = 26,000 salmon might be caught.

Alternative 2 triggers the bottom trawl prohibition when halibut by-catch reaches 1,200 mt, so the amount of pollock caught on-bottom versus off-bottom is dependent on the halibut by-catch rate. If the pollock are caught on-bottom, more halibut are caught incidentally, while if they are caught off-bottom, more salmon are intercepted.

Table 2 compares each alternative, in terms of the changes in foreign salmon, halibut and pollock catch each would cause. Since the tradeoffs depend on how foreign fleets react to a bottom trawl prohibition, each assumption about foreign fleet behavior will be discussed separately.

Table 2. A comparison of the changes (from the status quo) in foreign catches of pollock, salmon, and halibut expected to occur under each management alternative and varying halibut by-catch conditions and different foreign fleet responses to the bottom trawl prohibition.

Halibut by-catch rate (mt halibut/ mt pollock)	Management Alternative	Foreign Fleet Response to Bottom Trawl Prohibition					
		Discontinue Fishing			Continue Fishing		
		Pollock (mt)	Halibut (mt)	Salmon (# fish)	Pollock (mt)	Halibut (mt)	Salmon (# fish)
Low (.004)	1	-65,000	-260	-3,900	0	-260	+22,100
	2	0	0	0	0	0	0
	3	-65,000	-260	-3,900	0	-260	+22,100
Average (.011)	1	-65,000	-715	-3,900	0	-715	+22,100
	2	-56,000	-615	-3,400	0	-615	+19,000
	3	-65,000	-715	-3,900	0	-715	+22,100
High (.017)	1	-65,000	-1,105	-3,900	0	-1,105	+22,100
	2	-94,000	-1,605	-5,600	0	-1,605	+32,000
	3	-94,000	-1,605	-5,600	0	-1,605	+32,000

A. Foreign fleets stop fishing when the bottom trawl prohibition is triggered.

If it is assumed that foreign fleets will stop fishing and go home when a bottom trawl prohibition is instituted, all of the management alternatives will result in lower catches of salmon and halibut compared to the status quo (no restriction), because the foreign pollock harvest will be lower, with one exception noted below.

(1) Low by-catch rates.

The one exception to this general statement is that if foreign halibut by-catch rates are very low (perhaps because of a change in their targeting strategy), Alternative 2 (bottom trawl prohibition when halibut catch = 1,200 mt) proves not to be a constraint to foreign fleets, and they can catch the entire quota of 165,000 mt with a halibut by-catch of less than 1,200 mt. In this case, Alternative 2 results in no reduction of halibut and salmon catch compared with the status quo, but the total halibut by-catch is low enough not to be a problem.

In comparison, with low by-catch rates, Alternative 1 would provide even greater protection for halibut, because the bottom trawl prohibition would be triggered at 100,000 mt of pollock catch even though halibut by-catch was fairly low. Foreign halibut by-catch would be only 400 mt, instead of 660 mt, because of the fact that foreign fleets catch only 100,000 mt instead of 165,000 mt of pollock. Salmon catches would also be proportionately lower (6,000 fish instead of 9,900). With low by-catch rates, the effects of Alternative 3 (the hybrid of Alternatives 1 and 2) are the same as for Alternative 1, since the 100,000 mt pollock ceiling would be the binding constraint.[3/]

(2) Average halibut by-catch rates.

At medium or average halibut by-catch rates, all the alternatives provide about equal protection for halibut, because they permit an about-equal harvest of pollock with bottom trawls. Because Alternative 2 allows a slightly greater pollock harvest before the gear restriction is triggered and fleets go home (109,000 mt vs. 100,000 mt for Alternative 1), the salmon and halibut catch is slightly higher, though both alternatives result in substantial reductions in salmon and halibut catch compared with the status quo, because they limit the amount of pollock taken on-bottom to less than 110,000, while with no gear restriction foreign fleets could take the entire 165,000 mt with bottom trawls. Alternative 3, the hybrid, acts like Alternative 1 in this instance also, since the 100,000 mt pollock ceiling is the first one reached.

3/ If lower than average halibut by-catch rates are the result of foreign fleets changing their targeting behavior because of the incentive of catching more pollock with bottom trawls, low halibut by-catch rates may not be observed if Alternative 1 or 3 is chosen. The reason is that Alternatives 1 and 3 do not provide the incentives for halibut avoidance that Alternative 2 does, since the bottom trawl prohibition is triggered at a pollock catch of 100,000 mt regardless of how low the halibut catch is. Alternative 2 allows foreign fleets to catch up to the full 165,000 mt with bottom gear so long as their halibut catch is less than 1,200 mt.

(3) High halibut by-catch rates.

At the higher end of halibut by-catch rates, Alternative 2 achieves a substantially greater halibut savings than Alternative 1, because in no circumstance can halibut by-catch with bottom trawls exceed 1,200 mt. Alternative 1 in fact fails to meet the Council's objective, since with a halibut by-catch rate of .017 mt halibut/mt pollock, this alternative would permit 1,700 mt of halibut to be caught before the bottom trawl prohibition went into effect; this is some 500 mt higher than current levels. Alternative 3 in this instance is identical to Alternative 2, since the halibut by-catch limit of 1,200 mt is the binding constraint on foreign fleets.

B. Foreign fleets continue fishing when the bottom trawl prohibition is triggered.

If it is assumed that foreign fleets continue fishing with midwater gear once the bottom trawl prohibition is instituted, halibut by-catch is unchanged since midwater gear avoids halibut. However, the pollock quota is attained at the expense of greater interceptions of salmon with pelagic gear. In this instance the determining factor is how much of the pollock are taken with midwater vs. bottom gear.

If Alternative 1 is chosen, the same amount of pollock (65,000 mt) will be caught with midwater gear regardless of the halibut catch. The net effect of Alternative 1 on salmon interceptions, compared to the status quo, is an increase of about 22,000 salmon.

In contrast, the effect of Alternative 2 on salmon interceptions depends on the halibut by-catch rate. At low halibut by-catch rates, most or all of the foreign pollock catch of 165,000 mt is caught with bottom trawls, so little or none of it is taken up in the water column. Thus, little or no salmon interception occurs. At low to average halibut by-catch rates, Alternative 2 causes a lower increase in salmon interceptions than does Alternative 1. At high halibut by-catch rates, Alternative 2 triggers the bottom trawl restriction at pollock catches of less than 100,000 mt, so in this circumstance the proportion of the 165,000 mt foreign pollock catch taken with pelagic gear is higher, and salmon interceptions are correspondingly higher.

Alternative 3, a hybrid of Alternatives 1 and 2, provides the most consistent protection of halibut of any for the whole range of possible halibut by-catch rates. This is achieved at the expense of a somewhat lower catch of pollock, if fleets quit fishing when the gear restriction is applied, or at the expense of a somewhat higher catch of salmon, if the foreign fleets switch to pelagic gear and continue to fish.

SUMMARY

The tradeoffs posed by the alternative forms of a bottom trawl prohibition depend on the foreign fleet responses to the gear restriction. Should foreign fleets stop fishing when the prohibition is implemented, they will generally harvest less pollock than would otherwise be possible. (The one exception is the case where Alternative 2 is chosen and foreign fleets manage to achieve very low halibut by-catch rates. However, in this case halibut by-catch is

not a problem anyway.) Thus, since foreign pollock harvests using bottom trawls are lower, the incidental catch of salmon and halibut is lower. The tradeoff is achieving reductions in halibut and salmon by-catch at the expense of lower foreign pollock harvests.

On the other hand, should foreign fleets continue to fish with pelagic gear once the bottom trawl prohibition goes into effect, the foreign pollock harvest will reach 165,000 mt in every case, and there will be no reduction in pollock harvest from the status quo (no gear restriction). However, there will in virtually all cases be an increase in salmon interceptions because part of the pollock catch will be taken with pelagic gear, which intercepts salmon at a considerably higher rate than does bottom gear. (The only exception is the same one just discussed. If Alternative 2 is chosen and foreign fleets can reduce their halibut by-catch rates enough, they may be able to take the entire 165,000 mt with bottom trawls and avoid fishing with pelagic gear.) Thus, in this situation the extra pollock taken by foreign fleets with pelagic gear comes at the expense of higher salmon interceptions. As Table 2 shows, the management alternatives trade off differing amounts of salmon catch for various savings of halibut.

The first part of this discussion identified the sources of benefits and costs which result from the choice of OY level, and as a result, the level of TALFF. The discussion of benefits and costs of the OY decision are also applicable to the second management problem, which is an evaluation of alternative forms of a bottom trawl prohibition. Each different type of bottom trawl prohibition is expected to result in different foreign catches of pollock, halibut and salmon. Since the gross costs and benefits resulting from different levels of these catches are linear, they are proportional to the expected changes in catch.

With an OY of 400,000 mt and a potential foreign harvest (TALFF + reserves) of 165,000 mt, the foreign catch of pollock will range from 71,000 to 165,000 mt depending on the type of bottom trawl prohibition chosen and conditions in the foreign fishery. Fees received from pollock are $28/mt, and in this instance should be treated as a net gain or loss to the nation as a whole, since they are short term surpluses or shortfalls which were unanticipated when the 1984 fee schedule was set.

The foreign catch of salmon is expected to range from 4,300 to 41,900; an approximation of the gross ex-vessel loss per fish to domestic salmon fisheries is $17/fish, as noted earlier. Halibut by-catch is expected to range from 400 mt to 2,800 mt, depending on the alternative chosen; and approximation of the gross ex-vessel loss to domestic halibut fishermen is $1,400-$1,700/mt, based on the calculations on p. 10. It is extremely important to emphasize, however, that halibut and salmon are both fully utilized by American industry, and the gross losses may be substantial underestimates of the accumulated net losses to domestic harvesting, processing, and marketing sectors of the fishing industry.

EFFECTS ON ENDANGERED SPECIES AND ON THE ALASKA COASTAL ZONE

For reasons discussed above, none of the alternatives would constitute an action that "may affect" endangered or threatened species or their habitat within the meaning of the regulations implementing Section 7 of the Endangered Species Act of 1973. Thus, consultation procedures under Section 7 will not be necessary on the proposal and its alternatives.

Also, for the reasons discussed above, each of the alternatives would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Management Program within the meaning of Section 307(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

FINDINGS OF NO SIGNIFICANT ENVIRONMENTAL IMPACT

For the reasons discussed above, it is hereby determined that neither approval and implementation of any of the reasonable alternatives concerning the pollock OY would significantly affect the quality of the human environment, and that the preparation of an environmental impact statement on these actions is not required by Section 102(2)(C) of the National Environmental Policy Act or its implementing regulations.

Assistant Administrator for Fisheries, NOAA Date

AGENDA D-4(a)
FEBRUARY 1984

ICICLE SEAFOODS, INC.

ICICLE COURT BUILDING
4019 - 21ST AVENUE WEST
P.O. BOX C99309
SEATTLE, WASHINGTON 98199
(206) 282-0988
TELEX 32-8832 PFICICLE SEA

RECEIVED JAN 2 3 1984

January 18, 1984

Mr. Ray Arnaudo
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL
P.O. Box 103136
Anchorage, Alaska 99510

Dear Mr. Arnaudo:

It is our understanding that the North Pacific Fishery Management Council will be reviewing a proposal to allow for additional increases in incidental catch of black cod by joint venture catcher vessels. We are opposed to this proposal, and request that the Council not allow any such additional increases in incidental J/V black cod harvest.

With the ever-increasing U.S. fleet, and the conservation needs of the resource, an increased incidental catch by J/V catcher vessels is neither justified nor consistent with the established goals of the fishery.

Previous testimony before the Council indicated that when J/V catcher vessels were catching black cod, the fish were so small that they could not be sold to buyers in Kodiak. Since the size of this long-lived, low natural mortality species, is not increasing, further pressure by J/V catcher vessels, harvesting juvenile fish, will only put unnecessary pressure on an already "low" and "rebuilding" resource.

Once again, we are opposed to any additional increases in incidental black cod harvest by J/V catcher vessels. The juvenile black cod are the future of a viable, domestically controlled fishery, and a detriment to current marketing conditions. In addition to the problem of size, general -

quality and appearance of drag-caught black cod makes it the least desirable form to sell behind long-line and pot-caught. The U.S. industry does not need quality problems for a product base that is trying to expand and develop.

Very truly yours,

ICICLE SEAFOODS, INC.

Robert F. Brophy

Robert F. Brophy
President

RFB:pbl:33

cc: Robert Morgan
Rick Lauber
Jim Branson

RECEIVED JAN 10 1984

AGENDA D-4(b)
FEBRUARY 1984

FISHING VESSEL OWNERS' ASSOCIATION
INCORPORATED
ROOM 232, C-3 BUILDING
FISHERMEN'S TERMINAL
SEATTLE, WASHINGTON 98119
(206) 284-4720

ACTION	ROUTE TO	INITIAL
	Exec. Dir.	
	Deputy Dir.	
	Admin. Off.	
	Exec. Sec.	
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	
	[illegible]	

January 5, 1984

Chairman Jim Campbell
North Pacific Management Council
P.O. Box 103136
Anchorage , Ak. 99510

Dear Mr. Campbell:

This letter is to request that the North Pacific Management Council not allow additional increases in the incidental catch of blackcod by any of the Joint Venture catcher vessels. We make this request based on the conservation needs of the blackcod resource as well as the bio-economic considerations. The following arguments we feel are adequate nctto allocate additional blackcod to Joint Venture vessels.

1. The Pacific Council has gone to a size limit of 22 inches on blackcod. One of their published rationals for this was due to a considerable increase in catch in 1982 and most of the increase in harvest being of fish 22 inches and samller, it was felt catches of such immature sablefish could limit the reproductive potential of the stock by removing fish which never had spawned, eventually depleting the resource.

2. The testimony of Dave Harville, at the last North Pacific Management Council meeting verified that the Tawianese Joint Venture catcher vessels when they caught blackcod were catching fish so small the Kodiak buyers would not even offer any price for them.

3. The conclusions made by the National Marine Fisheries Service in their report on BIO-ECONOMIC CONSIDERATIONS OF HARVESTING SABLEFISH BY LONGLINE AND TRAWL GEAR IN THE GULF OF ALASKA, stongly support a targeted longline operation on blackcod rather than allowing a targeted trawl fishery due to the fact that you maximize the value of the resource by 76% more by having a longline fishery rather than a trawl fishery on blackcod.

4. The Councilmust decide what the long range harvest plan will be for blackcod. Do we harvest the resource now as

juveniles for the United States domestic fishery involved in an at sea Joint Venture or do we wait until those juvenile blackcod grow up and let United States vessels deliver the same fish for shoreside processing. We feel those juvenile fish are the heritage of tomorrows domestically controlled fishery rather than a quick fix for an interum phase of Joint Venture activity.

We have enclosed copies of the two reports and request the Council to make this letter available to the SSC as well as the enclosed documents in light of consideration of increasing the percentage of blackcod to domestic trawlers delivering in joint venture activities.

We request that the Council prepare an amendment to the Gulf of Alaska Groundfish Plan for a 22 inch size limit on blackcod for the Gulf of Alaska and Bering Sea.

Very truly yours,

FISHING VESSEL OWNERS ASS'N

Robert D. Alverson, Manager

1983

PACIFIC COAST GROUNDFISH

FINAL REGULATIONS

For Sablefish, Widow Rockfish, and Sebastes Complex

50 CFR Part 663

[Docket No. 30223-29]

Pacific Coast Groundfish Fishery

AGENCY: National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of inseason adjustments and request for comments.

SUMMARY: NOAA issues this notice announcing restrictions to reduce the levels of commercial fishing for widow rockfish, the other *Sebastes* rockfish except Pacific ocean perch and shortbelly rockfishes (the *Sebastes* complex), and sablefish taken off the coasts of Washington, Oregon, and California, and seeks public comment on these reductions.

These actions are authorized under regulations implementing the Pacific Coast Groundfish Fishery Management Plan and are necessary because signs of biological stress to these stocks have been identified or are projected to occur

before the end of 1983. These actions are intended to reduce fishing rates and to avoid the necessity of a fishery closure before the end of the year.

DATE: Effective date: 0001 PST March 1, 1983. Comments will be accepted through March 15, 1983.

ADDRESSES: H. A. Larkins, Director, Northwest Region, National Marine Fisheries Service, 7600 Sand Point Way NE, BIN C15700, Seattle, Washington 98115 or Alan Ford, Director, Southwest Region, National Marine Fisheries Service, 300 South Ferry Street, Terminal Island, California 90731.

FOR FURTHER INFORMATION CONTACT: H. A. Larkins, 206–527–6150, or Alan Ford, 213–548–2575.

SUPPLEMENTARY INFORMATION: The Pacific Coast Groundfish Fishery Management Plan (FMP) was approved on January 4, 1982, and final implementing regulations were published October 5, 1982 (47 FR 43984). The regulations allow the Secretary of Commerce (Secretary) to reduce fishing levels if it is determined that continued fishing at current levels would cause biological stress to any species.

The Pacific Fishery Management Council (Council), at its November and January meetings, discussed evidence of biological stress for widow rockfish, at least one species of rockfish within the multi-species *Sebastes* complex, and sablefish. The Council designated a Task Group of representatives from its membership, its Groundfish Management Team (Team), the fishing industry and State fishery agencies to recommend methods to reduce fishing levels with minimal disruption to the fishing industry. The Council considered advice from its Team (State and Federal fishery and social scientists), Groundfish Advisory Subpanel (fishing industry and consumer representatives), Scientific and Statistical Committee (State, Federal, and university scientists), the concerned public, and the Task Group. The Council's recommendations and Secretarial actions on those recommendations are presented below.

The FMP differentiates between numerical and non-numerical optimum-yield (OY) species. Those species which may be harvested fairly selectively have a numerical OY, which is the maximum amount of that species which may be landed in a year; landings in excess of OY are prohibited. Widow rockfish and sablefish have numerical OYs. Species which are not harvested selectively, which often are harvested together, which are of very little commercial interest, or about which there is little scientific data, are part of the non-numerical OY group and are managed by gear, area, and catch restrictions. An estimate of the acceptable biological catch (ABC), the annual catch that could be taken without jeopardizing a resource's productivity, has been made for most species in this group. Some species in the non-numerical OY group may be fished above the ABC. However, when a species in the group is stressed, or will be before the end of the year, the Council must determine whether harvest of the group as a whole should be reduced even though some species in the group may not be stressed. The *Sebastes* complex (all *Sebastes* species managed under the FMP except Pacific ocean perch and shortbelly and widow rockfishes) is included in this non-numerical OY group.

WIDOW ROCKFISH

Council Recommendation: At its meeting on January 12–14, 1983, in Portland, Oregon, the Council endorsed the Task Group proposal which recommended that the Secretary impose coastwide a 30,000 pound trip limit for widow rockfish, subject to inseason adjustment so that the OY is not exceeded before the end of 1983.

Rationale: Signs of stress were documented for widow rockfish *(Sebastes entomelas)* in 1982 and a trip limit of 75,000 pounds (round weight) per vessel per fishing trip was imposed on October 13, 1982 (47 FR 46287). (Round weight is the weight of the whole fish.) The 1983 ABC and OY were reduced to 10,500 metric tons (mt), about half the 1982 levels. Subsequent review by the Team at the Council's meeting on November 17–18, 1982, revealed that the signs of stress identified in August 1982 were evident still and were expected to persist into 1983. The catch of widow rockfish for the 1983 calendar year was projected to exceed the best current estimate of ABC, 10,500 mt; previously fished grounds had become markedly less productive, causing effort to be turned toward new grounds (which, consequently, became less productive); and increasing proportions of juvenile fish (juvenescence) were caught in areas where effort had been high. The Team indicated that it is unlikely that any large unexploited concentrations of widow rockfish will be found off Washington, Oregon, and California in 1983. The Secretary concurred with the Council's recommendation that the 75,000 pound trip limit should be extended into 1983 until alternate management measures could be analyzed and adopted (48 FR 809, January 7, 1983).

Secretarial Action: The Secretary concurs with the finding of continuing stress and hereby replaces the 75,000 pound trip limit with a coastwide trip limit allowing no more than 30,000 pounds (round weight) of widow rockfish to be taken and retained, or landed, per vessel per fishing trip until the trip limit is modified, superseded, or rescinded. This trip limit may be modified inseason as outlined in the paragraphs below on inseason adjustments. Landings of widow rockfish in excess of OY are prohibited according to 50 CFR 663.21(b).

Impacts: This action will have its greatest impact on vessels which would have landed more than 30,000 pounds of widow rockfish per trip. In 1982, widow rockfish were landed predominantly by midwater trawlers targeting on this species. The average landings of widow rockfish in 1982 for this gear type was about 45,000 pounds coastwide. Although landings per trip will be reduced, this measure is the least economically harmful way to preserve a year-round fishery for widow rockish while providing biological protection for the species. The impact may be neutralized to some extent because landings in 1983 are expected to be much smaller than in 1982 due to depletion of the resource and a reduction in effort due to vessels leaving this fishery.

Sebastes Complex

Council Recommendation: The Council adopted the Task Group's recommendation for a coastwide trip limit of 40,000 pounds of the *Sebastes* complex per vessel per trip which could be adjusted in-season so that the annual catch in the Vancouver-Columbia area would be about half-way between the 1982 landings and the sum of the 1983 ABCs for the complex (preliminarily estimated at 13,500 mt). This goal is a compromise between no restriction and the severe restriction required to achieve the aggregate ABCs in 1983.

Rationale: The *Sebastes* complex includes all the *Sebastes* rockfish species in the non-numerical OY group, and thus excludes Pacific ocean perch, shortbelly and widow rockfishes, and *Sebastolobus* species. The *Sebastes* complex consists of yellowtail (*Sebastes flavidus*), canary (*S. pinniger*), chilipepper (*S. goodei*), black rockfish (*S. melanops*), blue rockfish (*S. mystinus*), bocaccio (*S. paucispinis*), copper rockfish (*S. caurinus*) cowcod (*S. levis*), darkblotched rockfish (*S. crameri*), greenspotted rockfish (*S. chlorostictus*), olive rockfish (*S. serranoides*), redstripe rockfish (*S. proriger*), rougheye rockfish (*S. aleutianus*), sharpchin rockfish (*S.*

zacentrus), silvergrey rockfish (*S. brevispinis*), splitnose rockfish (*S. diploproa*), stripetail rockfish (*S. saxicola*), vermilion rockfish (*S. miniatus*), yellowmouth rockfish (*S. reedi*), and yelloweye rockfish (*S. ruberrimus*). Preliminary figures for 1982 indicate that coastwide landings for the complex exceeded the sum of the species ABCs. Yellowtail and canary rockfishes comprised 70 percent of the landings from the Vancouver-Columbia area in 1982, and their landings exceeded their summed ABCs by a factor of two.

Landings of yellowtail in the Columbia area have been twice the ABC the last five years. The exploitable biomass of yellowtail rockfish in the Vancouver-Columbia area is currently below a level expected to produce MSY. The Team documented biological stress for yellowtail rockfish and recommended lowering the 1983 ABC below MSY in those two areas with the intent of rebuilding stocks to MSY levels.

Landings of canary rockfish exceeded ABC in the Columbia area in four of the last five years, and were three times ABC in 1982. Catch per unit of effort for canary rockfish has declined in the Vancouver area since 1977. The Team feels earlier estimates of MSY and ABC were too high and recently set an interim ABC in the Vancouver area at 800 mt, the highest landing of record.

Landings of the other *Sebastes* complex species in the Columbia area in 1983 are projected to exceed the sum of the best current estimates of ABC, which means that some species will be harvested well above levels providing MSY.

The Council acknowledged the impossibility of managing these species individually, agreed that major components of the *Sebastes* complex were likely to be stressed in 1983 if current levels of fishing continued, and asked the Task Group to consider management regimes to reduce pressure on the *Sebastes* complex as a whole.

Secretarial Action: The Secretary concurs with the Council's determination of biological stress on the *Sebastes* complex and hereby announces a coastwide trip limit allowing no more than 40,000 pounds (round weight) of the *Sebastes* complex to be taken and retained, or landed per vessel per fishing trip unless modified, superseded, or rescinded. This trip limit may require modification in-season so that 1983 landings in the Vancouver-Columbia area do not exceed a level about half way between the 1982 landings and the 1983 aggregate ABC. (See the paragraphs below on in-season adjustments.)

Impacts: Vessels that traditionally have landed more than 40,000 pounds of the *Sebastes* complex per trip from the Vancouver or Columbia areas will be most restricted by this limit. In 1982, the *Sebastes* complex was landed predominantly by larger trawlers using roller gear and targeting on these species. Nevertheless, less than seven percent of the landings of the *Sebastes* complex, by all gear types, were greater than 40,000 pounds in the Vancouver-Columbia area in 1982. Accordingly, most gear types will not be affected significantly by this limit. Landings of this complex in the Eureka, Monterey, and Conception areas were below 40,000 pounds per trip in 1982. Consequently, the trip limit is not expected to inhibit operations in these three southern areas where no signs of stress are evident.

Sablefish

Council Recommendation: The Council adopted the Task Group recommendation for a minimum size limit of 22 inches (total length) for sablefish; applying it to fish taken north of Point Conception and setting a trip limit for incidentally caught sablefish smaller than 22 inches at 333 fish, 1,000 pounds, or 10 percent by weight of all sablefish retained, whichever is greatest, per vessel per trip. The recommended 22-inch size limit does not apply to Monterey Bay. The Council was uncertain of the applicability of this size limit to the fishery south of Point Conception because of reports that many sablefish landed in the Conception area have been smaller than 22 inches and there is no consensus as to whether this is a nursery area or whether the fish there mature at a smaller size. The sablefish fishery in the Conception area is not well developed; less than 600 mt were landed there in 1982. The Council will reconsider sablefish management for the area south of Point Conception at its March meeting. The separate OY of 2,500 mt for the Monterey Bay area is unchanged.

Rationale: In 1982, the OY for sablefish (*Anoplopoma fimbria*) was increased by 30 percent, from 13,400 mt to 17,400 mt, to forestall closing the fishery unnecessarily because stress was not evident or predicted at the then current fishing levels. When landings were projected to exceed the increased OY, the Secretary imposed a very restrictive trip limit (3,000 pounds round weight per vessel per trip) for the last two months of 1982, rather than prohibit all landings, because (1) the regulations had recently been implemented and the fishing industry had not been warned of an impending closure; (2) the Team was not able to document signs of biological stress resulting from landings above 13,400 mt and had no new data to evaluate landings near 17,400 mt; (3) targeting on sablefish would be curtailed; and (4) waste would be reduced by allowing incidentally caught sablefish to be landed rather than discarded. (*See*, 47 FR 49620 and 47 FR 56138.)

In its reevaluation of 1983 ABCs, the Team found no reason to change the ABC from its 1982 level of 13,400 mt because it was based on the best scientific data available. The Team acknowledged that data on sablefish are not complete, but also noted that if ABC were based on average landings over the past five years, ABC would be quite close to, but slightly below, 13,400 mt. The Team felt that continued fishing at the levels experienced in 1982 (above 17,400 mt) would produce a fishing mortality rate exceeding that required to take ABC in 1983, and likely would cause biological stress to the sablefish resource. Most of the increase in 1982 landings is attributed to small sablefish, less than 22 inches long (total length). Continued catches of immature sablefish (less than 25% are mature at 22 inches) could limit the reproductive potential of the stock by removing fish which never had spawned, eventually depleting the resource. The Council acknowledged that, if 1982 fishing patterns were repeated in 1983, OY would be exceeded before year's end, and the harvest would be dominated by young sablefish.

Secretarial Action: The Secretary accepts the Council's recommendations and hereby announces for sablefish taken and retained, or landed, in the area north of Point Conception (34°27' N. latitude), excluding Monterey Bay (37°00' to 36°30' N. latitude), a minimum size limit of 22 inches (total length), except for a trip limit for sablefish smaller than 22 inches of 333 fish, 1,000 pounds (round weight), or 10 percent (round weight) of all sablefish retained, whichever is greatest, per vessel per fishing trip. Total length is measured from the tip of the snout (mouth closed) to the tip of the tail (pinched together) without resort to mutilation of the fish or additional force. For sablefish which have been "headed," the minimum size limit will be 16 inches measured from the origin of the first dorsal fin (where the front dorsal fin meets the dorsal surface of the body closest to the head) to the tip of the upper lobe of the tail; the dorsal fin and tail must be left intact. No sablefish may be retained which is in such a condition that its length has been extended or cannot be determined by

the methods stated here. These provisions for sablefish will remain in effect until modified, superceded, or rescinded; they will be reviewed and adjusted as necessary when 95% of OY is reached (50 CFR 663.27(b)(3)). Landings of sablefish in excess of OY are prohibited according to 50 CFR 663.21(b).

Impacts: This action will restrict landings by vessels that land sablefish smaller than 22 inches. In 1982, these were predominantly trawlers, which, for the first time on record, contributed more than half the sablefish landed from waters off Washington, Oregon, and California. Most of the trawl-caught sablefish were smaller than 22 inches. Although many are taken incidentally in the deep-water Dover sole fishery and in shrimp trawls, some targeting also has occurred due to recently developed markets. The 22-inch size limit would reduce targeting on small sablefish, enabling more of the stock to spawn at least once, and should allow landings close to the 1983 OY. According to the FMP, maximum biological production and maximum economic production of sablefish occur at lengths of 24 and 28 inches, respectively. Consequently, this 22-inch size limit is more likely to achieve maximum production from the resource than unrestricted fishing on smaller fish. The Secretary believes that this size limit should confer the greatest overall benefit to the resource and the fishery, and would forestall both economic problems and the necessity to discard all sablefish regardless of size, that would result from complete closure of the fishery if OY were achieved much before year's end, as would be expected if the fishery is unrestrained.

Inseason adjustments: The Secretary agrees with the Council's recommendation that inseason adjustments should be established to enable annual goals to be met. Such inseason adjustments are authorized under § 663.22 of the implementing regulations.

For widow rockfish and sablefish, the 1983 goals are to prevent landings from exceeding the OYs. For the *Sebastes* complex in the Vancouver-Columbia area, the 1983 goal is for landings not to exceed a level half-way between the 1982 landings and the 1983 summed ABCs, preliminarily estimated at 13,500 mt.

After June 1, 1983, the Team will evaluate the best data available by that date and project landings for the first half of 1983. If the projected landings for widow rockfish, the *Sebastes* complex, or sablefish are within 10 percent of where they are expected to be on June 30, 1983, based on the 1982 fishing rates, no action will be taken. If the projected landings are not within 10 percent of the expected amount, the limit(s), including the trip limits for sablefish smaller than 22 inches, will be adjusted so that the annual goal(s) may be achieved. These mid-season adjustments will be implemented near July 1 or as soon as practicable thereafter. Other management actions may be imposed under the points-of-concern mechanism at any time of the year in response to a finding of further biological stress.

Other Fisheries

These limits for sablefish, widow rockfish, and the *Sebastes* complex apply to vessels of the United States, including those vessels delivering groundfish to foreign processors. For vessels delivering fish to foreign processors, the specified trip limits apply on a haul-by-haul basis. The limits are not applicable to foreign trawlers or joint venture processors operating in the Pacific whiting fishery because current foreign regulations are more restrictive than the limits announced in this notice. Sablefish and rockfish are taken incidentally in these operations.

Foreign trawlers operating in the directed fishery for Pacific whiting are limited by incidental catch levels of 0.173 percent sablefish and 0.738 percent rockfish (excluding Pacific ocean perch) based on a nation's allocation of whiting. In 1982, only 10,000 mt of whiting were allocated (with incidental catch limits of 17 mt of sablefish and 74 mt of rockfish, excluding Pacific ocean perch) and even less may be requested in 1983. If the foreign trawl fleet of any nation exceeds its incidental catch limit for any species, that foreign fishery will be terminated. Foreign incidental catches are not used in computation of OY and thus will not accelerate closure of the domestic fishery.

Joint venture processors are limited by incidental retention allowances of 0.173 percent sablefish and 0.738 percent rockfish (excluding Pacific ocean perch) based on the total allotment of whiting for joint venture processing (100,000 mt in 1983). In 1982, retention of sablefish and rockfish in the joint venture fisheries was far below allowed levels: about 23 sablefish and 1,000 pounds of rockfish (excluding Pacific ocean perch) were received per vessel per day by joint venture processors. Even in the worst possible case (if all the sablefish were smaller than 22 inches and all the rockfish were either widow rockfish or in the *Sebastes* complex), the 1982 catches were much lower than could be expected per vessel per day under trip limits of 333 small sablefish, 30,000 pounds of widows or 40,000 pounds of the *Sebastes* complex. Because U.S. fishermen are not paid for species that cannot be retained by the foreign processors, there is an economic incentive to avoid large amounts of incidentally-caught species. Joint-venture incidental catches to this point have not been used in computation of OY and thus will not accelerate closure of the shore-based domestic fishery.

Classification

The determination to impose these fishing restrictions are based on the most recent data available. The aggregate data upon which these determinations are based are available for public inspection at the Office of the Director, Northwest Region, during business hours until the end of the comment period.

These actions are taken under the authority of 50 CFR 663.23 and are taken in compliance with Executive Order 12291. The actions are covered by the Regulatory Flexibility Analysis prepared for the authorizing regulations.

Section 663.23 of the groundfish regulations state that the Secretary will publish a notice of proposed regulatory action before taking such action unless he determines that such notice and public review are impracticable, unnecessary, or contrary to the public interest. Because of the immediate need to limit the harvest of widow rockfish, the *Sebastes* complex, and sablefish; and thereby reduce catch levels which could otherwise result in overharvest, further delay of these actions is impracticable and contrary to the public interest. Anticipated fishing rates at the high levels of those in 1982 will unquestionably result in several ABCs being exceeded. Prompt action to reduce those fishing rates is necessary to protect the resource and alleviate the necessity for otherwise inevitable year-end closures. Consequently, these actions are taken without prior notice in the Federal Register and are made effective four days after filing for public inspection with the Office of the Federal Register in order to provide fishermen sufficient time to complete fishing trips and off-load their catches. The public has had opportunity to comment on trip limits for widow rockfish at the August, September, November, and January Council meetings, and at an industry meeting in Newport, Oregon. The sablefish size limit and *Sebastes* trip limit were discussed at both the November and January Council meetings, and public comment was solicited at the January Council meeting. The public participated in the Task Group meetings in December and

January that generated most of the management actions endorsed by the Council and the Secretary. Further public comments will be accepted for 15 days after publication of this notice in the Federal Register.

(15 U.S.C. 1801 *et seq.*)

List of Subjects in 50 CFR Part 663

Administrative practice and procedure, Fish, Fisheries, Fishing.

Dated: February 23, 1983.

Richard B. Roe,

Acting Deputy Assistant Administrator for Fisheries Resource Management, National Marine Fisheries Service.

[FR Doc. 83-5013 Filed 2-24-83; 8:45 am]

BILLING CODE 3510-22-M

AGENDA D-4(c)
FEBRUARY 1984

RECEIVED JAN 2 4 1984

Washington Fish & Oyster Company

A DIVISION OF
OCEAN BEAUTY SEAFOODS, INC.

P.O. BOX C-70739 • 1100 W. EWING ST.
SEATTLE, WASHINGTON 98107
CABLE: WAFCO
TELEX - INT'L. 32-1072 - DOM. 32-8721
206-285-6800

ACTION	INITIAL

January 19, 1984

Chairman Jim Campbell
North Pacific Fisheries Management Council
P.O. Box 103136
Anchorage, Alaska 99510

Dear Mr. Campbell:

We are concerned regarding the proposal to the Council which would permit a 5% incidental blackcod catch in the Kodiak Over The Side Joint Venture Flounder Fishery. We do not believe this proposal is in the best interest of the groundfish resources or the development of the U.S. harvesting and processing industry. Retention of non-target species such as blackcod would encourage vessels to be less diligent in seeking out areas and depths with clean populations of target species. It is our understanding that a very large percentage of the blackcod taken in this fishery would be of very small size. Harvesting blackcod at this state of development returns the least to the harvestors and eliminates the significant factors which would come into play through domestic processing of the fish after attaining maturity. It also eliminates any possibility of resource enhancement through reproduction by the fish taken in that fishery. Retention of these small fish for foreign processing and marketing reduces the opportunity for domestic processors to purchase blackcod from domestic harvestors and market that product in the same overseas markets. This ladder chain of harvesting, processing, and marketing would return a much greater benefit to the United States economy and foreign trade balance. We urge the Council to not accept this retention proposal.

Sincerely yours,

WASHINGTON FISH & OYSTER COMPANY

William S. Gilbert
Vice President

WSG:mc

AGENDA D-4(d)
FEBRUARY 1984

PACIFIC SEAFOOD PROCESSORS ASSOCIATION
1620 South Jackson Street
Seattle, Washington 98144
(206) 328-1205

RECEIVED JAN 2 4 1984

January 19, 1984

ACTION	ROUTE TO	INITIAL
	Exec. Dir.	
	Deputy Dir.	

Mr. James O. Campbell,
Chairman
North Pacific Fishery Management Council
P.O. Box 103136
Anchorage, Alaska 99510

Dear Chairman Campbell:

The Pacific Seafood Processors Association urges the North Pacific Fishery Management Council not to allow additional increases in the incidental catch of blackcod by any of the Joint Venture catcher vessels.

It is our understanding that Taiwanese Joint Venture catcher vessels were catching blackcod so small that U.S. buyers would not even offer a price for them. Allowing continued catching of the smaller size blackcod would eventually deplete the resource because these immature fish would be removed from the fishery before they have had a chance to reproduce or spawn.

It would seem obvious that the best interest of the United States would be served by allowing these juvenile fish to reach maturity when they could be harvested by U.S. vessels and delivered to shoreside plants for processing. These juvenile fish, if allowed to reach maturity, are part of the future resource to be utilized by the United States' industry.

We urge the Council to amend the Gulf of Alaska groundfish plan to include a 22" size limit on blackcod for the Gulf of Alaska and the Bering Sea.

Sincerely yours,

Robt. F. Morgan,
President

RFM:jc

cc: Kodiak Processors
William Gilbert

783-2922 Lundsten
284-9158

AGENDA D-4(e)
FEBRUARY 1984

HALIBUT

King of the Sea

DEEP SEA FISHERMEN'S UNION

OF THE PACIFIC

5215 Ballard Avenue N.W. Seattle, Washington 98107

RECEIVED JAN 2 4 1984

ACTION	ROUTE TO	INITIAL
	[illegible]	

January 19, 1984

Jim Campbell, Chairman
North Pacific Fishery Management Council
P. O. Box 103136
Anchorage, Ak., 99510

Dear Mr. Campbell and members of the Council:

Following the recent decision of the Council to prohibit foreign fishing of sablefish east of 159° and west of 140° until October, when a TALFF may or may not be granted, we would like to reccomend a few measures to ensure careful management of the stock.

First, this fishery is a new one. Not much is known, from domestic sources, of the habits of sablefish or of the catch patterns of the domestic fleet. Thus, we reccomend a 22-inch limit on sablefish. Travelling in the dark as we are in this new fishery, with insufficient funds available for proper monitoring of the fishery according to the MCFMA for anything but the Southeastern district (see Collinsworth's letter to Branson, 11/29/83), the most prudent course is at least to assure that we take the OY from the mature fish of the stock, and thereby allow for the continued reproductive potential of those fish. According to various sources (Pacific Council documents and data from the Alaska & Northwest Fisheries Center), 75% of 22-inch fish are mature. Also, since the Pacific Council has already enacted the same regulation, it would be a convenient measure for fishermen and processors dealing with fish from both areas.

Also, we reccomend, for much the same rationale, that the Council consider (or reccomend to NMFS) the establishing of sablefish charters. The lack of otoliths in delivered fish makes it difficult for dockside data-gathering (again see Collinsworth's letter to Branson) and, as is the case with the Halibut Commission, charters can actually generate income.

One obvious point to be made in any study of sablefish is whether or not these fish are one coastwide stock, various stocks, or predominantly local stocks. The Canadians seem to have more of their own domestic data than we; and, the Union encourages the U.S. to continue cooperation with the Canadians in these studies. If it seems to be an "international" stock, we urge the U.S. to consider an international commission on these fish as either part of the Halibut Commission or as a separate body modeled on the IPHC. Their scientific and statistical procedures are well-established and shown to be successful.

Longlining for sablefish is not a bonanza. But it is proving itself to be a decent living and a source of a high-quality product. In order to continue and enhance this fishery, we hope the Council pays attention to stocks we hope to see grow.

Sincerely,

MSL:rd

Mark S. Lundsten,
President