


MEMORANDUM

TO: Council, AP and SSC Members

FROM: Clarence G. Pautzke 
Executive Director

DATE: April 16, 1990

SUBJECT: Amendment 19/14: Pollock Roe Stripping and/or Seasonal Apportionments

ACTION REQUIRED

Final action on Amendment 19/14 (pollock roe stripping and/or seasonal apportionments) to the Gulf of Alaska and Bering Sea/Aleutian Islands Fishery Management Plans.

BACKGROUND

At its December meeting, the Council approved the Amendment 19/14 Environmental Assessment/Regulatory Impact Review subject to incorporation of SSC comments and several new options. The document was made available for 30-day public review on March 9. An executive summary is provided as item C-9(a). Draft sample regulations are included as item C-9(b). Public comments received by the April 9 deadline and a summary are included as item C-9(c). The five alternatives under consideration are:

1. Do nothing; maintain the status quo.
2. Prohibit the practice of roe-stripping in the pollock fisheries in the Gulf of Alaska and Bering Sea/Aleutian Islands, or portions thereof.
3. Require full utilization in the pollock fisheries in the Gulf of Alaska and Bering Sea/Aleutian Islands, or portions thereof.
4. Establish a seasonal apportionment schedule for pollock in the Gulf of Alaska and Bering Sea/Aleutian Islands, or portions thereof.
5. Prohibit pollock roe stripping and implement a seasonal apportionment schedule for pollock in the Gulf of Alaska and Bering Sea/Aleutian Islands, or portions thereof (a combination of alternatives 2 and 4).

Alternatives 4 and 5 include options to: prohibit pollock fishing during the roe season in the Gulf of Alaska and Bering Sea/Aleutian Islands, or portions thereof; establish separate TACs for pollock fishing during the roe and non-roe seasons in both areas, and restrict all Gulf of Alaska pollock trawl fisheries to the use of midwater gear.

Any alternative other than the status quo would be submitted to the Secretary of Commerce for approval and processed under the following target schedule:

- April 27: Council approves alternative other than status quo
- May 30: Submittal of final EA/RIR to Secretary of Commerce for review and approval
- June 5: Secretarial review begins
60 day public review period begins
- August 6: Public review period ends
- Sept. 10: Secretarial review ends
Amendment approved or disapproved
- Sept 25: Final regulations filed
- Oct 25: Amendment 19/14 implemented
- Jan 1, 1991: Groundfish fishery begins

**SUMMARY OF EA/RIR/IRFA FOR AMENDMENTS 19 AND 14
TO THE
FISHERY MANAGEMENT PLANS FOR THE GROUND FISH FISHERIES
OF THE GULF OF ALASKA
AND THE BERING SEA/ALEUTIAN ISLANDS**

POLLOCK UTILIZATION IN THE GROUND FISH FISHERIES OFF ALASKA

At its April 1989 meeting, the North Pacific Fishery Management Council requested that its groundfish plan teams prepare an amendment addressing roe-stripping. The Council reviewed the initial analysis in June and directed that a draft amendment package, including a draft environmental assessment/regulatory impact review/initial regulatory flexibility analysis (EA/RIR/IRFA), be released for public comment. The draft package was released in August.

In September, because of legal and procedural questions, the Council postponed action on this issue and instructed staff to revise the analysis and include an option of quarterly apportionments of pollock TACs. At that time the Council stated its intention to ban pollock roe-stripping and promote full utilization. It also postponed further consideration of action to consider full utilization of groundfish resources until more complete information on losses and discards is available. The Council examined the revised amendment package in December, requested modifications to the alternatives being analyzed, and recommended that it be distributed for public review as soon as practicable such that the Council could take final action at their April, 1990 meeting. Should the preferred alternative be other than the status quo, the package will be forwarded to the Secretary of Commerce for approval and implementation.

Since the amendment, if approved, would not take effect until mid-1990, a period in which pollock roe is no longer available, the Council took emergency action in December to regulate the 1990 pollock roe fishery. Specific measures recommended to the Secretary of Commerce include a prohibition on roe-stripping in the Gulf of Alaska and Bering Sea/Aleutian Islands and quarterly apportionments of pollock TACs for the Western and Central Gulf of Alaska. The emergency rule to prohibit roe-stripping in the Gulf of Alaska and the Bering Sea/Aleutian Islands was implemented on February 16 and will be in place for a 90-day period which will extend beyond the roe season. The quarterly apportionments of the Gulf of Alaska TACs were implemented under existing authority of the Regional Director to respond to a conservation emergency.

This document examines current pollock management in the Gulf of Alaska and the Bering Sea/Aleutian Islands with respect to the issues of roe-stripping and seasonal apportionments of pollock TACs.

Description of the Problem and Alternative Solutions

One of the principal objectives of the Magnuson Act is to provide an opportunity for the U.S. domestic fisheries to expand and replace the foreign and joint venture fisheries. The North Pacific Fishery Management Council and the National Marine Fisheries Service have taken a variety of actions to provide such an opportunity and to encourage the growth of domestic harvesting and processing capacity in the groundfish fisheries off Alaska. These actions have been successful. Capacity has increased rapidly in recent years and in 1990 the domestic groundfish industry is expected to harvest and process the entire pollock TACs for both the Gulf of Alaska and the Bering Sea, but not for the Aleutian Islands.

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This growth has provided employment and income for a large number of people in the groundfish industry and in support industries. The employment and income have resulted in increases in local, regional, state, and national economic activity. This growth has also increased U.S. net exports of fishery products.

However, because capacity continues to grow and has grown beyond the level necessary to fully utilize the pollock TACs, the demands for pollock of all the participants in the groundfish industry cannot be met and individual harvesting or processing operations are competing against each other for shares of the limited pollock TACs. The first intense competition for pollock in the domestic fishery occurred in the Gulf of Alaska in 1989. During the 1989 pollock roe fishery, factory/trawler and mothership operations harvested about 32,000 mt of pollock, approximately 53% of the initial Gulf of Alaska pollock TAC. This combined with an accelerated rate of harvest by vessels delivering to shoreside processors resulted in all of the initial TAC for the Western and Central Gulf being taken by the time the valuable roe fishery was closed in late March. Until the TAC was later increased, no TAC was available either for the pollock fisheries that had been expected to occur later in the year or for bycatch in other groundfish fisheries.

The unexpected level of competition by at-sea processors increased employment and income for those dependent on these operations and naturally decreased income and employment for those dependent on other sectors of the groundfish industry. The costs to the latter group were higher than they would have been had the change in the competition been expected and planned for.

That experience in the Gulf clearly demonstrated that there was an allocation problem. The problem was as follows: two or more fishing or processing operations wanted to use the same fish; the existing mechanism for allocating the pollock TAC among competing uses was the race for fish; and some people, including those that didn't do as well as they had expected to do with this allocation mechanism, didn't think the resulting allocation of the pollock TAC among the competing uses was appropriate.

There was not a similar situation in the BSAI in 1989, because the pollock TACs exceeded the amount of pollock the domestic fishery wanted to use. However, due to the continued growth in capacity, the NMFS adjusted domestic fishery requests for pollock exceed the 1990 Bering Sea pollock TAC by about 556,000 mt or 43% and the requests are expected to exceed TAC by even more in 1991 and beyond. Therefore, beginning in 1990, there is expected to be increasing competition for shares of the pollock TACs. Note that although the requests did not exceed the Aleutian Islands pollock TAC for 1990, they are expected to in the future. The expansion of the pollock TAC allocation problem to the Bering Sea not only eliminates what some considered a simple and low cost solution to the allocation problem in the Gulf, it intensified the problem in the Gulf because the increased competition in the Bering Sea will result in more at-sea processors operating in the Gulf.

Because there is not sufficient pollock to meet the demands of all fishing and processing operations, the issue of whose demands or plans for pollock will be met and the issue of the level of the TACs are suddenly much more important. The increased importance of both of these issues has again raised questions concerning the efficacy of using some of the pollock TAC to only produce roe.¹ It has also raised questions concerning the appropriate seasonal distribution of catch. More

¹ This use of pollock, which consists of stripping roe from female pollock and discarding all male pollock and the carcasses of female pollock, is referred to as roe-stripping in this report.

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specifically it has resulted in the Council considering an amendment to the Gulf of Alaska and Bering Sea/Aleutian Islands Groundfish FMPs in response to the following four potential management problems:

1. Roe-stripping may be a wasteful practice.
2. Roe-stripping may adversely affect the ecosystem as the result of additional discards.
3. Targeting on spawning populations may adversely affect the productivity of the pollock stocks.
4. Roe-stripping and/or a large roe fishery may cause an inappropriate, unintended allocation of the pollock TACs among seasons and types of processing (at-sea or shorebased).

The following alternative amendments are being considered:

1. Do nothing. Maintain the status quo.
2. Prohibit roe-stripping in the pollock fisheries in the Gulf of Alaska and Bering Sea/Aleutian Islands or portions thereof.
3. Require full utilization of all pollock in the pollock fisheries in the Gulf of Alaska and Bering Sea/Aleutian Islands or portions thereof.
4. Implement a seasonal apportionment schedule for pollock to place limits on the winter-early spring harvest in the Gulf of Alaska and Bering Sea/Aleutian Islands or portions thereof.
5. Prohibit roe-stripping and implement a seasonal apportionment schedule for pollock in the Gulf of Alaska and Bering Sea/Aleutian Islands or portions thereof (a combination of Alternatives 2 and 4).

Alternatives 4 and 5 include the options to: prohibit pollock fishing during the roe season in either the Gulf of Alaska or Bering Sea/Aleutian Islands, establish separate TACs for the roe seasons in both areas, and restrict all Gulf of Alaska pollock trawl fisheries to the use of midwater gear.

The first alternative retains the race for fish as the allocation mechanism; however, the current FMPs provide considerable authority to protect the stocks and alter the rules of the race. Neither a ban on roe-stripping nor the requirement of full utilization can be implemented without an FMP amendment. The other alternatives would retain the race for fish as the allocation mechanism but with some explicit changes in the rules for the race. The changes would eliminate some operations from the pollock fishery, increase the cost of the fishery to some or all operations, and, at least temporarily, reduce the competition faced by some operations. The alternatives do not include the use of the market mechanism to solve the allocation problem, that is to efficiently allocate the TACs among competing uses.

Analyses of the Issues

By addressing the following five questions, information is provided that can be used to evaluate alternative management measures including some that can only be taken by amending the FMPs and some that may be possible without an amendment.

1. Is roe-stripping a wasteful practice?
2. Does roe-stripping adversely affect the ecosystem as the result of additional discards?
3. What is the effect on the productivity of the pollock stocks of a roe season fishery that may be highly concentrated in both time and space and that may target on female pollock?
4. What effects does the timing of the pollock fishery have on the bycatch of crab and halibut?
5. What effects does the timing of the pollock fishery have on the populations of sea lions and other marine mammals?

1. Is roe-stripping a wasteful practice?

Public support for a ban on roe-stripping has been considerable. Much of this support results from the perception that roe-stripping is wasteful simply because it may result in increased discards and a lower total product recovery rate relative to operations which extract roe and other products, or operations which produce other products but not roe. Defining waste strictly in terms of foregone product weight, instead of in terms of the foregone net benefits is inappropriate and can result in misleading conclusions because the benefits and costs of producing different products are ignored. These costs and benefits should be defined as broadly as is appropriate given the Council's goals and objectives, the MFCMA, and other applicable Federal regulations and directives.

Under this more general definition of waste, all waste is ultimately measured in broadly defined economic terms; the focus is on the current and future benefits that can be obtained from a given pollock TAC; and roe-stripping is not necessarily wasteful.

The conclusions drawn from information provide by the industry and from NMFS catch data are as follows: (1) the benefits per metric ton of pollock catch vary significantly among individual operations for each use of pollock; (2) the benefits per metric ton are higher for some roe-stripping operations than for some other types of operations; (3) in the Gulf, roe-stripping operations as a whole in 1989 had substantially higher benefits per metric ton of catch than did other operations as a whole for either the year or the first quarter in terms of gross and net wholesale values and employment cost, but lower benefits in terms of employee days; (4) in the BSAI, roe-stripping operations as a whole in 1989 had substantially higher benefits per metric ton of catch than did other operations as a whole for the year in terms of gross wholesale values, employee days, and employment cost, but lower benefits in terms of net wholesale value, and roe-stripping operations as a whole also had lower gross wholesale value per metric ton of catch than did other operations as a whole for the first quarter; and, therefore, (5) it cannot be concluded that roe-stripping was a wasteful use of pollock in 1989 or that it will be in 1990 and beyond.

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2. Does roe-stripping adversely affect the ecosystem as the result of additional discards?

Seafood processing discard is a major environmental concern. All discards other than live fish are considered a pollutant, and as such may not be dumped into the marine environment of the United States (including all EEZ waters) unless approved by the Environmental Protection Agency (EPA).

Given that: (1) processing of pollock for surimi and other accepted product forms already accounts for discard of hundreds of thousands of metric tons of waste; (2) processing of other groundfish contributes substantial discard; (3) the incidental catch of prohibited species must also be discarded; (4) catches of undersized or otherwise undesirable fish or other marine organisms are often discarded, it appears that the incremental discard of pollock from roe-stripping operations may not be significant relative to other practices common to the groundfish fisheries in the Bering Sea and the Gulf of Alaska. Current indications are that the amount and type of processing discharge are not negatively impacting the environment, except possibly in confined areas. Such occurrences and other adverse effects of additional discharges of processing waste would be reduced if existing EPA requirements were more closely adhered to, specifically if all discards were ground into particles less than 0.5 inch. Therefore, the conclusion is that roe-stripping does not adversely affect the ecosystem.

3. What are the productivity effects on the pollock stocks of a roe season fishery which is concentrated in both time and space and which may target on females?

The productivity of a fishery can be measured biologically and economically, that is, in terms of catch, product weight, and net benefits over time. In terms of the wise use of the resources, net benefit is the most comprehensive measure of productivity for the same reasons that foregone net benefit is a better measure of waste than is foregone product weight. However, because catch over time is a critical factor in determining net benefits, the first part of this section focuses on the potential effects of a roe fishery on future productivity measured in terms of catch, that is, biological productivity.

Note that the question being addressed in this section deals with the effects of a roe season fishery, not with the effects of roe-stripping, per se. There are two reasons for this. First, one of the alternatives being considered is intended to limit the roe season fishery without banning roe-stripping. Second, although the timing of the harvest, the compression of the harvest in time and space, and the disproportionate harvest of females are among the factors that may affect the sustainable yield of the pollock stocks, they are primarily determined by the size of the roe fishery and not by the types of processing that occur during the roe fishery.

3.1 Effects on sustainable catch

3.1.1 Effect of the timing of the harvest

A preliminary analysis (Collie 1989) showed that growth outstrips mortality in the early years but falls behind at age 5. Under this set of conditions, there is no advantage (increased yield) to harvesting late in the year versus early in the year.

3.1.2 Effect of fishing mortality occurring over a short time period

These stocks are not thought to be directly affected by fishing mortality occurring over a short time period. Rather potential negative effects are associated with overharvest of the TAC. The potential for exceeding TAC can be decreased by the recently implemented observer program and expanded reporting requirements. If necessary, this potential can be further reduced by improving inseason

monitoring. The use of conservative TACs greatly reduces the potential for overfishing when TACs are exceeded. Therefore, the major concern is not the compressed season, per se, but rather that the fishery occurs during the spawning season.

3.1.3 Effect of fishing during the spawning season

Whether concentration of fishing effort during the spawning season would lead to a decrease in the equilibrium size of the Gulf and eastern Bering Sea stocks is an open question. At least one theoretical model suggests that this is a possibility, given the stock-recruitment relationship assumed in the model (see Appendix II). However, the same model indicates that even though equilibrium stock size would be expected to decrease, the impact on the acceptable catch level is less clear; catch could be higher or lower than in the case of uniform effort distribution. Again, it is noted that this model presents an example of conditions which would result in the decrease of equilibrium stock size, and is not necessarily representative of current pollock stock dynamics.

Without a well-defined stock-recruitment relationship and an understanding of all the factors affecting recruitment, definite conclusions regarding the impacts of targeting on spawning pollock cannot be made.

3.1.4 Effect of targeting on females

The impact of this removal to future recruitment is difficult to evaluate. If intra-species competition plays a significant role in controlling pollock stock production, minor reductions in egg concentrations may be advantageous for survival of the young. If, on the other hand, density independent factors are the major controlling factors influencing survival during the early life history period, the additional mortality caused by fishing may be deleterious to the stock. Until the relative importance of density dependent and density independent processes can be quantified, it is difficult to anticipate the net result of egg removals to the stock.

Appendix III suggests that targeting on females could unbalance the sex ratio of the stock under high exploitation rates. This could be a factor in the Bering Sea where the exploitation rate is greater than 15%, but probably is not an issue in the Gulf where exploitation is less than 10%. Note that fishermen reported less success in targeting on females in the Bering Sea than in the Gulf, reducing the importance of this factor in the Bering Sea.

3.1.5 Localized depletion

One potential impact of concentrating fishing activities on spawning concentrations of pollock is the localized depletion of discrete stocks. At the current time there is insufficient information to define localized stock boundaries.

3.1.6 Conclusions

Current understanding of pollock stock dynamics does not permit clear-cut conclusions about the biological impacts of a roe fishery. The research that has been conducted does not indicate that there are significant adverse impacts. The probability of adverse impacts occurring has not been considered to be sufficiently high by the Council, NMFS, ADF&G, or the industry for them to fund research projects that might provide more definitive results. Although there have been large or dominant pollock roe fisheries for many years, the issue of adverse biological impacts has apparently not warranted such research.

3.2 Effects on the sustainable economic yield of the pollock fishery

The effect of a roe fishery on the sustainable economic yield of the pollock fishery is determined by its effects on both sustainable catch and the net benefit per unit of catch.

The conclusions based on information provided by the industry and NMFS catch data are as follows: (1) in the Gulf, estimated benefits per metric of catch during the first quarter compared to those later in the year are 18% higher in terms of gross wholesale value, 90% higher in terms of net wholesale value, 4% higher in terms of employment costs, but 12% lower in terms of employee days; (2) in the BSAI, estimated benefits per metric of catch during the first quarter compared to those later in the year are 22% higher in terms of gross wholesale value, 35% higher in terms of net wholesale value, 11% higher in terms of employee days, but 1% lower in terms of employment cost; therefore, (3) a transfer of catch from the first quarter to later in the year would substantially reduce three out of four measures of benefits in both areas and substantially reduce the economic viability of the domestic pollock fishery; and (4) net wholesale value would have been higher with the actual 1989 GOA pollock fisheries all scaled back by 50% than with the actual level of catch but without a roe season fishery.

In considering the distribution of benefits between those who benefit from catch for at-sea processing and those who benefit from catch for onshore processing, it should be noted that there was also a difference in the proportion of catch delivered to shoreside processing plants during roe fisheries and during non-roe pollock fisheries later in 1989. The difference was substantial in the GOA but minimal in the BSAI. PacFIN data indicate that 42.5% and 21.5% of the pollock catch was delivered to shoreside processing plants, respectively, for the GOA and BSAI roe season fisheries. The corresponding values for the rest of the year were 99.8% and 22.8%. As capacity continues to increase, the seasonal difference in the distribution of catch between at-sea and shoreside processing is expected to decrease in the Gulf.

Even without quantifying income and employment impacts it is clear that if jobs and, hence, income, are created or maintained in communities that participate in shoreside processing (for example, Kodiak) jobs will be lost in the at-sea processing sector. It is not possible to characterize a job in one community as "superior" to a job in a different community.

4. What effects associated with the bycatch of crab and halibut does the timing of the pollock fishery have?

The late winter/early spring fishery which targets on roe-bearing pollock is primarily an off-bottom trawl fishery with low bycatch rates for halibut and crab. Later in the year, pollock tend to be found on or near the bottom. The target gear, bottom trawls, can encounter significantly greater numbers of halibut and crab if fished "hard on bottom". Thus, any management measures which seek to limit the spring pollock fishery and apportion quota to the latter part of the year will tend to result in higher bycatch rates for crab and halibut if, as a consequence, a smaller proportion of the groundfish harvest is taken with gear that is fished off-bottom. This would result in greater crab and halibut mortality in the pollock fishery and/or decreased groundfish catch depending on when the bycatch caps would be taken with and without such a change in the seasonality of the pollock fisheries. Bycatch would not be expected to exceed established limits.

Because the bottom trawl halibut PSC cap in the GOA is expected to be taken regardless of any change in the seasonality of the pollock fishery, the major cost of a change in seasonality would be in terms of foregone groundfish catch and increased fishing costs, with the latter resulting both from

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earlier area closures and from additional efforts by the fleet to reduce bycatch rates. If the PSC caps in the BSAI are constraining regardless of the seasonality of the pollock fishery, the same would be true in the BSAI. This is likely to be the case due to the expansions of the domestic fisheries and the domestic observer program.

5. What effects does the timing of the pollock fishery have on the populations of sea lions and other marine mammals?

National Marine Mammal Laboratory (NMML) research indicates that the recent declines in northern sea lion abundance in Alaska are linked, at least in part, to changes in either the quality or quantity of prey available. It is hypothesized that walleye pollock roe fisheries may be contributing to these declines for at least the following reasons.

1. These fisheries target on dense aggregations of gravid female walleye pollock, which for sea lions are easy to catch (because of their concentration) and may be the most nutritional form of pollock.
2. These fisheries occur in the late winter and early spring, a time when pregnant adult, and newly weaned juvenile northern sea lions would be very vulnerable to nutritional stress.

These remain hypotheses to be tested because evidence linking population declines of these marine mammals to declines in prey availability is insufficient at this time to suggest such a cause-effect relationship.

Analysis of the Alternatives

The analysis contained herein may be summarized with respect to the four identified management problems. With respect to the discard issue (problems 1 and 2), Alternatives 2, 3, and 5 directly reduce or eliminate the amount of discard associated with pollock through regulatory controls on the type of processing that may occur. The amount of processing discard under Alternative 4 may be less than under the status quo depending on the seasonal dates and apportionments chosen. The potential changes in the quantity, geographical location and timing of waste discharge are likely to be undetectable against the background of general processing waste discharge and the ability of the ecosystem to recycle organic material.

With respect to the pollock productivity issue (problem 3), Alternatives 4 and 5 will affect the timing of the pollock harvest directly and Alternatives 2 and 3, indirectly. The biological impacts are dependent on the form of the spawner-recruit relationship, the current stock status, and density independent factors. Appendices I-III provide examples of conditions under which roe-stripping can effect changes in the spawning stock, but these examples are simplified and do not necessarily represent current stock dynamics. Current understanding of pollock stock dynamics does not permit clear-cut conclusions about the biological impacts of a roe fishery.

With respect to the issue of inappropriate allocation of pollock among seasons and processors (problem 4), information provided by processors who processed pollock in 1989, indicates that, under the market and fishery conditions that existed, roe-stripping was a relatively high valued use of pollock. Results also indicate that transferring catch from the roe season fishery to a later fishery can adversely affect the profitability of the pollock fishery.

Shifting the fishery to later in the year could increase the bycatch rates for halibut and crab, relative to the status quo, if the fall fishery were prosecuted primarily with bottom trawls fished hard on bottom rather than with midwater trawls which tend to have much lower bycatch rates for crab and halibut. Because the bottom trawl halibut PSC cap in the GOA is expected to be taken regardless of any change in the seasonality of the pollock fishery, the major cost of a change in seasonality would be in terms of foregone groundfish catch and increased fishing costs, with the latter resulting both from earlier area closures and from additional efforts by the fleet to reduce bycatch rates. If the PSC caps in the BSAI are constraining regardless of the seasonality of the pollock fishery, the same would be true in the BSAI. This is likely to be the case due to the expansions of the domestic fisheries and the domestic observer program. Any increase in bycatch would be limited by the established PSC caps. Alternatively, the Council may require that a fall fishery for pollock be prosecuted only with midwater trawls.

Shifting the harvest to later in the year may also temporarily redistribute income from at-sea processors to shoreside processors in the Gulf of Alaska, particularly those located close to the fishing grounds, but this effect will likely be short-lived as domestic processors expand their demand for pollock.

Enforcement of a prohibition on roe-stripping, as defined by Alternative 2 or 5, will be difficult. Regulations would require some amount of pollock product other than roe to be onboard should an enforcement agent wish to inspect a vessel carrying pollock roe. Depending on enforcement policy and practice, the latitude given vessel captains and plant foremen may render enforcement either ineffective or prohibitively expensive.

Enforcement of a requirement to have meal plants onboard at-sea processing vessels will not be difficult. Verifying that all processing by-product is reduced to meal, however, may be extremely difficult, particularly in the absence of 100% observer coverage. Likewise, determining that all shorebased waste product is going to the local meal plant may prove troublesome. Enforcement of a requirement to deliver processing waste to other at-sea processors or to shorebased processors will be geared to the effectiveness of the Council's observer program and domestic logbook program.

It is difficult to identify both the intent of a ban on roe-stripping and the regulations that would assure that the intent is met. It is clear that the intent includes a ban on operations that only intend to extract roe. It is not clear that the intent is to prevent operations from occasionally discarding pollock when equipment failure or exceptional catch rates preclude that operation's normal utilization of its catch. Neither is the intent clear with respect to what other products and what quantities of those products define acceptable utilization behavior. As suggested in the analysis of Alternative 3, depending upon the particular options selected by the Council to deal with issues of "surplus" or "unmarketable" product, enforcement of a full utilization regulation may be extremely complex and costly.

A more detailed summary of the analysis by Alternative suggests the following:

Alternative 2: Ban pollock roe-stripping.

Environmental Impacts

In the Bering Sea, pollock harvest would be spread more uniformly over the year, at least initially, until the fishing capacity of vessels that utilized more than just roe increased and compensated for the initial reduction caused by roe-only boats leaving the roe season fishery. However, unless the

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amount of catch taken for roe-stripping increases substantially from the 1989 level in the absence of a ban, this effect would not be large. In the Gulf of Alaska, given current catch and production capacity and stock abundance, there will likely be no discernible shift in the timing of the harvest. In effect, there is sufficient harvesting and processing capacity to take the entire quota early in the fishing year, irrespective of regulations on roe-stripping.

Crab and halibut bycatch could increase if fishing effort displaced from the relatively low bycatch, roe fishery transferred that effort to a on-bottom fishery. This would be mitigated in the long term as capacity to utilize more than roe increased and once again enabled the fleet to fully prosecute the stocks in a spring, midwater fishery. It would also be mitigated by the PSC caps that are in place.

The change in discards would be small in comparison to the overall level of discards from the groundfish fisheries under "normal" processing and would not be expected to affect the productivity of the ecosystem.

Economic Impacts

As noted above, a ban on roe-stripping would replace some individual operation or groups of operations that produce relatively high benefits per ton of pollock catch with some operations that produce lower benefits.

Vessels not equipped to process pollock beyond roe extraction (H&G) numbered nine in the Gulf of Alaska and 16 in the Bering Sea in 1989. These vessels would be eliminated from the pollock fishery with an estimated loss in gross revenue of about \$21 million. Processors other than H&G vessels who stripped roe in 1989 would have lost an additional \$12 million in gross revenue if they had not produced roe. The latter losses would be offset to some unknown extent by income generated by production of additional product forms. Additional costs would be imposed on vessels to upgrade their processing capacity for more than roe-extraction. This could impact more heavily smaller vessels that do not have as much room for expanded machinery.

Banning roe-stripping in the BSAI would reduce, at least temporarily, the pace of the fishery which would help to alleviate any shortage of pollock available to processors outside the roe season. However, in 1989 only 29,700 mt were taken for roe-stripping, so a ban in 1989 would have resulted in at most 29,700 mt of additional pollock being available later in the year. This could be a short term result nullified by additional capacity, capable of fuller utilization, entering the roe fishery. Because the pollock TAC in the Gulf of Alaska is so small and the capacity of processors that can process more than roe is so large, banning roe-stripping would probably not have guaranteed the opportunity for directed fisheries on pollock after the roe season.

Alternative 3: Require full utilization of pollock.

Environmental Impacts

Current indications are that the amount and type of processing discharge associated with the pollock fisheries are not negatively impacting the environment, except possibly in confined areas. Such occurrences and other adverse effects of additional discharges of processing waste would be reduced if existing EPA requirements were more closely adhered to, specifically if all discards were ground into particles less than 0.5 inch. Therefore, the resulting reduction in discards is not expected to increase the productivity of the ecosystem.

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Requiring full utilization would eliminate more of the present fleet than just a ban on roe-stripping, at least until the capacity for full utilization compensates for the initial reduction. The concomitant increase in fishing effort at other times of the year and in on-bottom fisheries could impact the bycatch of crab and halibut.

Economic Impacts

Requiring full utilization will impose costs on the processing industry to retool for fuller utilization as it is eventually defined by the Council. Additional onboard and shorebased reduction capacity will be necessary. Capital costs of such expansion are about \$1 million per 100 mt/day capacity. An average at-sea reduction plant would cost approximately \$1.5 million and an average shoreside plant \$8 million. The capital cost of the required meal plants is estimated to be about \$50 million.

Catch in the domestic pollock fishery would be limited by existing meal plant capacity. The production of many at-sea and shoreside processors would be reduced until their meal plant capacity is significantly increased.

Requiring reduction to fish meal would almost double the world supply of whitefish meal and could cause price reductions that would jeopardize the economic viability of existing meal plants and increase the extent to which new meal plants would have to be subsidized by the profitable components of the pollock operations.

Enforcement difficulties would be compounded by a need to assure that all processing waste is delivered to meal plants.

Alternative 4: Seasonal apportionment.

Environmental Impacts

Current understanding of pollock stock dynamics does not permit clear-cut conclusions about the biological impacts of a roe fishery. The research that has been conducted does not indicate that there are significant adverse impacts. The probability of adverse impacts occurring has not been considered to be sufficiently high by the Council, NMFS, ADF&G, or the industry for them to fund research projects that might provide more definitive results. Although there have been large or dominant pollock roe fisheries for many years, the issue of adverse biological impacts has apparently not warranted such research.

To the extent that the fishery is shifted to a later year fishery using trawls fished hard on bottom, bycatch of halibut and crab could increase. Any such increases would be limited by the existing PSC caps. In some cases, the established caps would prevent a change in the seasonality of the pollock fishery from having any effect on the level of bycatch.

Economic Impacts

Semi-annual or quarterly allocations would have reduced the amount of pollock taken in the 1989 Gulf of Alaska pollock roe fishery but would have had little impact on the Bering Sea fishery.

Quarterly apportionments of pollock in 1989 would have caused a reallocation of catch from the GOA to the BSAI. The share of the GOA catch going to shoreside processors would have increased.

DRAFT

In 1990 and beyond, any shift in catch from the first quarter to later in the year is expected to decrease the profitability of the pollock fishery because the estimated gross and net wholesale values per metric ton of catch are substantially higher in the first quarter than later in the year. Quarterly allocations could increase the loss by concentrating more of the first quarter fishery early in the quarter before the roe is in peak condition.

Effort would be expected to shift to other fisheries as seasonal pollock closures occur. This could lead to a shortening of seasons in other target fisheries. Quarterly apportionments would eventually result in four short fishing periods at the beginning of each quarter. This would increase operating costs.

If increased bycatch rates lead to closure of the pollock fishery or other groundfish fisheries before attainment of the TACs, gross exvessel revenue will be foregone, or if the groundfish fleets take additional actions to reduce bycatch rates, costs will increase. If the seasons are adjusted to eliminate the roe fishery, the benefits associate with approximately \$50 million of pollock roe exports to Japan would be eliminated.

Alternative 5: Prohibition on roe-stripping and seasonal apportionment.

The environmental and economic impacts associated with adoption of this alternative are approximately the same as those described under Alternatives 2 and 4.

It should be recognized that even without this amendment the Council may be able to control the amount of harvest effort on prespawn pollock by regulatory amendment; this course of action could be taken by the Secretary of the Commerce under the fishing season framework adopted under Amendments 18 and 13 to the Gulf of Alaska and Bering Sea FMPs. In this case, the Council could change the pollock fishing season so that it commences on, say, May 1, effectively eliminating a roe-only fishery.

Concluding Remarks

The issue being addressed is the appropriate allocation of pollock TACs among types of fishing and processing operations and among different seasons. The appropriate allocation is that which maximizes the net value of the pollock fishery, where value is broadly defined to be consistent with Council goals and objectives, the MFCMA, and other Federal regulations. The allocation can affect the value of the pollock fishery through its effects on the sustainable TACs and through its effects on value per metric ton. Whether or not there is sufficient biological information to determine the first type of effects, a significant part of the problem before the Council is assuring that the value per metric ton of catch is not significantly reduced by an incorrect allocation of pollock among competing uses.

The alternatives being considered are part of a large set of alternative management measures that can be used to influence the allocation of pollock among these uses. The difficulty with most of these alternatives, including those being considered, is that a tremendous amount of information is needed by the Council to make the right allocation decisions and much of the required information is not available. Also, even if the Council makes the "correct" allocation decision in 1990, it does not necessarily follow that a similar scheme would be "correct" in 1991 and beyond.

Appendix V

EXAMPLE REGULATIONS TO IMPLEMENT ALTERNATIVES 2-6
FOR AMENDMENT 19/14

Examples of draft regulatory language are presented only for 50 CFR Part 672. Similar regulatory changes would also occur in 50 CFR Parts 611 and 675.

Alternative 2: Prohibit roe-stripping in the pollock fisheries in the Gulf of Alaska and Bering Sea or portions thereof.

Regulations implementing this alternative would require some amount of pollock product other than roe to be retained by a vessel during a fishing trip and would not necessarily prohibit pollock roe-stripping as long as the amount of roe product retained by a processor meets established retention criteria. Regulations could be based on: (1) acceptable roe retention criteria applied against the round weight equivalent of other pollock product onboard (amount of pollock product, excluding roe, divided by published average product recovery rates); or (2) an established, acceptable roe to product weight ratio that is applied to all pollock processor operations, regardless of the product produced.

Option 1 is similar to regulations set forth under the emergency rule implemented February 16, 1990 that limited pollock roe stripping operations during the latter portion of the 1990 roe season. Option 2 would provide pollock operations with higher product recovery rates a greater opportunity to strip roe as long as an acceptable level of wastage and established roe to product weight ratio is not exceeded. In essence, this option would allow head and gut (H&G) vessels to retain as much roe for product on board as a surimi operation, regardless of the round weight equivalent of product retained.

An example of regulations that would implement both options follow. Product recovery rates and roe retention criteria enclosed in brackets [] are examples only. Examples of recovery rates for pollock surimi and fillets were obtained from pollock processors in 1989.

Option 1.

PART 672 - GROUND FISH OF THE GULF OF ALASKA [AMENDED]

In Section 672.20, a new paragraph (i) is added to read as follows:

§ 672.20 General limitations.

* * * * *

(i) Allowable retention of pollock roe. Pollock roe may comprise no more than [seven] percent of the total round weight equivalent of pollock and other pollock products retained onboard a vessel at any time during a fishing trip.

(1) Assumed product recovery rates used to extrapolate round weight equivalents. The following product recovery rates will be used to calculate round weight equivalents:

- (A) Pollock surimi - [15] percent;
- (B) Pollock fillets - [18] percent;
- (C) Pollock minced product - [17] percent;
- (D) Pollock meal - [17] percent; and
- (E) Pollock headed and gutted - [50] percent.

(2) Other product recovery rates.

- (A) Recovery rates for products not listed under paragraph 672.20(i)(1) must equal or exceed the product recovery rate established for pollock surimi.
- (B) Round weight equivalents for products not listed under paragraph 672.20(i)(1) will be based on the best available information, including recovery rates reported by observers.

(3) Fishing trip. For purposes of this paragraph (i), a vessel is engaged in a single fishing trip when commencing or continuing fishing during the period of time from [insert date of filing for public inspection with the Office of the Federal Register] until any transfer or offload of any pollock or pollock product or until the vessel leaves the regulatory area where fishing activity commenced, whichever comes first.

* * * * *

Option 2.

PART 672 - GROUND FISH OF THE GULF OF ALASKA [AMENDED]

In Section 672.20, a new paragraph (i) is added to read as follows:

§ 672.20 General limitations.

* * * * *

(i) Allowable retention of pollock roe.

- (1) Pollock roe may comprise no more than [47] percent of the total weight of primary pollock products retained onboard a vessel at any time during a fishing trip.
- (2) Primary pollock product. For purposes of this paragraph (i), a primary pollock product is the product produced from a fish that recovers the highest percentage of pollock flesh relative to all other pollock products produced from the same fish.
- (3) Fishing trip. For purposes of this paragraph (i), a vessel is engaged in a single fishing trip when commencing or continuing fishing during the period of time from [insert date of filing for public inspection with the Office of the Federal Register] until any transfer or offload of any pollock or pollock product or until the vessel leaves the regulatory area where fishing activity commenced, whichever comes first.

* * * * *

Alternative 3: Require full utilization in the pollock fisheries in the Gulf of Alaska and Bering Sea or portions thereof.

Regulations implementing this alternative would require full utilization of all pollock harvested such that no discard of solid processing waste is allowed. Given current technology, such a requirement would necessitate the installation of processing reduction (meal) plants in all pollock processing facilities or, alternatively, delivery of processing by-product for reduction to meal plants either at-sea or shoreside.

Discharges of processing waste would be limited to that allowed by Federally approved point source NPDES discharge permits.

PART 672 - GROUND FISH OF THE GULF OF ALASKA [AMENDED]

In Section 672.20, a new paragraph (i) is added to read as follows:

§ 672.20 General limitations.

* * * * *

(i) **Processing of pollock.** At-sea processors harvesting or receiving pollock must fully utilize pollock such that no at-sea discard of whole fish or solid processing waste occurs.

Processing vessels that are not equipped to fully utilize pollock must deliver pollock processing by-product to a meal reduction plant for further processing.

* * * * *

Alternative 4: Establish a seasonal apportionment of pollock in the Gulf of Alaska and Bering Sea or portions thereof.

Regulations implementing this alternative should reflect a framework procedure whereby seasonal apportionments of pollock TACs for an upcoming year could be accomplished through the existing September - December process of developing initial and final TAC and PSC limit specifications. This approach would provide the Council with the flexibility to change TAC apportionments between seasons in response to changing conditions in the pollock fishery. Although the example regulations set forth below would establish a triannual apportionment of TAC, final regulations would reflect the Council's intent for the number of seasonal apportionments of pollock TAC with respect to limiting the roe fishery.

PART 672 - GROUND FISH OF THE GULF OF ALASKA [AMENDED]

In Section 672.20, paragraph (c)(3) is revised, paragraphs (e) through (h) are redesignated as paragraphs (f) through (i), respectively, and a new paragraph (e) is added to read as follows:

§ 672.20 General limitations.

* * * * *

(c) * * *

- (3) Notices of closure. (i) If the Regional Director determines that the TAC or seasonal apportionment of TAC for any target species or of the "other species" category in any regulatory area or district in Table 1 has been or will be reached, the Secretary will publish a notice in the **FEDERAL REGISTER** prohibiting directed fishing for that species, as defined at §672.2, in all or part of that area or district, and declaring such species in all or part of that area or district a prohibited species for purposes of paragraph (f) of this section. During the time that such notice is in effect, the operator of every vessel regulated by this Part or Part 611 must minimize the catch of that species in the area or district, or portion thereof, to which the notice applies.

* * * * *

(e) Seasonal apportionment of pollock TAC.

- (1) As soon as practicable after October 1 of each year, the Secretary, after consultation with the Council, will publish a notice in the **FEDERAL REGISTER** specifying the proposed [triannual] apportionments of annual pollock TAC and associated JVP and DAP allocations for the fishing year. Public comments on the proposed [triannual] apportionments of pollock TAC and season dates for the apportionments will be accepted by the Secretary for 30 days after the notice is filed for public inspection with the Office of the **FEDERAL REGISTER**. The Secretary will consider timely comments in determining, after consultation with the Council, the final [triannual] apportionments of pollock TAC for the next year. A notice of the final [triannual] apportionments will be published in the **FEDERAL REGISTER** as soon as practicable after December 15.
- (i) The Secretary will base the final apportionments of pollock TACs among seasons upon some or all of the following relevant information:
- (A) Estimated monthly pollock catch and effort in prior years;
 - (B) Expected changes in harvesting and processing capacity and associated pollock catch;
 - (C) Current estimates of and expected changes in pollock biomass and stock condition;
 - (D) Potential impacts of expected seasonal fishing for pollock on pollock stocks, and marine mammals;
 - (E) The need to obtain fishery-related data during all or part of the fishing year;
 - (F) Effects on operating costs and gross revenues;
 - (G) The need to spread out fishing effort over the year, minimize gear conflicts, and allow participation by all elements of the groundfish fleet;
 - (H) Potential allocative effects among users and indirect effects on coastal communities; and

- (1) Other biological and socioeconomic information that affects the consistency of seasonal pollock harvests with the goals and objectives of the FMP.
- (2) Unharvested portions of a seasonal apportionment of pollock TAC allocated to JVP or DAP will be proportionately added to respective allocations of subsequent seasonal apportionments of the pollock TAC established for the same fishing year under paragraph 672.20 (e)(1).
- (3) If the portion of a seasonal apportionment of pollock TAC allocated to JVP or DAP is exceeded, the amount by which the seasonal allocation is exceeded will be proportionately deducted from respective allocations of subsequent seasonal apportionments of pollock TAC established for the same fishing year under paragraph 672.20 (e)(1).

Alternative 5: Prohibit pollock roe-stripping and establish a seasonal apportionment schedule in the Gulf of Alaska and Bering Sea or portions thereof (a combination of Alternatives 2 and 4).

Regulations would reflect a combination of those set forth as examples under Alternatives 2 and 4.

Alternative 6: Prohibit pollock fishing during the roe season in the Gulf of Alaska and Bering Sea/Aleutian Islands or portions thereof.

This alternative is authorized under Alternative 4 if the Council apportioned the pollock TAC such that zero pollock would be available during the first three or four months of the fishing year.

Alternative 6A: Establish two TAC components for pollock - one for fishing during the roe season and one for fishing outside the roe season.

Provided that authority for establishing separate pollock TACs by season is set forth in the FMP, existing regulations would implement this alternative.

SUMMARY

COMMENTS RECEIVED ON AMENDMENT 19/14 EA/RIR

Alaska Factory Trawler Association

- supports alternative 2, with provision that more realistic, individualized product recovery rates are used

Alaska Groundfish Data Bank

- supports alternative 5

Cascade Fishing, Inc.

- no decision should be made by the Council until alternatives are analyzed for consistency with the national standards of the MFCMA
- none of the alternatives to the status quo justified on a conservation basis

Emerald Seafoods, Seacatcher Fisheries, Inc. and Seahawk Pacific Seafoods, Inc., Swan Fisheries

- support alternative 2 provided presumed product recovery rates reflect existing domestic fleet's product recovery rates
- consideration of alternatives 3, 4 and 5 is premature
- full environmental impact statement necessary before Council adopts any alternative to the status quo

Fishing Company of Alaska

- supports alternative 4
- opposes alternatives 2, 3, and 5

David Fraser

- opposes alternative 2
- alternative 3 acceptable only if the Council makes policy decision that maximizing protein production and minimizing waste outweighs net economic benefits
- favors alternative 4 provided that framework procedure is incorporated
- proposes an alternative to the emergency rule prohibiting roe stripping
(latter point supported by Crystal Fisheries, Amfish, Speedwell Inc., Fishing Company of Alaska, and Jubilee Fisheries)

Greenpeace

- favors alternatives 3, 4, and 6 (an option under alternative 4 to prohibit directed pollock fishing during the roe season)

International Pacific Halibut Commission

- potential solutions will shift effort from midwater trawl to bottom trawl. Consequences of such a shift will be 1) an increase halibut bycatch rates, 2) earlier attainment of halibut PSC caps, and 3) foregone harvest of groundfish.

Dean Pankratz

- opposes the waste observed in the pollock fishery

Speedwell, Inc.

- insufficient biological evidence to warrant a prohibition on roe stripping
- presumed recovery rates in event of a ban on roe stripping should be based on actual experience in the fishery
- Council should take no action until alternatives analyzed for consistency with national standards of MFCMA

Trans-Arctic Ltd.

- supports full utilization of pollock and a restriction of directed fishing for pollock to midwater trawl gear.

Original sponsor(s): REP. DAVIDSON, Grussendorf, Hudson, Jacko, Leman,
Navarre, Goll; SEN. Sturgulewski, Jones

1 IN THE HOUSE BY THE RESOURCES COMMITTEE

2 SENATE CS FOR CS FOR HOUSE BILL NO. 394 (Resources)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 SIXTEENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act relating to utilization of pollock and pro-
7 hibiting the waste of pollock taken in a commercial
8 fishery; and providing for an effective date."

9 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 * Section 1. LEGISLATIVE FINDINGS. The legislature finds

11 (1) extensive and valuable populations of pollock are available
12 for harvest in the water of and off Alaska;

13 (2) commercial markets are available for pollock processed in
14 several forms including both roe and flesh;

15 (3) the biology of pollock results in the tendency of pollock to
16 gather in large spawning aggregations during specific times of the year so
17 that large quantities of female pollock are easily harvested by commercial
18 trawl fisheries;

19 (4) the trawl fleet is a highly efficient fishery;

20 (5) trawl fleets targeting on spawning aggregations of pollock
21 generate management difficulties for state and federal fisheries managers,
22 and could cause serious conservation problems for the pollock resource;

23 (6) one processing technique presently employed involves strip-
24 ping roe from female pollock and then discarding the carcasses of both male
25 and female pollock;

26 (7) profitable markets for fish roe have promoted roe stripping
27 in commercial fisheries for salmon, herring, and pollock, however roe
28 stripping is now prohibited in the salmon and herring fisheries; recent
29 events have demonstrated the need to prohibit the wasteful practice of roe

1 stripping in the pollock fishery.

2 * Sec. 2. AS 16.10 is amended by adding new sections to article 3 to
3 read:

4 Sec. 16.10.164. POLICY ON UTILIZATION OF POLLOCK. The legisla-
5 ture declares that stripping roe from pollock without utilizing the
6 flesh is wasteful and does not constitute utilization of this resource
7 for the maximum benefit of the people. Therefore, it is the policy of
8 the state that

9 (1) roe stripping be eliminated to the fullest extent
10 possible; and

11 (2) pollock taken in a commercial fishery should be uti-
12 lized for human consumption to the fullest extent practicable.

13 Sec. 16.10.165. UTILIZATION OF POLLOCK TAKEN IN A COMMERCIAL
14 FISHERY. (a) Unless otherwise provided by law, a person may not
15 recklessly waste or cause to be wasted pollock taken in a commercial
16 fishery.

17 (b) The Board of Fisheries may adopt regulations under the
18 Administrative Procedure Act (AS 44.62) it considers necessary for
19 implementation of this section. The board may delegate its authority
20 under this section to the commissioner. -

21 (c) A person who violates this section is guilty of a class A
22 misdemeanor.

23 (d) Each day on which a violation of this section occurs is a
24 separate violation.

25 (e) In this section

26 (1) "flesh" means all muscular body tissue surrounding the
27 skeleton;

28 (2) "person" includes a joint venture;

29 (3) "waste" means the failure to use the flesh of pollock

1 for human consumption, reduction to meal, production of food for
2 domestic animals or fish, or scientific, display, or educational
3 purposes; "waste" does not include normal, inadvertent loss of flesh
4 associated with processing that cannot be prevented by practical
5 means.

6 * Sec. 3. This Act takes effect immediately under AS 01.10.070(c).



U.S.A.

P.O. Box 104432, Anchorage, Alaska 99510, Tel. (907) 277-8234, FAX (907) 272-6519

STATEMENT OF CINDY LOWRY
GREENPEACE U.S.A.
TO THE NORTH PACIFIC FISHERY MANAGEMENT COUNCIL
ON AMENDMENTS 19/14 TO THE BERING SEA/ALEUTIAN ISLANDS AND
GULF OF ALASKA GROUND FISH FISHERY MANAGEMENT PLANS

April 24, 1990

My name is Cindy Lowry and I am providing testimony on behalf of Greenpeace U.S.A. and its 1.9 million supporters in the United States. Our supporters include 3000 Alaskans.

We have submitted written comments to the Council on Amendments 19/14 which include specific comments highlighting the deficiencies of the draft Environmental Assessment.

As an organization committed to maintaining the integrity of the marine environment, Greenpeace supports the selection of alternative actions 3, 4, and 6 for inclusion in amendments 19/14.

Our organization is highly concerned that the rapid decline of the Steller sea lion population indicates that the Bering Sea and Gulf of Alaska marine ecosystems are facing significant environmental stresses. Not only are Steller sea lions declining, but population drops have also been noted for Alaska's harbor seals, northern fur seals, and fish-eating seabird species such as common murre and kittiwakes.

In the face of the overcapitalization of the domestic trawl fishery and its problems related to excess capacity and equitable access to the pollock resource, it is critical that the Council take action to address the pollock roe-stripping issue through adoption of these three alternatives in the FMP amendments. Adoption of all three would provide the immediate precautionary measure to halt fishing on roe-bearing pollock, as well as the needed full-utilization requirement, and the flexibility to spread pollock harvesting throughout the year.

In our view alternative action 6 is needed as a precautionary measure for the protection of the threatened sea lion population. Strong concern has been raised that Stellers may be experiencing prey deprivation as a result of the concentrated fishing efforts on roe-bearing pollock. This measure to prohibit fishing during

the roe season would serve to provide greater quantities of pollock as forage for Stellers. The roe pollock are protein rich prey that are easier to catch and high in energy content for pregnant females and weaned pups.

We have developed this position based on the recommendations found in the draft report by Dr. Thomas Loughlin of the National Marine Mammal Lab entitled "Allocation of Groundfish Among Fisheries and other Marine Resources." We have just gained this information through a Freedom of Information Act request.

In addition, we support alternative 3, the full utilization measure, as a result of our concern over the sheer waste of protein rich-resources due to roe-stripping and other practices in the pollock fisheries.

As a facet of these options, we support the proposed measure to restrict fishing for pollock in the Gulf of Alaska to midwater trawl in order to not increase by-catch of bottom-dwelling species during months later in the year as a result of the measure to prohibit pollock trawling during the roe season. Moreover, trawling hard on the bottom should be prohibited in areas of the Bering sea where by-catch rates are historically high.

Thank you for this opportunity to present Greenpeace's views.

PUBLIC COMMENTS RECEIVED

ON AMENDMENT 19/14

James A. Wexler
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36810.101

VIA TELECOPIER 907-271-2815

April 9, 1990

Mr. Don W. Collinsworth
Chairman
c/o Clarence G. Putzke
Executive Director
North Pacific Fishery Management Council
P.O.Box 103136
Anchorage, AK 99510

APR - 9 1990
By fax

Re: Comments, Amendments 19 and 14, Pollock Utilization
in the Groundfish Fisheries Off Alaska

Dear Mr. Collinsworth:

This firm is general counsel to Speedwell, Inc., a Washington corporation. Speedwell's primary business is processing groundfish in the North Pacific, including the Gulf of Alaska and Bering Sea waters. Speedwell, Inc. owns and operates the F/T Speedwell, an at-sea processor vessel which targets the processing of groundfish, including pollock. Speedwell requests that the following comments be placed into the Council's hearing packet for the April 24, 1990 meeting in Anchorage. Speedwell, Inc. further expects to provide additional comments through the public hearing process during the April 24 - 27 meeting.

Briefly, Speedwell does not believe that there is sufficient biological evidence at this time to warrant a prohibition of roe stripping in the pollock fisheries in either the Gulf of Alaska or Bering Sea/Aleutian Islands. The Council should not take actions for reasons to "protect" the resource, unless there is demonstrable scientific evidence that such steps are necessary. In fact, such evidence appears totally lacking, at this point. Speedwell does not believe that action should be taken simply for "appearances" to satisfy what are in reality allocation concerns of Alaska based and sited processors.

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Bellevue
Tacoma
Vancouver
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Mr. Don W. Collinsworth
April 9, 1990
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If the Council acts to prohibit roe stripping and establishes certain product recovery rates for at-sea processors processing roe bearing pollock, the vessels without such capacity at this time should be grandfathered. Any recovery rates set should be based upon the actual experience and ability of the existing fleet to achieve the recovery rates. For example, it is noted that current recovery rates are based on out-dated statistics taken during the time that the foreign fishing fleet or joint venture fleets were harvesting in the EEZ.

Speedwell further notes that any regulation by the Council will not be effective unless it is done in conjunction with the State of Alaska. To Speedwell's knowledge, despite a current emergency prohibition against pollock roe stripping, the State of Alaska has not prohibited this practice. The Secretary, to date, has failed and refused to preempt Alaska's regulation and impose a ban upon roe stripping within state regulated waters or state licensed processing facilities. Speedwell specifically objects to any action taken in the EEZ unless it is done with the specific intent to require Alaska to conform also to the Secretary's form of regulations. Unless action is taken in coordination with Alaska, the Council will merely be taking steps which provide an undue advantage to Alaska sited processors over the at-sea processing fleet, clearly a violation of the national standards.

Finally, Speedwell is concerned that the Council's proposed options, including implementation of a seasonal apportionment schedule for pollock are being considered for reasons other than protection of the resource. In reality, certain options, including quarterly season proposals, act to allocate fish between the at-sea processors and Alaska sited processing plants and their catcher-processor vessels. Speedwell believes that the Council should forthrightly state that it is engaged in allocation and analyze these issues accordingly. To date, Speedwell is unaware of any analysis of the proposed alternatives for Amendments 19 and 14, which include an analysis of these alternatives for consistency with the national standards. Without such an analysis, the public's ability to fairly and intelligently comment on the proposals is hampered if not effectively precluded. Speedwell insists that the Council should take no actions on Amendments 19 or 14 until such a consistency analysis is prepared and made available for public comment and review.

Mr. Don W. Collinsworth
April 9, 1990 ..
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On behalf of our client, we would like to thank the Council for its attention to these comments. Again, additional comments at the scheduled April 24 meeting will be provided.

Sincerely yours,

WILLIAMS, KASTNER & GIBBS

J. J. Reynolds For:

James A. Wexler

JAW:kc
cc: Speedwell, Inc.

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VIA TELECOPIER 907-271-2815

36315.101

April 9, 1990

APR - 9 1990

Mr. Don W. Collinsworth
Chairman
c/o Clarence G. Putzke
Executive Director
North Pacific Fishery Management Council
P.O. Box 103136
Anchorage, AK 99510

Re: Comments, Amendments 19 and 14, Pollock Utilization
in the Groundfish Fisheries Off Alaska

Dear Mr. Collinsworth:

This firm is general counsel to Cascade Fishing, Inc., a Washington corporation, which will shortly place into operation in the Alaska groundfish fisheries the M/V Savage, a H & G boat. On behalf of Cascade Fishing, Inc. we request that you acknowledge receipt of the following comments on Amendments 19 and 14 to the Fishery Management Plan for Groundfish of the Gulf of Alaska, and the Fishery Management Plan for Groundfish of the Bering Sea/Aleutian Islands, respectively. The client intends to provide additional comments on these issues at the Council's meeting scheduled to commence April 24, 1990 in Anchorage. The client requests that its written comments be included and summarized in the Council's hearing package.

The client's primary interest relates to alternatives which may include a seasonal apportionment schedule for pollock in the Gulf of Alaska and/or Bering Sea/Aleutian Islands.

Cascade believes that any decision should be based upon sufficient biological evidence of harm to pollock stocks requiring specific, articulated regulatory action. Cascade does not believe that many of the alternatives under consideration at the present time can be justified to protect the pollock stocks, based upon concerns related to over-fishing. Instead, many of the alternatives appear

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Mr. Don W. Collinsworth
April 9, 1990
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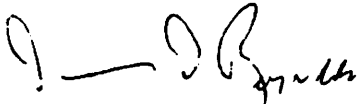
to be methods to implement political choices of the Council, favoring in particular, shorebased Alaska sited processing plants.

In addition, none of the alternatives currently under consideration appear to be analyzed under the standards of the Magnuson Act. Such an analysis is necessary to ensure consistency with the requirements of the Act and allow for intelligent, fully informed public comment. Cascade believes that the Council should not take action on any amendments to the Gulf of Alaska or Bering Sea/Aleutian Islands management plans until a complete analysis of the alternatives, for consistency with the Magnuson Act national standards, has been completed and circulated to the Council members, as well as the public for review and comment.

In conclusion, Cascade wishes to express its appreciation to the Council for consideration of its written comments. Cascade is looking forward to providing additional comments through the public hearing process.

Very truly yours,

WILLIAMS, KASTNER & GIBBS



Dennis D. Reynolds

DDR:kc

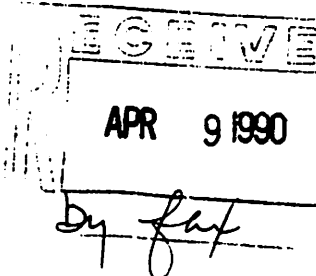
cc: Cascade Fishing, Inc.



ALASKA FACTORY TRAWLER ASSOCIATION

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April 9, 1990

North Pacific Fishery Management Council^{v.05}
605 West 4th Avenue
Anchorage, Alaska 99501

Re: Comment Amendment 19/14 Management Alternatives

The Alaska Factory Trawler Association (AFTA) submits the following comment on the proposed pollock management alternatives currently under consideration by the North Pacific Fishery Management Council (NPFMC). AFTA continues to support rational management measures for the fisheries which promote sustainable species populations and maximize the nation's net benefit return from the resource.

AFTA supports an apportionment scheme for pollock which will promote continued high economic return of the pollock fishery to the nation, while stretching the effective season in which pollock are generally available to fishermen. However, actions taken to artificially manipulate the domestic fishermen's use of the pollock fishery must be conservative. Market place forces remain the most efficient method for determining the appropriate use of the pollock resource. We concur with the EA/RIR analysis which concludes any mechanism effectively transferring excessive pollock quota from the roe season to later in the year "would substantially reduce the economic viability of the four measures of benefits in both areas (Bering Sea/Aleutian Islands and Gulf of Alaska) and substantially reduce the economic viability of the domestic pollock fishery". (EA/RIR - Summary - Effects on the sustainable economic yield of the pollock fishery) In effect transferring pollock quota out of the roe season reduces the net economic benefit to the nation. Any unnecessary reduction in economic return to the fisherman and the nation should not be endorsed by the NPFMC.

Within the Bering Sea the present system is largely driven by the market place and is working well: "in the Bering Sea/Aleutian Islands alone, pollock accounted for 84% of the catch and 72% of the exvessel value of the 1989 domestic groundfish fishery". (EA/RIR, Section 1.3, page 5) No major adjustments to pollock

management in the Bering Sea/Aleutian Islands are now required.

Should the Council initiate an allocation scheme which artificially defers some of the pollock harvest, any fishery slow down should take place immediately following the roe season. During this period pollock bring less value in their spawned out condition. CPUEs are somewhat lower since the schools are dispersed during this time period. Given the choices for a pollock fishing slow down, the period immediately following spawning is the least harmful.

Significant bycatch problems will be encountered if the Council shifts excessive pollock catching effort to the summer and fall. This year the present Amendment 12A bycatch cap constraints may well prevent attainment of the pollock TAC in the Bering Sea. NMFS presently predicts the pollock "other" fishery will close in mid-May. Imposition of an allocation scheme deferring substantial pollock harvest to later in the year are likely to exacerbate the Bering Sea problem. "Any management measures which seek to limit the spring pollock fishery and apportion quota to the latter part of the year will tend to result in higher bycatch rates for crab and halibut if, as a consequence, a smaller proportion of the groundfish harvest is taken with gear that is fished off-bottom". (EA/RIR, section #4, page vii).

Pollock management in the Gulf of Alaska during 1989 presented problems which were distinct from those in the Bering Sea. In large measure the issues presented in 1989 have now been satisfied. The Council banned roe stripping and implemented quarterly allocations of pollock in the Gulf, which slowed the pollock harvest. In addition, the Regional Director this year has the "single species" management tool which effectively slows the fishery as necessary for bycatch conservation purposes. The net result is fishermen are now presently able to compete for pollock in the Gulf during much of the year. In light of the present size of the Gulf pollock stocks, a semiannual apportionment is a preferable allocation scheme to quarterly apportionment. In the Gulf, no additional Council pollock management measures are necessary at this time.

AFTA supports a ban on roe stripping as a tool for preventing waste. However, a new rule banning roe stripping must be fashioned for replacement of the current emergency rule, if our management scheme is to permit the best return from the pollock harvest. The current emergency rule banning pollock roe stripping was well intended, but unsatisfactory as it actually forced waste of valuable pollock product and left many fishermen uncertain about the rule's specific requirements. The emergency rule's defect was the failure to judge pollock processing productivity on a basis of the individual processing operation's product recovery efficiency. The averages used in the emergency rule were Comment

insufficient to account for individual efficiency, expertise, or many of the inherent pollock resource variables throughout the roe season. In light of the current observer and processor data information, NMFS should now be able to derive individual product recovery rates for at-sea pollock processing operations which operated during the 1990 roe season. Unfortunately, the State of Alaska failed to implement a roe stripping ban on shore plants during the 1990 roe season. Perhaps this omission will be rectified by the State in time for shoreside operations in 1991. By continuing the requirement for observers at shoreplants, at a time when the plants are actually operating under roe stripping constraints, their operators could provide the same avenue for NMFS to determine accurate shore plant recovery rates during the 1991 pollock roe season.

While a rational ban on roe stripping is desirable, the EA/RIR demonstrates a well managed and substantial pollock roe fishery should proceed without question. The broad based economic return a pollock roe fishery provides is unquestionably important for all pollock fishermen in both the Gulf of Alaska and Bering Sea. "(1) In the Gulf, estimated benefits per metric (ton) of catch during the first quarter compared to those later in the year are 18% higher in terms of gross wholesale value, 90% higher in terms of net wholesale value, ...; (2) in the BSAI, estimated benefits per metric ton of catch during the first quarter compared to those later in the year are 22% higher in terms of gross wholesale days, 35% higher in terms of net wholesale value." (EA/RIR, Summary, Section 3.2) A well managed pollock roe fishery means jobs and economic stability to all sectors of the groundfish fishery. This is as true for the pollock fishery as it is for herring or salmon.

Significantly, a well managed roe fishery is an acceptable use of the resource and does not harm the ecosystem. Several concerns are examined in the EA/RIR and put to rest: "It appears the incremental discard of pollock from roe-stripping operations may not be significant relative to other practices common to the groundfish fisheries..." (Summary, page v) Discards in the roe fishery can be reasonably lessened through a rational roe stripping ban which should reduce any remaining concern. Under the current conservative pollock management schemes, the timing of a roe fishery on pollock stocks does no harm to the stocks since "there is no advantage (increasing yield) to harvesting late in the year versus early in the year". (Summary, page v) While some marine mammals feed on gravid female pollock, sea lions are opportunistic feeders relying on a variety of food sources. No evidence establishes a "cause and effect relationship" between pollock fishing and the current status of sea lions. (Summary, page viii) Pollock are not localized stocks according to the best scientific evidence. Current exploitation rates are sufficiently conservative to obviate fears of localized depletion.



APR 10 1990

by fax

April 9, 1990

To: N.P.F.M.C.
MR. CLARENCE PAUTZKE, EXECUTIVE DIRECTOR

RE: POLLOCK ROE STRIPPING

FR: CAPTAIN G.E. ANDERSON
THE FISHING COMPANY OF ALASKA
SEWARD, ALASKA

Dear Clarence,

I'll just make some brief remarks regarding the E.A.R.I.R. for Amendment 19/14. The Fishing Company of Alaska is in support of Alternative four.

Honestly, I feel nothing is wrong with the practice of roe-stripping of pollock. The economic value of the resource when processed in this method certainly justifies any possible moral issue, in my personal opinion. However, understanding the tremendous public sentiment aroused against this practice, I feel we must adopt an alternative which will best suit all of industry for 1991.

Alternative 2.

Prohibition of roe-stripping across the board, or in any portion of the Gulf and Bering Sea simply is not appropriate unless the scientists deem it necessary. Should it become necessary in any given area, the Regional Director, upon advice from our scientists and the Council should be given the authority to close or reserve any portion of the TAC, by area or seasons.

Alternative 3.

A worthy goal, full utilization, for all of our fisheries. Technologically, I don't feel we are ready for it. It would pose a severe economic impact on vessels not equipped or capable to make the necessary changes to accommodate this alternative. Even if we were ready, I doubt the market would be able to accommodate the bi-products.

The Fishing Company of Alaska, Inc.

P.O. BOX 1121 • SEWARD, ALASKA 99664
PHONE (907) 224-8937 • FAX (907) 224-3709

*** Alternative 4.

This is definitely the most favorable of all alternatives, if indeed one is proven to be needed at all. While details and impacts are worked out, the Council can have the framework already in place for any conservation or economic need. This would also allow for a "cooling off" period and allow more time for study. This alternative gives the Council the flexibility it needs to gather scientific assessments annually, and then make determinations of TACs acceptable.

Alternative 5.

The above alternative simply works better, for now.

Comments:

During the 1990 pollock roe season, one of our vessels did target on pollock. This was a head and gut vessel. The vessel followed the guidelines NMFS established for recovery rates and roe percent. The roe percentage calculations developed by NMFS proved to be inaccurate for a H&G vessel, and we were in the position of having to throw roe overboard to comply with the Council's intent. This was a greater waste in my estimation, than utilizing carcasses that have relatively little market value.

Our four vessels will not even consider the retention of any pollock next year unless it is economically feasible, allowing a portion of quota for roe-stripping. Perhaps this is the Council's intent. It will cause an economic burden as we have two machines that were purchased and installed prior to the Emergency Rule. I am certain that other companies must face a similar financial burden. I don't think this was the Council's intent.

I also find it difficult that the foreign fleets are allowed to benefit in the market place with an increase in roe prices, because of our regulations, restricting us to compete on an open playing field with them.

If there is a conservation problem within our control, pollock fishing should be ceased, or TACs reduced to accommodate the problem. Some form of roe-stripping should be allowed if there is not a scientific need established. Alternative four seems to best suit the Council's needs at this time.

Regards,



GEORGE E. ANDERSON

COMMISSIONERS

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DENNIS N. BROCK
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ESTABLISHED BY A CONVENTION BETWEEN CANADA
AND THE UNITED STATES OF AMERICA

APR - 9 1990

April 9, 1990

by fax

Dr. Clarence G. Pautzke
North Pacific Fishery Management Council
P.O. Box 103136
Anchorage, AK 99510

Dear Clarence:

Thank you for the opportunity to comment on the Amendment 19/14 package (pollock roe stripping) which is before the Council. The staff of the International Pacific Halibut Commission has reviewed the draft EA/RIR/IRFA which was recently distributed. We do not have comments on selection of specific alternatives, but are concerned that several of the alternatives may cause greater problems with increased halibut bycatch rates.


We agree with the conclusions of the analysis that potential solutions will shift vessel effort for pollock from a midwater trawl fishery to a bottom trawl fishery which may occur at a later time of year. Although the PSC limits in the GOA and BSAI would retain the halibut bycatch within Council-adopted levels, the effect of a shift in the fishery would be:

- (1) an increase in bottom trawl fishing where halibut bycatch rates are typically higher than in midwater trawling;
- (2) an earlier attainment of the halibut PSC limits, closing the groundfish fisheries at an earlier date;
- (3) an unknown amount of groundfish, perhaps in non-pollock fisheries, remaining unharvested.

The analysis points out that costs to the pollock fishery specifically, and other groundfish fisheries in general, will increase as earlier attainment of bycatch limits causes foregone groundfish harvest. Under some alternatives, value of the pollock fishery will decrease as roe production is made less efficient. The analysis presents no compelling justification that the alternatives to status quo will be an improvement. We request that the Council find a course of action that will not increase bycatch problems, while reaching a resolution that satisfies the Council's policies on roe stripping.

Thank you for this opportunity for input. A member of the Commission staff will be at the April Council meeting and will be available to provide additional information.

Sincerely yours,


Donald A. McCaughan
Director

RJT/jdf

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LAW FIRM

APR - 9 1990

by Jay

April 9, 1990

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Re: Amendment 19/14 to the Bering Sea/Aleutian Islands and Gulf of Alaska Groundfish Fishery Management Plans

Dear North Pacific Fishery Management Council:

We represent Emerald Seafoods, Seacatcher Fisheries, Inc. and Seahawk Pacific Seafoods, Inc., Swan Fisheries. We make the following comment on behalf of the above companies.

They support the implementation of roe stripping regulations in the pollock ground fishery as long as the recovery rates that are implemented for the various products are reflective of the existing domestic fleet's recovery rates.

Alternatives 3, 4, and 5, as discussed in the Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis of Amendment 19 address issues of political allocation rather than biology. Careful review of these alternatives demonstrates that these alternatives were proposed to implement an on-shore preference amendment to the FMP. Analysis accompanying these alternatives indicates that alternatives any unneeded to protect the pollock fishery or the Northern Sea Lion. The only clear-cut conclusion that may be drawn is that these alternatives, if implemented, would adversely affect the at-sea processors to the benefit of the onshore processors, and creates an allocation decision unrelated to biological concerns.

The North Pacific Fishery Management Council is a federal, not an Alaskan advisory panel. The interests of the nation should be foremost in determining whether the Council should recommend an Amendment to the Secretary for implementation. The advisory panels were formed to prevent balkanization of the fishery. The members of the Council have an obligation to examine any proposed Amendments against the National Standards to ensure compliance.

During the last several months our clients have been deeply concerned by the actions of the Council upon which the proposed

Seattle
Bellevue
Tacoma
Vancouver
Portland

alternatives are based. The implementation of quarterly allocations in the Gulf of Alaska for the 1990 fishing season by in season adjustment was particularly inappropriate. Quarterly allocations were not necessary to protect the pollock fishery or to prevent overfishing. This observation is consistent with the SAFE report and the testimony of the Council's Scientific and Statistical committee members. An issue before the council does not become a biologic emergency merely because the council recites a litany of reasons which are not supported by scientific evidence.

The quarterly allocation system which was implemented by in season adjustment for 1990 essentially allocated the Gulf of Alaska fishery to on-shore processors for the first quarter and eliminated the harvest of roe by-product for the GOA thereby assuring the 1990 harvest will not maximize the best value of the pollock fishery. The Environmental Assessment for Amendment 19 indicates that all of the first quarter allocation of pollock was taken by on-shore processors. This is not too surprising based on the historical data. In 1989, over 11,000 metric tons were taken before the majority of the at sea processors repositioned to the Gulf of Alaska. Setting the first quarter allocation of pollock in the Western Gulf (excluding Shelikof) to 11,250 metric tons virtually ensured that all of the first-quarters catch of pollock would be harvested by on-shore processor boats.

Justifications for the quarterly allocations were not supported in the record. The scientific evidence did not indicate that a quarterly allocation scheme was necessary to protect the integrity of the pollock stock. Furthermore, the Regional Director, when implementing the quarterly allocations by in season adjustment indicated that the quarterly allocations would result in a net benefit to the Nation. Such a finding is in direct conflict with to the evidence contained in the Environmental Assessment to Amendment 19, which recognizes that the roe fishery is a valuable aspect of the roe fishery. In reality, the quarterly allocations have precluded a strong roe fishery this year in the Gulf of Alaska, which, in turn, has resulted in a net loss to the Nation.

Our clients are also concerned regarding the Secretary's use of in season adjustments to implement quarterly allocations. This power, as interpreted by the Secretary, is extremely amorphous and has no visible constraints. Both the Regional Director and Mr. O'Connor stated during the December and September council meetings that a seasonal allocation system could not be set up by in season adjustment. The Regional Director subsequently, without explanation, used in season adjustments to do exactly what he said he did not have the power to do. The Secretary has represented in resulting litigation that the quarterly allocation

system in 1990 was experimental. This was not an expressed view at the council meeting and was only expressed when the Secretary had to justify his action to the court. Before any of the amendments or alternatives are considered, we would like the Council to address which of these alternatives can be implemented in the future by in season adjustment, and which of the alternatives can only be invoked by Plan amendment.

The above discussion reflects our concern that allocation regulations and Amendments are being presented to the council disguised as regulations and Amendments needed to protect the integrity of the pollock stock. We believe that this is the case for alternatives 3, 4, and 5 to Amendment 19. Our clients hope that the Council will recognize that these particular alternatives are allocative in nature, and are unnecessary for the protection of the pollock fishery.

Finally, our clients are concerned that the Council is acting without any real analysis of the National Standards. This step is exceedingly important, since any actions must be consistent with these standards as well as other positive dictates of federal law. Without such analysis, there is a grave danger the Council could act to protect regional interests over those of the entire nation.

Alternative 1: Do nothing. Maintain the status quo. Our clients agree that roe stripping should be regulated. Therefore, they believe that the status quo should not be maintained.

Alternative 2: Prohibit roe stripping of the pollock fisheries in the Gulf of Alaska and Bering Sea/Aleutian Islands or portions thereof. As stated above, our client supports a prohibition of roe stripping in both the Gulf of Alaska and the Bering Sea. However, our clients specifically object to the implementation of roe stripping regulations which are not based on reasonable product recovery rates. The emergency regulations implemented by the Secretary on February 16, 1990 were not reflective of the fleet's existing capability and were unreasonable. The justifications for the rates were reportedly set to prevent targeting of females during the roe season. The scientific data before the council did not support the proposition that targeting on females would adversely affect the productivity of pollock stocks. Without such a basis, it is unreasonable to restrict the roe fishery with constraints that were not supported by scientific analysis.

Alternative 3: Require a full utilization of all pollock in the pollock fishery in the Gulf of Alaska and Bering Sea/Aleutian Islands or portions thereof. This proposition does not make

sense in light of the analysis which was presented with this alternative. Full utilization would adversely affect the at sea processors with no resulting economic benefit to the nation. The alternative also opens the possibility for greater direct or joint-venture foreign participation in the pollock fishery. This alternative would require major refitting of both at sea processors and on shore processors. Result of such an investment would only lead to the depression of the world fish meal market, it would not result in a benefit to the nation.

Alternative 4: Implement a seasonal apportionment schedule for pollock to place limits on the winter-early spring harvest in the Gulf of Alaska and Bering Sea/Aleutian Islands or portions thereof. The quarterly allocation system which is now proposed is only a veiled attempt to protect the interests of the on shore processors. Quarterly allocations in the Gulf of Alaska allocates the Gulf of Alaska pollock fishery to the on-shore processors. It is not a mere coincidence that the quarterly allocation system in the Gulf mirrors the on-shore processors rate of harvest in 1988, when the at-sea processors participation in the fishery was inconsequential.

There is no scientific evidence that the quarterly allocation system is needed to protect the integrity of the pollock stock in the Bering Sea. Implementation of such regulations only would lead to unnecessary constraints on the at-sea processors in the Bering Sea.

5. Prohibit roe stripping and implement seasonal apportionment schedule for pollock in the Gulf of Alaska and Bering Sea/Aleutian Islands or portions thereof. There is no need for seasonal apportionments to be adopted in addition to roe stripping regulations. The roe stripping regulations by themselves accomplish the Council's goal to minimize waste in the industry. Seasonal apportionments are allocative measures and should not be implemented in conjunction with roe stripping regulations.

Our clients believe that the Council is premature in its consideration of alternatives 3,4 and 5. The Environmental analysis underlying these particular alternatives does not demonstrate any clear environmental impact. The Regional Director attempted to justify his implementation of quarterly allocations for 1990 by saying the scientists needed more data. Implementing Amendments before this data is available further clarifies that this is an political allocation issue and not an issue of biology. Our clients also believes that a full Environmental Impact is necessary before the Council recommends any alternative to the Secretary for implementation.

North Pacific Fishery Management Council
April 9, 1990
Page 5

Our clients will be present at the Council meeting and will participate fully in presenting testimony to expand the enclosed summary of our client's position with respect to each of the alternatives.

Sincerely yours,

WILLIAMS, KASTNER & GIBBS

James A. Wexler
James A. Wexler

cc: Emerald Seafoods
Seacatcher Fisheries, Inc.
Seahawk Pacific Seafoods

Groundfish Data Bank

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APR - 9 1990

April 9, 1990

Don Collinsworth, Chairman
 North Pacific Fishery Management Council
 P.O. Box 102136
 Anchorage, Alaska 99510



Sent by Fax

RE: EA/RIR FOR AMENDMENT 19/14 - ROE STRIPPING

We appreciate the opportunity to review and comment on the draft EA/RIR for Amendment 19/14 for the Bering Sea/Gulf of Alaska concerning roe stripping and seasonal apportionment of pollock.

We support option 5, prohibiting roe-stripping and implementing a seasonal apportionment schedule for pollock. We are particularly concerned that there be a seasonal apportionment in the Gulf of Alaska.

While the new draft EA/RIR is more accurate than the previous draft we reviewed, we still feel it is misleading and incomplete. Our reasons for supporting option 5 and our concerns with the EA/RIR are reviewed in the sections below.

SEASONAL APPORTIONMENT

A. History

Gulf of Alaska was predominantly a roe fishery in Shelikof Strait 1982-1984. By 1985 it was obvious that there were recruitment failures, disappearance of older year classes either due to migration or an unexpected high mortality and a sharp decline in the Shelikof Strait biomass.

At the same time, the unfishd pollock stocks on the east side of Kodiak began to increase and notable spawning biomasses appeared in Marmot, Chiniak and Barnabas. These spawning aggregations were not documented by NMFS until 1988, though they were fished as early as 1986.

Whether these events were a result of the roe-fishery or coincidental is unknown; but they should certainly send a signal that management should be conservative until further research can be done or a longer time series is available.

B. Roe Fishery

There are a multitude of spawning aggregations in the Gulf of Alaska of varying sizes. Any other roe fishery is managed inseason, on the grounds, to assure that no signal aggregation is overfished. This has not been done with pollock and we do not see management attempting to do this.

Since pollock are not managed as a roe fishery, the only appropriate conservative management regime has to be seasonal allocations which spread the effort over time. We also feel

AGDB on Amd. 19/14 - page 2

smaller area quotas are appropriate to spread the harvest over space and will be submitting a proposal in June to that effect.

If, as some of the data cited suggests, there are localized pollock populations, taking the whole quota in a short time period presents a serious potential for overfishing selected components of the stock and damaging the entire stock a component at a time.

It should be noted that there is no data to suggest that the size of a spawning aggregation relates to the success of that aggregation's recruitment or to that aggregation's contribution to overall recruitment. Since pollock spawn year round in many locations, this suggests that any particular location or aggregation is not guaranteed successful recruitment.

E. Bycatch

At least in the Gulf of Alaska the fall pollock fishery is predominantly a midwater trawl fishery and in 1989 was exclusively a midwater trawl fishery.

There is no increase in PSC bycatch in the Gulf by deferring a portion of the pollock TAC to the last 4 months in the year. In fact, there may be net decrease in PSC bycatch because deferring a portion of the quota to the last part of the year encourages targeting Pacific cod in the early part of the year when the cod are aggregated and bycatch is at its lowest.

D. EA/RIR

We feel it is inappropriate for the EA/RIR to state "These stocks are not thought to be directly affected by fishing mortality occurring over a short time period." The truth is the effect is unknown. Circumstantial evidence in the only short season roe pollock fishery (Gulf of Alaska) suggests management should proceed with caution.

The lack of clear knowledge about the effect of fishing during the spawning season and the effect of targeting females is appropriately noted. Fishing mortality over a short period of time should be given the same treatment.

The repeated references to the potential for increased bycatch of PSC species in a fall pollock fishery in the Gulf are erroneous, contrary to existing data and should be deleted from the EA/RIR. There is no more danger of PSC bycatch in the fall than in the late-winter spring. As noted above, a pollock fishery in the fall may actually result in an overall reduction of PSC take.

The conclusion under 3.1.6 is erroneous. There have not been dominant pollock roe fisheries anywhere but in the Gulf of Alaska 1984-1986. In the Bering Sea the pollock fishery has

been a year round fishery through 1989. In the Gulf the fishery has been basically year round except 1984-1988 and those years were followed by a drastic reduction in biomass.

The probability of adverse impacts of a roe only fishery has been considered sufficiently high for the Council, NMFS, ADF&G and the industry to limit the Shelikof Strait quota to a research quota only during the roe season rather than at the current exploitation rate set for stocks outside Shelikof Strait. Industry has considered the potential problem severe enough in the Gulf to request quarterly allocations on emergency basis in 1990.

The presence or absence of research projects has little bearing on whether there is something critical to research, but rather on the possibility of economically getting results.

ECONOMIC ANALYSIS

The economic analysis appears based on one year and gives highest points to short term profits.

The logical conclusion from this analysis is that the best use of the nation's fisheries is to allow only foreign vessels to fish and charge them whatever the market will bear. This would result in pure profit and eliminate all the costs to the U.S. industry. Since jobs don't count, the loss of jobs should be of no concern.

Short of this, we could eliminate all quotas and PSC caps and let the U.S. industry fish as hard as it wants anyway it wants until the fish are gone. This eliminates all the costs of management and enforcement.

If the intent is to promote a healthy, long term U.S. industry, then the health of the resource is the primary concern and long term strategies which create employment, preserve market position, a company's ability to respond to changing market conditions and attempt to allow adjustment of product flow to meet market demands (reduce glutting the market, the necessity to hold product in cold storage, etc.) would be the major economic concerns.

Nowhere does the analysis address the following:

1. The long range advantage of providing a variety of product forms to both hedge a company's long term profit and maintain its position in the market.
2. The deferred costs communities must bear when unemployment reaches a level which results in the closure of support businesses and falling property prices.
3. Reduced market prices as the result of large amounts of product coming onto the market all at once.
4. Cost of cold storage for product which cannot be sold because of a glut on the market

5. The cost of letting people go and then having to hire and train new people later. For Kodiak the cost was considerable 1989-90.

For the Gulf of Alaska the references to "as capacity continues to grow" are erroneous for the shorebased segment. There are no expansion plans for Gulf of Alaska processors nor any new catcher boats being built for the Gulf of Alaska. In fact the trawl catching capacity is less now than it was during the height of the shrimp fishery.

We may be a little sensitive, but it seems since at-sea processing was only substantial in the Gulf of Alaska in 1989 that profits were shifted from the onshore component to the offshore component and we are really discussing whether to allow this shift to accelerate. Using 1989 as the base year ignores a lot of history. It also ignores that many of the shorebased catcher vessels in the Gulf were once Gulf joint venture vessels.

The statements referring to "shifting the harvest to later in the year" as "redistributing income from at-sea processors to shorebased processors" are also erroneous. This year's quarterly release of pollock in the Gulf may end up shifting quota from shorebased processors who could have taken it early in 1990 to at-sea processors who come into the Gulf after the Bering Sea is closed.

While the economic analysis is certainly in line with the short term profit taking by a few at the cost of many philosophy which has spawned leveraged buyouts, the collapse of many savings and loan companies and other headline making economic decisions, many of which have left behind the human tragedy of unemployment and devastated communities across the nation, it is contrary to much of the council's work during the last ten years from management for long term stock yield to elimination of pot boats for black cod through Americanization of the fisheries.

Whether the economic analysis is adequate, depends on the council's current philosophy on what economic parameters are important and what constitutes the best return to the nation of the common property resource. Obviously from our perspective, jobs and long term profitability rank ahead of short term profitability.

Sincerely,



Chris Blackburn, Director
Alaska Groundfish Data Bank

RECEIVE

GREENPEACE

APR - 9 1990 Greenpeace USA • 4649 Sunnyside Ave N • Seattle WA 98103 • Tel (206) 632-4326
• Fax (206) 632-6122 •

April 5, 1990

Don W. Collinsworth, Chairman
North Pacific Fishery Management Council
605 West 4th Avenue
Anchorage, AK. 99501

RE: Comments on Amendment 19/14 to the Bering Sea/Aleutian
Islands and Gulf of Alaska Groundfish Fishery Management
Plans.

Dear Council Members:

On behalf of Greenpeace U.S.A., we are taking the opportunity to provide comments on the above-referenced amendments pertaining to pollock utilization in the Bering Sea/Aleutian Islands and the Gulf of Alaska.

As an organization committed to maintaining the integrity of the marine environment, Greenpeace supports the selection of alternative actions 3, 4, and 6 for inclusion in amendments 19/14.

Our organization is highly concerned that the precipitous decline of the Steller sea lion population indicates that the Bering Sea and Gulf of Alaska marine ecosystems are facing significant environmental stresses. The National Marine Fisheries Service has provided an emergency threatened listing for Steller sea lions. Population declines have also been noted for Alaska's harbor seals, northern fur seals, and fish-eating seabird species such as common murre and kittiwakes.

In the face of the overcapitalization of the burgeoning domestic trawl fishery, it is critical that the Council take action to address the pollock roe-stripping issue.

Greenpeace supports the adoption of alternative action 6 as a precautionary measure for the protection of the threatened Steller sea lion population. Concern has been raised that Steller sea lions may be experiencing prey deprivation as a result of the concentrated fishing effort on roe-bearing pollock. This measure to prohibit fishing during the roe season would serve to provide substantially greater quantities of pollock as forage for Steller sea lions. The roe-bearing pollock are protein-rich prey that are easier to catch and high in energy content for pregnant females and weaned pups.

Our support for full utilization through alternative action 3 results from our concern over the waste of protein-rich

resources due to roe-stripping and other practices in the pollock fisheries. In addition, we support alternative action 4 as a measure to provide the Council with the option to spread pollock harvests throughout the year in order to serve conservation purposes. This measure would provide the Council with flexibility to implement the prohibition on pollock fishing during the roe season and spread the fishing effort over the rest of the year even as an increasing number of trawl vessels enter the already fully capitalized fishery.

As a facet of these options, we support the proposed measure to restrict fishing for pollock in the Gulf of Alaska to midwater trawl in order to not increase by-catch of halibut and crab, and other bottom-dwelling species, during months later in the year as a result of the measure to prohibit pollock trawling during the roe-bearing season. Furthermore, trawling hard on the bottom should be prohibited in areas of the Bering Sea where by-catch rates are historically high.

As an attachment to this letter, we are submitting specific comments on the Draft Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis that the Council has provided for analyses of the environmental and economic impacts of the alternatives. There are numerous deficiencies in the analyses that we encourage the Council to remedy during production of the final document.

Thank for your consideration of our views.

Sincerely,



Alan Reichman
Pacific Ocean Ecology Coordinator
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enclosure

cc: Dr. William Fox, NMFS
Dr. Nancy Foster, NMFS
Mr. John Twiss, Marine Mammal Commission

**SPECIFIC COMMENTS ON
THE DRAFT ENVIRONMENTAL ASSESSMENT/REGULATORY IMPACT REVIEW/
INITIAL REGULATORY FLEXIBILITY ANALYSIS FOR AMENDMENT 19
TO THE FISHERY MANAGEMENT PLAN FOR GROUND FISH
OF THE GULF OF ALASKA
AND AMENDMENT 14 TO THE FISHERY MANAGEMENT PLAN
FOR GROUND FISH OF THE BERING SEA/ALEUTIAN ISLANDS**

Comment # (page #, paragraph)

Section 2. Discussion of Alternatives:

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Since we currently do not know much yet about the relative importance of density-dependent and density independent factors on fish population dynamics in Alaska groundfish, effects of fishing impacts, seasonal targeting, etc. cannot be predicted. Nevertheless, there is increasing evidence that environmental factors (=density-independent) affect pollock recruitment more than adult biomass or cannibalism (e.g. Bailey et al., 1988; Bailey and Stokes, 1986). Hence, any fishing impacts would act in addition to those environmental effects.

Thus, it appears evident that excessive egg-removals or excessive targeting on females could unbalance the sex ratio and threaten future reproductive potential. An important factor determining the relative importance of such selective removal is the ratio of fishing to natural mortality, as pointed out in section 2.3.3.1.4. (top of page 21, and Appendix III). Obviously, if fishing mortality greatly exceeds natural mortality, the sex ratio will become unbalanced. Furthermore, Baldwin and Megrey's (1988) age-structured model indicates that the timing of the harvest can affect stock condition when fishing mortality is high.

At best, thus, present data and analytical tools are insufficient to anticipate any clear-cut effect of excessive seasonal harvesting and female removal on the pollock stocks. At worst, the effects will be detrimental to stock conditions and reproductive potential. Clearly thus, any decision allowing future excessive seasonal and sex-biased targeting should take these uncertainties into account.

Section 2.3.3.2. Effects on sustainable economic yield.

C12 (p.22,2-4).

Given the poor accuracy of the data, and no indication of the range of possible confidence intervals, differences less than 5% are probably insignificant. Therefore, only two of four criteria in the Gulf of Alaska and only one in the Bering Sea show increased benefits. The conclusions (that roe fishing was

more profitable in 1989) must thus be taken with caution, especially for the Bering Sea roe fishery. See also comment C20.

C13 (p.22,5).

See comment C7 regarding projections of DAP requests. Furthermore, given the fact that DAP requests will continue to exceed TAC's, a more detailed analysis could have been made assuming different scenarios of future increases or decreases in catch, and expected future changes of product values, instead of just relying on a single-year analysis. There is no guarantee that market conditions will develop such that roe-stripping remains profitable in the long-term future, given changing levels of catches, demands, prices, etc. The analysis in this section thus does not provide satisfactory answers to the question of effects of roe-fishing on sustainable economic yield.

Section 2.3.4. Effects of timing of pollock fishery on bycatch of halibut, crab and other bottom dwellers (see comment C2 for change in wording).

C14 (p.23-24).

This question and the analysis is only geared towards protecting the interests of crab and halibut fishermen, not of the ecosystem as a whole or at least of other non-utilized species. Why were potential effects on other species not considered? Given the goals and objectives of the Magnuson Act, such considerations should be included in the environmental assessment.

C15 (p.23,2-5).

Considering overall bycatch, three scenarios arise: A pollock fishery with midwater trawls, that is generally clean and produces little bycatch. A pollock fishery "off the bottom" with moderate amounts of bycatch. And a pollock fishery hard on the bottom, with potential for high bycatch and ensuing discard of any bottom dwelling species including halibut and crab. Thus, if harvesting is restricted to midwater and off-bottom trawling in both the Gulf of Alaska and Bering Sea/Aleutian Island regions, much potential bycatch and discard could be avoided.

Section 2.3.5. Effects on marine mammals.

C16 (p.24,5-8).

The analysis points out that we do not know enough about the importance of pollock diet for marine mammals, particularly northern sea lions. Potential deleterious effects on northern sea lions and other marine mammals can therefore not be ruled out (see also Marine Mammal Commission Annual Report 1989), and decisions on pollock harvesting schedules should be made accordingly. Given the concern of marine mammal scientists that pollock fishing during the roe-season may adversely affect pregnant female sea lions and weaned pups by depriving them of

nutritionally-important prey, a precautionary approach needs to be taken at this time (see also comment C30).

Section 2.3.6. Comparison of Alternatives.

2.3.6.1. Alternative 1.

C17 (p.25,3-6).

For a discussion on the relative increase in discards due to roe-stripping based on alternative Surimi production only, see comment C8 and Table 1. Actual increases in discards may be much higher, if alternative operations include H&G and/or fileting operations. The analysis assumes that H&G factory-trawlers producing roe are unwilling to process carcasses into headed and gutted products (i.e. footnote 1 on page 26). A complete analysis, however, should include all possible scenarios (e.g. as done on Table 1). Under some of those scenarios, the increased fishery discards would be significant and could measurably affect ecosystem behavior in parts of the Gulf of Alaska and the Bering Sea. See also comment C18.

C18 (p.26,3).

It is assumed that H&G processors would be unwilling to process carcasses into H&G products. On what facts or observations is this assumption based? It should be assumed that the carcasses are processed into a mix of products, i.e. headed and gutted, filets, Surimi, meal, etc. Furthermore, potential technological progress can be included in the analysis: alternative 2 might for instance force processors to streamline their operations such that headed and gutted operations become more profitable.

C19 (p.27,2).

It is stated that the pollock available from prohibition of roe-stripping to other operators later in the year would not provide them with the level of protection they desire. The question is, what amount of protection do those operators need to make pollock processing desirable to them? A numerical basis for decisions can be given: in 1989, 20 750 mt of pollock were processed for roe-stripping at sea, 9 150 mt of that amount by H&G-equipped factory trawlers. According to the assumption on page 26, the 9 150 mt would be available for other processing since the H&G processors would be eliminated from the roe-pollock fishery if roe-stripping was prohibited. This represents a 26.8% increase over the 34 100 mt pollock taken for processing beyond roe-stripping during the first quarter. Would the 26.8% increase represent sufficient amount of protection for those processors, or how much more would it have to be to be considered sufficient? The economic assessment of alternative 2 is very vague on this question. See also comment C21.

C20 (p.27,7).

Given the inaccuracy of the data, the relative increases and decreases of the economic benefits calculated for the Bering Sea are insignificant. See also comment C12.

C21 (p.28,1-2).

What was the expected amount of pollock by shoreside processors in 1989? If roe-stripping would have been prohibited, shoreside processors could have received maximally 9,150 mt more in 1989 (see comment C19). According to Table 2.3, shoreside processors received 24 650 mt of pollock during the first quarter of 1989. If all of that would have gone to shoreside processors, it would have given them 37% more pollock to process. Would that have been sufficient to satisfy their expectations? Again, as above (comment C19), the analysis given is very vague.

Section 2.3.6.2. Alternative 3. Require full utilization of pollock.

C22 (p.28,7).

A more balanced biological assessment can be made, based on discussions in section 2.3.3. E.g., a slower-paced fishery would prevent a potential for exceeding TAC and provide greater reserves available for bycatch in other fisheries. It would also release more food immediately available for other predators who depend on pollock for their diet, such as the northern sea lion and other marine mammals. For effects on marine mammals, see comments C16 and C30.

C23 (p.29,1).

The assessment of relative quantities of discard lacks precision and perspective, such as: given the relative importance of the pollock fishery in both the Gulf of Alaska (43% of groundfish fishery in 1989) and Bering Sea/Aleutian Islands (64.4% of domestic and joint venture fisheries in 1989), the contribution of discards from pollock fishing and processing represents somewhere between 40 and 60% of total discard associated with groundfish fishing in the Alaska region. This is a very significant part, rather than "only" a part of total fishery discard. See also comment C9.

C24 (p.29,1).

It is mentioned that no adverse effects of current discards on stock productivities and components of the ecosystem are known. However, any level of discards would have effects, positive or negative, and some are seen in confined nearshore areas. Therefore, a more accurate assessment would indicate that the magnitudes of the effects of the current levels of discard on the pollock stock productivity and on food web dynamics as a whole are not known, except in confined areas.

C25 (Economic analysis, pp. 29-30).

The economic analysis entirely omits potential social benefits of meal-plant expansion in the form of future and more stable employment opportunities.

C26 (p.29,5).

How realistic is an assumption of an overall 20% product recovery rate? This would assume most of pollock is processed to Surimi plus roe. However, filet and H&G operations have higher product recovery rates (25-80%, Low et al., 1989), but roe-only operations have much lower product recovery rates and represented a large fraction of the total pollock processing in the Gulf of Alaska in 1989. Most likely, there are large seasonal and regional differences in average recovery rates, and a more complete analysis of it presented to justify the average 20% used here.

C27 (p.30,2).

The comparisons of the potential effects of meal-production increases on the world market are misleading. The increased required production must be compared to an already planned near-future expansion of capacity. The planned expansion, from 175 000 mt to 780 000 mt of product waste in Alaska is presumably to be accomplished in the near future. It would represent an increase of 56.5% over current U.S. meal production and 45.3% of world-wide fish meal production (Table 2). If such capacity expansion is already planned in the absence of any regulations demanding such an expansion, the owners/ operators/ investors must have reason to believe that such operations will be profitable in the future and that the world market can absorb such a significant increase in fish meal production. Hence, the total need for maximally 1 200 000 mt of pollock product waste would represent an additional increase of maximally 58 800 mt of meal over the planned expanded meal production capacity (equal to 21.6% over planned world fish meal production, Table 2). Seen from such an angle, the increase in meal production required from full utilization of pollock appears less significant and economically acceptable. It must be noted that the analysis gives no data on the projected world demand for fish meal, and the potential for new market and product developments. If industry feels that the world market cannot absorb such an increase in fish meal, it might be appropriate and not wasteful to invest into research on innovative marketing and product conversions for this product and conduct product expansion surveys.

Section 2.3.6.3. Alternative 4. Establish seasonal apportionment and restrict the Gulf pollock trawl fishery to midwater gear.

C28 (p.31,1-3).

The assessment on environmental factors affecting egg and larval survival is not clear. There is no reason to believe that egg and larval production are positively linked to the

probability of encountering good conditions for egg and larval survival. In other words, a high fecundity is not environmentally coupled with high survival of eggs and larvae. For the assessment of natural mortality, see comment C10. Seasonal fishing in combination with natural mortality may significantly affect stock conditions (e.g. Baldwin and Megrey, 1988) and net yield to the fishery.

C29 (p.31,6).

Bycatch can further be reduced by requiring off-bottom trawl fishing, rather than hard on the bottom, in the Gulf of Alaska as well as in the Bering Sea. Under such conditions, it would be possible to reduce bycatch of crab, halibut, and all other bottom dwellers with a full pollock season in operation. See comments C14 and C15.

C30 (p.32,2).

Although the relative contributions of the different pollock fisheries to the decline of the northern sea lion populations and on other marine mammals are not clearly known, marine mammal scientists are clearly concerned about effects of groundfish removals in general and pollock fisheries in particular on marine mammal populations in the Gulf of Alaska and Bering Sea (see Marine Mammal Commission Annual Report, 1989). Scientists have repeatedly proposed that groundfish catches must be reduced to provide adequate protection for marine mammals, given our limited knowledge on the problem. Hence, any decisions must consider such potential effects in the face of the uncertainties.

C31 (p.33,4).

The effect of an annual "multi-season" fishery developing within a seasonal apportionment schedule could be avoided by proposing a monthly apportionment schedule.

Prepared by Hans J. Hartmann, Ph.D.
Aquatic Resources Conservation Group

For Greenpeace International

April 6, 1990

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Table 1. Pollock waste produced from various processing operations, and absolute and relative increases in discard due to roe stripping. Product conversion coefficients of 7.5% and 4% are assumed for roe-stripping in the Gulf of Alaska and Bering Sea, respectively. Data from 1989, in metric tons.

| | Gulf of Alaska | Bering Sea |
|--|----------------|--------------|
| 1. Pollock processed at sea | 33 000 mt | 1 067 000 mt |
| 2. Roe stripping at sea | 20 750 | 29 700 |
| 3. Discards if all is Surimi (16%) | 27 700 | 896 300 |
| 4a. Discards, roe strip at sea | 19 200 | 28 500 |
| b. Discards, Surimi, of remainder | 10 300 | 871 300 |
| c. Total actual discards w/ roe-stripping (4a+4b) | 29 500 | 899 800 |
| 5. Increase compared to Surimi- only processing (4c-3) | 1 800 | 3 500 |
| Pct increase roe>Surimi (5/3) | 6.4% | 0.4% |
| 6a. Discards if all is filets (30%) | 23 100 | 746 900 |
| b. Discards, filets, of non-roe- stripping operations | 8 800 | 726 100 |
| c. Total discards w/ roe-stripping (6b+4a) | 28 000 | 754 600 |
| 7. Increase compared to filet- only processing (6c-6a) | 4 900 | 7 700 |
| Pct increase roe>filets (7/6a) | 21.2% | 1.0% |
| 8a. Discards if all is H&G (65%) | 11 600 | 373 500 |
| b. Discards, H&G, of non-roe- stripping operations | 4 300 | 363 100 |
| c. Total discards w/roe-stripping (8b+4a) | 23 500 | 391 600 |
| 9. Increase compared to H&G-only processing (8c-8a) | 11 900 | 18 100 |
| Pct increase roe>H&G (9/8a) | 102.6% | 4.9% |
| Repeat analysis for increased roe-stripping (details not shown): | | |
| 10. Pollock harvested at sea | 33 000 | 1 067 000 |
| 11. Pollock roe stripping at sea | 30 000 | 297 000 |
| 12. Increase in discard compared to Surimi-only processing | 2 600 | 35 600 |
| Percent increase in discard | 9.2% | 4.0% |
| 13. Increase in discard compared to filet-only processing | 6 800 | 77 200 |
| Percent increase in discard | 29.2% | 10.3% |
| 14. Increase in discard compared to H&G-only processing | 17 300 | 181 200 |
| Percent increase in discard | 149.4% | 48.5% |

Table 2. Current, planned, and future required fish-meal production capacities for processing pollock waste in Alaska waters. Data are taken from the Environmental Assessment document.

| | |
|---|--------------|
| 1. Current capacity for pollock waste | 175 000 mt |
| 2. Fish meal produced (14% of 1) | 24 500 mt |
| 3a. Current U.S. production | 150 000 mt |
| b. Current world production | 187 000 mt |
| 4. Planned expansion for pollock waste reduction capacity in Alaska | 780 000 mt |
| 5a. Expansion increase over current capacity | 605 000 mt |
| b. Increased amount of fish meal produced | 84 700 mt |
| 6a. Percent increase over current U.S. prod. | 56.5% |
| b. Percent increase over current world prod. | 45.3% |
| 7. Total maximal need of capacity for Alaska pollock waste reduction | 1 200 000 mt |
| 8a. Increase over planned expanded capacity | 420 000 mt |
| b. Increased amount of fish meal produced | 58 800 mt |
| 9a. Percent increase over expanded U.S. prod. | 25.1% |
| b. Percent increase over expanded world prod., assuming no other increase in fish-meal production elsewhere | 21.6% |

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C11 (pp.18-22).

The biological analyses justly point out the inadequacies inherent in applying equilibrium-type models such as the Ricker spawner recruit model, to predict pollock stock behavior. But the analyses ignore some recent developments. Those models are based on too many simplifying assumptions to be useful for real-world situations. For instance, given the relatively large confidence limits usually associated with stock-abundance estimates, it would be difficult to distinguish the fit of a simple linear regression from the fit of the Ricker curve within the range of the data shown on Figure 2.4. The data show that in the Bering Sea, within an 8-fold range of the spawner population, the number of recruits is nearly independent of spawner population size. Any other prediction would be inappropriate.

Since we currently do not know much yet about the relative importance of density-dependent and density independent factors on fish population dynamics in Alaska groundfish, effects of fishing impacts, seasonal targeting, etc. cannot be predicted. Nevertheless, there is increasing evidence that environmental factors (=density-independent) affect pollock recruitment more than adult biomass or cannibalism (e.g. Bailey et al., 1988; Bailey and Stokes, 1986). Hence, any fishing impacts would act in addition to those environmental effects.

Thus, it appears evident that excessive egg-removals or excessive targeting on females could unbalance the sex ratio and threaten future reproductive potential. An important factor determining the relative importance of such selective removal is the ratio of fishing to natural mortality, as pointed out in section 2.3.3.1.4. (top of page 21, and Appendix III). Obviously, if fishing mortality greatly exceeds natural mortality, the sex ratio will become unbalanced. Furthermore, Baldwin and Megrey's (1988) age-structured model indicates that the timing of the harvest can affect stock condition when fishing mortality is high.

At best, thus, present data and analytical tools are insufficient to anticipate any clear-cut effect of excessive seasonal harvesting and female removal on the pollock stocks. At worst, the effects will be detrimental to stock conditions and reproductive potential. Clearly thus, any decision allowing future excessive seasonal and sex-biased targeting should take these uncertainties into account.

Section 2.3.3.2. Effects on sustainable economic yield.

C12 (p.22,2-4).

Given the poor accuracy of the data, and no indication of the range of possible confidence intervals, differences less than 5% are probably insignificant. Therefore, only two of four criteria in the Gulf of Alaska and only one in the Bering Sea show increased benefits. The conclusions (that roe fishing was

more profitable in 1989) must thus be taken with caution, especially for the Bering Sea roe fishery. See also comment C20.

C13 (p.22,5).

See comment C7 regarding projections of DAP requests. Furthermore, given the fact that DAP requests will continue to exceed TAC's, a more detailed analysis could have been made assuming different scenarios of future increases or decreases in catch, and expected future changes of product values, instead of just relying on a single-year analysis. There is no guarantee that market conditions will develop such that roe-stripping remains profitable in the long-term future, given changing levels of catches, demands, prices, etc. The analysis in this section thus does not provide satisfactory answers to the question of effects of roe-fishing on sustainable economic yield.

Section 2.3.4. Effects of timing of pollock fishery on bycatch of halibut, crab and other bottom dwellers (see comment C2 for change in wording).

C14 (p.23-24).

This question and the analysis is only geared towards protecting the interests of crab and halibut fishermen, not of the ecosystem as a whole or at least of other non-utilized species. Why were potential effects on other species not considered? Given the goals and objectives of the Magnuson Act, such considerations should be included in the environmental assessment.

C15 (p.23,2-5).

Considering overall bycatch, three scenarios arise: A pollock fishery with midwater trawls, that is generally clean and produces little bycatch. A pollock fishery "off the bottom" with moderate amounts of bycatch. And a pollock fishery hard on the bottom, with potential for high bycatch and ensuing discard of any bottom dwelling species including halibut and crab. Thus, if harvesting is restricted to midwater and off-bottom trawling in both the Gulf of Alaska and Bering Sea/Aleutian Island regions, much potential bycatch and discard could be avoided.

Section 2.3.5. Effects on marine mammals.

C16 (p.24,5-8).

The analysis points out that we do not know enough about the importance of pollock diet for marine mammals, particularly northern sea lions. Potential deleterious effects on northern sea lions and other marine mammals can therefore not be ruled out (see also Marine Mammal Commission Annual Report 1989), and decisions on pollock harvesting schedules should be made accordingly. Given the concern of marine mammal scientists that pollock fishing during the roe-season may adversely affect pregnant female sea lions and weaned pups by depriving them of

nutritionally-important prey, a precautionary approach needs to be taken at this time (see also comment C30).

Section 2.3.6. Comparison of Alternatives.

2.3.6.1. Alternative 1.

C17 (p.25,3-6).

For a discussion on the relative increase in discards due to roe-stripping based on alternative Surimi production only, see comment C8 and Table 1. Actual increases in discards may be much higher, if alternative operations include H&G and/or fileting operations. The analysis assumes that H&G factory-trawlers producing roe are unwilling to process carcasses into headed and gutted products (i.e. footnote 1 on page 26). A complete analysis, however, should include all possible scenarios (e.g. as done on Table 1). Under some of those scenarios, the increased fishery discards would be significant and could measurably affect ecosystem behavior in parts of the Gulf of Alaska and the Bering Sea. See also comment C18.

C18 (p.26,3).

It is assumed that H&G processors would be unwilling to process carcasses into H&G products. On what facts or observations is this assumption based? It should be assumed that the carcasses are processed into a mix of products, i.e. headed and gutted, filets, Surimi, meal, etc. Furthermore, potential technological progress can be included in the analysis: alternative 2 might for instance force processors to streamline their operations such that headed and gutted operations become more profitable.

C19 (p.27,2).

It is stated that the pollock available from prohibition of roe-stripping to other operators later in the year would not provide them with the level of protection they desire. The question is, what amount of protection do those operators need to make pollock processing desirable to them? A numerical basis for decisions can be given: in 1989, 20 750 mt of pollock were processed for roe-stripping at sea, 9 150 mt of that amount by H&G-equipped factory trawlers. According to the assumption on page 26, the 9 150 mt would be available for other processing since the H&G processors would be eliminated from the roe-pollock fishery if roe-stripping was prohibited. This represents a 26.8% increase over the 34 100 mt pollock taken for processing beyond roe-stripping during the first quarter. Would the 26.8% increase represent sufficient amount of protection for those processors, or how much more would it have to be to be considered sufficient? The economic assessment of alternative 2 is very vague on this question. See also comment C21.

C20 (p.27,7).

Given the inaccuracy of the data, the relative increases and decreases of the economic benefits calculated for the Bering Sea are insignificant. See also comment C12.

C21 (p.28,1-2).

What was the expected amount of pollock by shoreside processors in 1989? If roe-stripping would have been prohibited, shoreside processors could have received maximally 9,150 mt more in 1989 (see comment C19). According to Table 2.3, shoreside processors received 24 650 mt of pollock during the first quarter of 1989. If all of that would have gone to shoreside processors, it would have given them 37% more pollock to process. Would that have been sufficient to satisfy their expectations? Again, as above (comment C19), the analysis given is very vague.

Section 2.3.6.2. Alternative 3. Require full utilization of pollock.

C22 (p.28,7).

A more balanced biological assessment can be made, based on discussions in section 2.3.3. E.g., a slower-paced fishery would prevent a potential for exceeding TAC and provide greater reserves available for bycatch in other fisheries. It would also release more food immediately available for other predators who depend on pollock for their diet, such as the northern sea lion and other marine mammals. For effects on marine mammals, see comments C16 and C30.

C23 (p.29,1).

The assessment of relative quantities of discard lacks precision and perspective, such as: given the relative importance of the pollock fishery in both the Gulf of Alaska (43% of groundfish fishery in 1989) and Bering Sea/Aleutian Islands (64.4% of domestic and joint venture fisheries in 1989), the contribution of discards from pollock fishing and processing represents somewhere between 40 and 60% of total discard associated with groundfish fishing in the Alaska region. This is a very significant part, rather than "only" a part of total fishery discard. See also comment C9.

C24 (p.29,1).

It is mentioned that no adverse effects of current discards on stock productivities and components of the ecosystem are known. However, any level of discards would have effects, positive or negative, and some are seen in confined nearshore areas. Therefore, a more accurate assessment would indicate that the magnitudes of the effects of the current levels of discard on the pollock stock productivity and on food web dynamics as a whole are not known, except in confined areas.

C25 (Economic analysis, pp. 29-30).

The economic analysis entirely omits potential social benefits of meal-plant expansion in the form of future and more stable employment opportunities.

C26 (p.29,5).

How realistic is an assumption of an overall 20% product recovery rate? This would assume most of pollock is processed to Surimi plus roe. However, filet and H&G operations have higher product recovery rates (25-80%, Low et al., 1989), but roe-only operations have much lower product recovery rates and represented a large fraction of the total pollock processing in the Gulf of Alaska in 1989. Most likely, there are large seasonal and regional differences in average recovery rates, and a more complete analysis of it presented to justify the average 20% used here.

C27 (p.30,2).

The comparisons of the potential effects of meal-production increases on the world market are misleading. The increased required production must be compared to an already planned near-future expansion of capacity. The planned expansion, from 175 000 mt to 780 000 mt of product waste in Alaska is presumably to be accomplished in the near future. It would represent an increase of 56.5% over current U.S. meal production and 45.3% of world-wide fish meal production (Table 2). If such capacity expansion is already planned in the absence of any regulations demanding such an expansion, the owners/ operators/ investors must have reason to believe that such operations will be profitable in the future and that the world market can absorb such a significant increase in fish meal production. Hence, the total need for maximally 1 200 000 mt of pollock product waste would represent an additional increase of maximally 58 800 mt of meal over the planned expanded meal production capacity (equal to 21.6% over planned world fish meal production, Table 2). Seen from such an angle, the increase in meal production required from full utilization of pollock appears less significant and economically acceptable. It must be noted that the analysis gives no data on the projected world demand for fish meal, and the potential for new market and product developments. If industry feels that the world market cannot absorb such an increase in fish meal, it might be appropriate and not wasteful to invest into research on innovative marketing and product conversions for this product and conduct product expansion surveys.

Section 2.3.6.3. Alternative 4. Establish seasonal apportionment and restrict the Gulf pollock trawl fishery to midwater gear.

C28 (p.31,1-3).

The assessment on environmental factors affecting egg and larval survival is not clear. There is no reason to believe that egg and larval production are positively linked to the

probability of encountering good conditions for egg and larval survival. In other words, a high fecundity is not environmentally coupled with high survival of eggs and larvae. For the assessment of natural mortality, see comment C10. Seasonal fishing in combination with natural mortality may significantly affect stock conditions (e.g. Baldwin and Megrey, 1988) and net yield to the fishery.

C29 (p.31,6).

Bycatch can further be reduced by requiring off-bottom trawl fishing, rather than hard on the bottom, in the Gulf of Alaska as well as in the Bering Sea. Under such conditions, it would be possible to reduce bycatch of crab, halibut, and all other bottom dwellers with a full pollock season in operation. See comments C14 and C15.

C30 (p.32,2).

Although the relative contributions of the different pollock fisheries to the decline of the northern sea lion populations and on other marine mammals are not clearly known, marine mammal scientists are clearly concerned about effects of groundfish removals in general and pollock fisheries in particular on marine mammal populations in the Gulf of Alaska and Bering Sea (see Marine Mammal Commission Annual Report, 1989). Scientists have repeatedly proposed that groundfish catches must be reduced to provide adequate protection for marine mammals, given our limited knowledge on the problem. Hence, any decisions must consider such potential effects in the face of the uncertainties.

C31 (p.33,4).

The effect of an annual "multi-season" fishery developing within a seasonal apportionment schedule could be avoided by proposing a monthly apportionment schedule.

Prepared by Hans J. Hartmann, Ph.D.
Aquatic Resources Conservation Group

For Greenpeace International

April 6, 1990

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Table 1. Pollock waste produced from various processing operations, and absolute and relative increases in discard due to roe stripping. Product conversion coefficients of 7.5% and 4% are assumed for roe-stripping in the Gulf of Alaska and Bering Sea, respectively. Data from 1989, in metric tons.

| | Gulf of Alaska | Bering Sea |
|--|----------------|--------------|
| 1. Pollock processed at sea | 33 000 mt | 1 067 000 mt |
| 2. Roe stripping at sea | 20 750 | 29 700 |
| 3. Discards if all is Surimi (16%) | 27 700 | 896 300 |
| 4a. Discards, roe strip at sea | 19 200 | 28 500 |
| b. Discards, Surimi, of remainder | 10 300 | 871 300 |
| c. Total actual discards w/ roe-stripping (4a+4b) | 29 500 | 899 800 |
| 5. Increase compared to Surimi- only processing (4c-3) | 1 800 | 3 500 |
| Pct increase roe>Surimi (5/3) | 6.4% | 0.4% |
| 6a. Discards if all is filets (30%) | 23 100 | 746 900 |
| b. Discards, filets, of non-roe- stripping operations | 8 800 | 726 100 |
| c. Total discards w/ roe-stripping (6b+4a) | 28 000 | 754 600 |
| 7. Increase compared to filet- only processing (6c-6a) | 4 900 | 7 700 |
| Pct increase roe>filets (7/6a) | 21.2% | 1.0% |
| 8a. Discards if all is H&G (65%) | 11 600 | 373 500 |
| b. Discards, H&G, of non-roe- stripping operations | 4 300 | 363 100 |
| c. Total discards w/roe-stripping (8b+4a) | 23 500 | 391 600 |
| 9. Increase compared to H&G-only processing (8c-8a) | 11 900 | 18 100 |
| Pct increase roe>H&G (9/8a) | 102.6% | 4.9% |
| Repeat analysis for increased roe-stripping (details not shown): | | |
| 10. Pollock harvested at sea | 33 000 | 1 067 000 |
| 11. Pollock roe stripping at sea | 30 000 | 297 000 |
| 12. Increase in discard compared to Surimi-only processing | 2 600 | 35 600 |
| Percent increase in discard | 9.2% | 4.0% |
| 13. Increase in discard compared to filet-only processing | 6 800 | 77 200 |
| Percent increase in discard | 29.2% | 10.3% |
| 14. Increase in discard compared to H&G-only processing | 17 300 | 181 200 |
| Percent increase in discard | 149.4% | 48.5% |

Table 2. Current, planned, and future required fish-meal production capacities for processing pollock waste in Alaska waters. Data are taken from the Environmental Assessment document.

| | |
|---|--------------|
| 1. Current capacity for pollock waste | 175 000 mt |
| 2. Fish meal produced (14% of 1) | 24 500 mt |
| 3a. Current U.S. production | 150 000 mt |
| b. Current world production | 187 000 mt |
| 4. Planned expansion for pollock waste reduction capacity in Alaska | 780 000 mt |
| 5a. Expansion increase over current capacity | 605 000 mt |
| b. Increased amount of fish meal produced | 84 700 mt |
| 6a. Percent increase over current U.S. prod. | 56.5% |
| b. Percent increase over current world prod. | 45.3% |
| 7. Total maximal need of capacity for Alaska pollock waste reduction | 1 200 000 mt |
| 8a. Increase over planned expanded capacity | 420 000 mt |
| b. Increased amount of fish meal produced | 58 800 mt |
| 9a. Percent increase over expanded U.S. prod. | 25.1% |
| b. Percent increase over expanded world prod., assuming no other increase in fish-meal production elsewhere | 21.6% |

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SEATTLE, WASHINGTON 98166

(206) 242-0263

April 2, 1990

Don W. Collinsworth
Chairman
North Pacific Fisheries Management Council
P.O. Box 103136
Anchorage Alaska 99510

Subject: Final Draft of Amendment 19/14

Dear Mr. Collinsworth:

After reviewing amendment 19/14, it is the feeling of Trans-Artic Ltd., is there hasn't been enough research on the potential impact of concentrated fishing activities on spawning concentrations of pollock, is the localized depletion of discrete stocks, and what are the boundries of the localized stock ?

Your draft indicates that NMFS, ADF&G, and industry does not feel that reasearch is warranted. In this case we feel that roe-stripping should be prohibited, until research has been done to see what effects it has on the population of sea lions and other marine mammals.

In any event there should be full utilization of the pollock, even if it has to be used for fish meal.

In addition we would hope that the Council would restrict fishing for pollock in the Gulf of Alaska to midwater trawl.

Sincerely,


George E. Matz
President

April 9, 1990

Clarence Pautzke
Executive Director
North Pacific Fishery Management Council
P.O. Box 103136
Anchorage, AK 99510

VIA FAX (907) 271-2817

Re: 14/19 EARIR

Dear Clarence,

Congratulations to the staff for a job well done on the amendment 14/19 EARIR. The organization and clarity of the document has improved with each passing draft. While the issues have been clarified, there has been little qualitative change in the conclusions to be drawn from the analysis; rather, those conclusions have been underscored. I am therefore requesting my previous letters on earlier drafts and on the emergency rule be incorporated by reference as they remain relevant at this time. I have some further comment which are as follows:

- Alternative 2 should be rejected as an ineffectual measure with negative net economic benefits. It is allocationally ineffectual in enhancing shoreside deliveries and in preserving a second semester fishery (if those are Council objectives). It is ineffectual biologically because it has insignificant impact on the size of a roe season fishery. It should be noted that the catches this season were about 29,000, 33,000, and 34,000 in three weeks prior to the emergency rule and after the imposition of the rule they dropped to 28,000, 25,000 and 30,000, a change of roughly 15%.

As noted in the document it is also ineffectual in significantly reducing waste, or increasing protein production. An analysis recently conducted by the Montlake lab indicated that pollock roe had a protein content of 25.3% and an oil content of 4.2% (personal communication with Dick Nelson) this contrasts with 15.4-18.6% protein and .1-.9% oil from filets (Process Report 1976 S-761). Thus, the roe alone may have nutritional value rivaling that of the filets at certain recovery rates (i.e. 10% roe during the prime roe season vs. 15-20% filet yield in the post spawn period) as well as economic value far exceeding the value of flesh products.

- Alternative 3 would be acceptable only if the Council were to make a policy decision that the ethical benefits of maximizing protein production and minimizing discards out weigh net economic benefits as a measure of value. If this new policy is adopted by the Council we should be consistent and apply it beyond just the roe pollock fishery despite the fact that it would diminish or

destroy the profitability of many DAP fisheries and likely bring back JVP as a major player. Within the context of this new policy objective (which should only be adopted after serious debate on its implications) Alternative 3 is a far more effectual measure than Alternative 2.

- Alternative 4 is my personal choice of a preferred alternative so long as the framework procedure detailed on pg. 9-10 is incorporated. As noted, in the last paragraph of 2.3.6.5 (pg.36) the "correct" allocation of TAC will vary from year to year (for biological as well as economic reasons) and it is essential to maintain the ability to adjust accordingly. The caveats in the last paragraph of section 2.3.6.3 (pg.34,35) are important to note. However the 2nd point - that information necessary to avoid a wrong apportionment may not be available - is more applicable to attempting to set a fixed apportionment at this time than it is to a framework process. We should anticipate that our information base will improve as the data gathered by observers is processed (note that we do not have any information from the 1990 roe season fishery available to us at this time, though there were substantial differences between the '89 and '90 fisheries). The 3rd point - that apportionments are set by political process rather than a market process - is pertinent to the potential of incorrect apportionments imposing huge reductions of net economic benefits on the industry, a criticism that would be equally applicable to interfering with market decisions by processors under Alternative 2. This criticism of a framework is not as valid to the biological reasons for setting an apportionment.

Perhaps a way to modify the potential of decreased planning stability associated with a framework would be to limit the percentage change in the apportionment from the historic or status quo split to something like a 10-20% change in a single year. (Greater changes could be accommodated by emergency rule if clearly warranted.)

While the analysis does not demonstrate any biological risk associated with a roe season fishery, neither does it allow the conclusion that there is no risk. Many of us who have been participating in the roe season pollock fishery for 10 years now have a gut feeling that there is a risk. We feel that we are applying uneven exploitation rates to different components of the stock, which may in fact be distinct stocks. For instance approximately 90% of the January/February roe season fishery occurred in area 515 (Bogoslav). Frankly, myself and other fishermen are frightened by the potential of a disproportionate amount of the TAC being taken out of one sub area during the roe season, whether it be Shelikov, or Bogoslav.

This brings me to the phrase "portions thereof". While both



the SSC and myself submitted plan amendment proposals that would have allowed setting a separate 515 TAC the Council did not accord the proposal high priority. I believe this is a tragic mistake, for the reasons just expressed. There would have been far more potential conservation value in such a measure than in banning a particular processing practice. I have been informed by staff that taking such an action is probably not within the scope of this analysis. However, if we can stretch the phrase "portions thereof" to do so, it would help justify the time and effort spent on this amendment package. I do understand we would be able to set a separate western GCA TAC for pollock in the roe season under this alternative and strongly endorse doing so.

The primary justification for a split season is, in my mind, based on biological concerns and not as an indirect method to make allocations. Therefore a split season (i.e. Jan.1 - May 31, and June 1 - Dec. 31) is appropriate because it would limit total fishing mortality that could occur during the spawning season. However I would find quarterly allocations much more difficult to justify based on this document.

- Concerning restrictions on the use of bottom trawl gear for pollock, I agree that the cost of using bottom gear will be paid in foregone groundfish catch since the halibut caps are constraining to the bottom trawl fishery. Ideally we would allow a market mechanism to determine the optimum distribution of bycatch caps and perhaps we will move in that direction by 1991. If we fail to do so then I think we probably should consider restricting the use of bottom gear in the directed pollock fishery, though it makes more sense to do so with the carrot than the stick.

- Section 2.3.5 (page 34) addresses the "sea lion issue". It introduces an hypothesis without attendant documentation that the roe pollock fishery is an important competitor with the sea lion for its food. 1990 observer reports do not indicate any sea lion taking in the 515 pollock fishery where the vast majority of the roe fishery occurred (personal communication with J. Berger), nor have observer debriefings indicated any visual sightings of sea lions in the proximity of the roe pollock fleet in 515. This may change as more observers are debriefed, however if the Council intends to use this particular concern to justify a restriction on the roe fishery, then the SSC ought to comment on the validity of this hypothesis. As a footnote our logbook data (submitted to NMFS) indicates our fishing depth ranged from 175-275 fathoms for most of the roe season. This is beyond the typical feeding depth of sea lions and doesn't fit the characterization of spawning aggregations as easy prey.

- Page 12 includes discussions of the economic components of net benefits. In doing so it equivocates as to whether employee

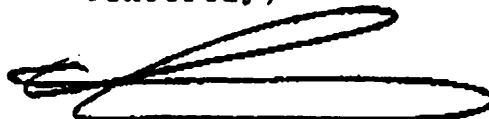


days and employee costs are benefits or not depending on the mobility of labor. I submit the statement is incomplete. From a national accounting perspective we are concerned that rents (net benefits) are captured. We are not particularly concerned whether they accrue to the employee or the employer. Thus employee "costs" are actually a "benefit" when they exceed the opportunity cost of labor. In this regard not that H & G roe operations have maximum employee costs and minimum employee days (Tables 2.6-10) per ton of pollock catch. Dividing the employee cost by employee days one can compare H & G operations to other operations, assuming the lower figure represents an approximation of something equal to or greater than the opportunity cost of labor per ton, the higher figure (from H & G roe operations) represents additional benefits captured in this case by labor. (In other terms wouldn't we all like to work less days for more pay?)

According to a recent Council mailing forwarding a report from the U.S. Embassy in Japan (2/28/90), 8,000 tons of U.S. pollock roe worth 57 million dollars were exported to Japan alone in 1989, the value of the roe fishery in 1990 is likely to be substantially greater. While the press and others have been critical of the Council for not reaching a prejudged conclusion, this is an issue of major proportions and deserves a better solution than the emotionally based action taken under the emergency rule.

Thank you for considering these comments.

Sincerely,



david fraser
P.O. Box 771
Port Townsend, WA 98368

JAN 3

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January 3, 1989

Dr. Clarence Paulzke
 North Pacific Fisheries Management Council
 P.O. Box 103136
 Anchorage, AK 99510

Re: Roe Pollack Plan Amendment

Dear Clarence:

Recently I wrote a letter to the Secretary of Commerce commenting on the council's recommendations for emergency action, and a copy of that letter has been sent to the council. In as much as most of the comments in that letter are applicable to consideration of plan amendment to regulate the roe pollack fishery, I would like you to enter that letter together with this one in the comment record.

As pointed out in my previous letter, there are really two quite separate issues addressed in this amendment package: 1.) Should the magnitude of a roe pollack season fishery be limited (for all locational or biological reasons)? It is my contention that these two issues should be treated as separate amendment packages, since each of these two issues requires a different regulatory response.

Also, as I have previously argued, the issue of waste or optimum utilization needs to be dealt with in a generic manner, with the same principles governing all fisheries under council jurisdiction. The council must develop and define the principles governing such policy before attempting to implement them on an ad hoc basis. Until the council takes this step it would do well to set aside the proposal to regulate a particular processing process and focus its attention on the merit of managing the magnitude of the roe season pollack fishery.

I believe a split season does have merit. Given analysis in the EARIR it is, however, difficult to quantify at this time what might constitute an optimal split of the TAC between the roe and non-roe season. Given, also, our experience with BSA amendment II, where a split was implemented one year and then suspended the next, because it clearly was no longer appropriate; and given the long lead time for adopting new plan amendments--it becomes apparent that we must framework this action for it to yield lasting value.

So--I come to the heart of this letter--which is to ask of council and regional staff what latitude we have under the EARIR as currently drafted to structure a frameworked action. I raised this question in the AP in September and don't feel I received a definitive answer.

The EARIR now speaks of splitting the TAC in the BSA and GOA or portions thereof. I would like clarification of the "portions thereof."

- Does this only speak to existing areas such as western vs. central GOA or could another "Shelikov district" type area be delineated without requiring a separate plan amendment?
- If so, would all such sub areas need to be identified in the amendment package or could they be developed later as appropriate under the authority of this amendment without a further plan amendment?
- Could a separate TAC be specified for an area such as S15 (Bogaslav), as the SSC suggested, without another plan amendment?
- Could the percentage split between the two seasons be varied from area to area?
- Could the percentages be varied from year to year in a given area?
- If a TAC is not caught in the roe season, would it automatically roll over into the non-roe season?
- If so, could an uncaught quota for a special sub area (like Shelikov or Bogaslav) "roll out" in to the GOA or BSA wide quota for the remainder of the year?
- If this frame work had been in place this year could it have been used to provide for an exploratory fishery such as was requested for the area east of Kodiak?
- And if it had been uncaught in the roe season, could it be specified to not roll out or over into the general area or TAC?

All the foregoing options seem like pollock management tools the council might have wished it had at its disposal in December, and if they could be available for next year it could prove a valuable asset in managing the pollock fishery. Given the time involved in going through the plan amendment cycle, this amendment package is the one opportunity to acquire these tools in real time.

If the EARIR as presently drafted does not allow for a framework approach, then it would be better to delay consideration at this meeting and expand the analysis. This would still allow the amendment to be place for next year.

The further question relates to whether quarterly rather than semi-annual assessment can be considered under this GARR. It would seem that once a split is made between the roe and non-roe season, that further division of the quota during the non-roe season is not reasonably related to the issue of managing a roe fishery which is the thrust of the GARR. (though avoiding a second quarter fishery might be justified to avoid the waste of foregone yield per recruit associated with the poor condition of pollack in the post spawn period.)

The foregoing all focuses on the issue of managing the magnitude of a roe season fishery--the sort of management action for which there is ample precedent. Assuming the council decides to rush down the "slippery slope" of managing processing as well as fishing, there seems to be a glaring deficiency in the analysis package, that impacts the public's ability to comment on the proposal. That deficiency is the lack of even a "strawman" example to what a regulation "banning roe stripping" would look like.

Presumably the emergency rule being developed is the sort of regulation we can expect. Not having seen it, rumour has it that it will involve a list of legal product forms and hypothetical recovery rates together with a set of ratios of products that will determine the legality of an operation. My letter to the Secretary of Commerce points out some the the pit falls of this approach, which will quite probably result in mandatory waste when variable real world recovery rates don't fit with hypothetical averages. (is waste more ethical when it's mandatory?)

However, my point here is that the council ought to have an obligation to the industry to allow it to comment on likely regulatory language. Simply defining roe-stripping as "something you know when you see it", is too amorphous. Regulations to manage processing as opposed to fishing are qualitatively different and more complex. It is not just a matter of "shall this area be open or closed?", "shall this species be allocated to this or that gear type?", "shall a cap or TAC be X or Y amount?"--all of which decisions result in fairly straightforward regulations. A regulation banning a processing practice is like banning pornography: it presumes a definition of that which is to be banned. so far the council has failed to provide that definition and a look at what sort of regulation might follow from it, thus depriving industry and public of the opportunity for effective comment.

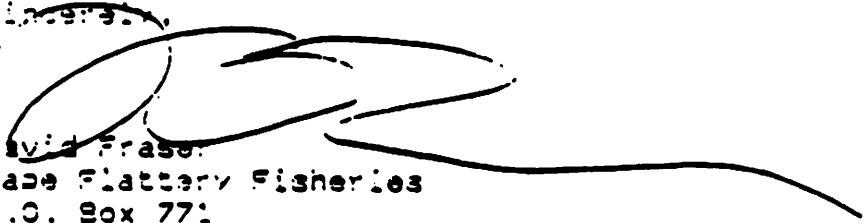
In short, and once again . . .

- 1.) Split the question
- 2.) Take the opportunity to framework some much needed fishery management tools.

- 2.) Table the issue of managing processing until the principles or criteria upon decisions are to be made defined.
- 3.) Place the development of a full or optimal utilization back on track as a priority.
- 4.) Make sure staff has answers to the question enclosed. (I don't ask much, do I?)

Thanks for your attention to these comments.

Sincerely,



David Fraser
Case Flattery Fisheries
P.O. Box 77
Port Townsend, WA 98368

December 21, 1989

U.S. Secretary of Commerce
Robert Mosbacher
14th St. & Constitution Avenue N.W.
Washington, DC 20230

Dear Secretary Mosbacher:

We are writing this letter to express our concerns regarding the NPFMC request that you implement a "ban on roe stripping" in the pollack fishery. The first part of this letter deals with the rationale for, and efficiency of, an emergency ban. The second part deals with the impacts and equity of such a regulation.

The Rationale

The EARIR prepared for the September council meeting and as modified in response to comments by the SSC, Region, Plan Team and others was resubmitted to the council at the December meeting and sent out for further public comment. While the document is still in draft form it must be regarded as the best available information for making a decision on this issue. There was little or no new and substantive information provided in public comment to justify a ban on roe stripping of the December meeting. Since the EARIR must provide the heart of the record, these comments address the issue in that light.

The EARIR makes it clear there are two issues being addressed:

- A. The magnitude of a roe season fishery.
Relative to this issue there exist:
1. Biological concerns--not necessarily provable or quantifiable, but valid areas of concern.
 2. Allocational questions--whether to provide for a fall fishery to ensure market and labour continuity.
- B. The moral acceptability at a particular processing practice--roe stripping--which happens to be the best economic use of pollack for production at a single product (i.e., relative to filets only, surmi only, H&G only, or meal only). Secondary concerns were raised about the impacts of waste discharge associated with roe stripping, however, as the EARIR makes clear, they are:
--not incrementally significant

--already dealt with by EPA regulations requiring grinding of processing discharge. (a regulation which deserves to be uniformly enforced).

The two issues suggest two regulatory strategies:

- The first is seasonal quotas or adjustment of TAC.
- The second is a prohibition on a processing practice.

The first measure is clearly an effectual one.

Allocationally--it guarantees a fishery after the roe season.

Biologically--while the concerns aren't provable problems a seasonal constraint on the size of the fishery is prophylactically effective.

Morally--a seasonal quota is effective in that it is a constraint that at least limits the extent of the practice that some find repugnant.

The second measure is clearly ineffectual:

Allocationally--the EARIR indicates a "ban on roe stripping" would have only extended the season by a matter of days in the GOA last year.

Biologically--in the BSA as well as the GOA it is quite conceivable that the vast majority of the TAC could be taken during the spawning season with the tremendous increase in processing capacity without seasonal allocation of the quota.

Morally--while morality, like beauty, is in the eye of the beholder, presumably the moral criteria here is the total amount of protein. If so, there is little to be said for the efficacy of a ban on "roe stripping". As noted in the EARIR, "roe stripping" accounts for only a miniscule fraction of the "wasted" or unutilized protein in the ground fish fishery.

In summary there is little sense or value in proceeding with a ban on a particular processing practice in either the BSA or GOA, but particular in the BSA where the council declined to pursue the more appropriate seasonal allocation of TAC.

Impacts

If all of the above were merely an academic debate we would not be writing, however, there are some serious negative impacts as the result of the way the emergency rule is being developed. These impacts will both specifically effect our operation and generally effect the industry's ability to plan and prepare for the 1990 roe pollack season.

In the first instance, we (F/V Muir Milach) have been fishing as a DAP harvester on roe pollack since 1981 in the BSA and 1982 in the GOA. For eight years we operated in a JV mode, then in 1989 we worked with a DAP processor. In all of these years the production of roe was the primary focus of the processors we worked with, and in most cases the processors did not have the processing capacity or equipment to produce filets or surimi. On average, the pollack roe season, while only representing 1/4th or less of our fishing time, has contributed 1/3rd or more of our gross income per year. In 1989 the roe fishery was absolutely essential to our survival in the DAP mode. We are fearful our ability to participate in this fishery, upon which we have historic dependency, will be pre-empted by a ban on "roe stripping".

In the more general instance, banning "roe stripping" by emergency rule has severe disruptive impact on the H&G type processing and catcher/processor operations. As noted in the EARIR, pre-emption of their ability to participate is likely to have a multimillion dollar impact.

Because this regulation is being crafted as an emergency rule and its content will not be known until it is announced and takes effect at the beginning or during the roe season, there is insufficient lead time to allow the processors to re-equip their factories to comply with the regulation even if it were feasible to do so. Planning is impossible in this atmosphere, with so many unresolved questions:

What products will be considered legal "co-production" with roe . . .? "Kirimi" cut? Spinka? Mince? Filets? Meal? H&G? Surimi?

What recovery rates will be assumed?

Will filet recovery rates be based on capital intensive Bader 182 type technology?

Will they allow for lower recovery rates that may result from damage to the carcass resulting from the roe extraction process?

What recovery rates will be used for the non-traditional products such as spinka and kirimi cut, that might be feasible with modification of existing technology on H&G processors?

Perhaps most importantly, how can the use of a ratio of recovery rates take into account the crossing curves of escalating roe recovery over two months of the roe maturation prior to spawning when roe recovery increases from 5% to 20% (EARIR) while flesh condition and recovery is simultaneously deteriorating--and for the fact that this process occurs at differing times area by area?

In the face of all this it is like playing Russian roulette for a processor to attempt to position ones self to comply with an unknown regulation.

Conclusion

When this issue surfaced at the April council meeting I made a motion which passed unanimously in the Advisory Panel to the NPFMC. That motion requested that an amendment package be developed "which would ensure a full airing of the issues and impacts of full utilization". The AP recommended this package proceed immediately off cycle. At a subsequent meeting the council dumped consideration of the generic issues involved in full utilization into limbo for at least a year, while proceeding headlong in a rather hysteric atmosphere of orchestrated media hype and political grand standing to this emergency ban on roe stripping. The folly of this should have been apparent when the council was unable in a half day of debate to define roe stripping beyond "you'll know it when you see it".

In doing so the council disregarded the good advice in the RD's September 15th letter:

"We have reviewed the draft analysis of alternatives for Amendments 19 and 14 to the groundfish fishery management plans, the so-called "roe-stripping" amendment. While the "roe-stripping" issue begs for resolution, I suggest that the council should first establish an overall policy on full utilization. If we are to embark on the precedential path of regulating processing as well as fishing activities, we should do so with a clear sense of direction and destination. I do not believe that the Council has yet come to such an understanding. We should hear more argument about what exactly we want to achieve, why and how best to achieve it."

It also ignored the advice of NOAA general consul in the opinion presented at the December meeting that cautioned against embarking on the slippery slope of regulating the economic decisions of processors.

Therefore we request of you to not pursue an emergency ban on roe stripping. Failing that we suggest a simplified action that would only state that:

Pollack roe shall not be the majority (by weight of product), of all pollack products on board a vessel.

Such a regulation would avoid all reference to, and problems associated with, product recovery coefficients. It would result in minimum recoveries of 10% to 35% which is comparable (or even favorable) to recoveries achieved in the non-roe season. It would also avoid the disproportionate impact on H&G processor which borders on defacto discrimination.

Thank you very much for your consideration of these comments.

Sincerely,

David Fraser
Cape Flattery Fisheries
P.O. Box 771
Port Townsend, WA 98368

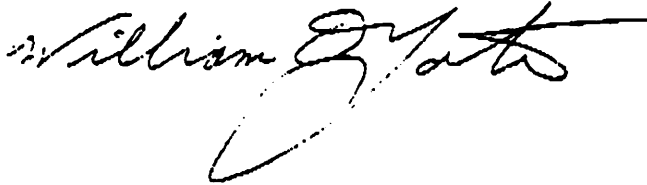
CC: Bill Fox - NOAA
Steven Pennoyer RD
Craig O'Conner
Clarence Pautzke

December 21, 1967

Dear Secretary:

We the undersigned wish to add our voice to the comments in Mr. Frasers letter regarding emergency action on roe stripping.
Thank you.

Crystal Fisheries
Manager FV Grand Duchess
FV Bon Sue Mar



Amfish

Speedwell Inc.



Fishing Company of Alaska
FV Alaska
Alaska Ranger
Alaska Voyage

Jubilee Fisheries
FV Vaerdam



FEB 22 1990

K. J. ...

2-15-90

MR DEAN FRANKRATZ
535 N. BRAGAW #2
ANCHORAGE, AK 99508

NORTH PACIFIC FISHERIES
& MANAGEMENT COUNCIL
605 W. 4TH AVE
ANCHORAGE, ALASKA

DEAR SIRS/MAM:

RE: CURRENT AND PAST WASTE OF POLLOCK FISH.

I AM GRATEFUL FOR YOUR EFFORTS TO PREVENT
OVERFISHING OF POLLOCK IN THE ALASKAN GULF.
YOU ARE COMMENDED FOR INITIATING ACTION ON
THIS IMPORTANT ISSUE.

ON 26 JUNE 1989, THRU 12 JULY 1989 (16 DAYS)
I WAS ON ONE OF EMERALD SEAFOODS VESSELS,
THE F/T "CLAYMORE SEA". TO THIS DATE THEY
HAVE NOT PAID ME, AND ARE VERY VICIOUS OVER
THE PHONE.

WHILE ABOARD THE "CLAYMORE SEA" I OB-
SERVED A GROSS WASTE OF FISH, EVERYWHERE
FROM TOSSING OUT THE MANY FISH THAT WEREN'T
POLLOCK, TO THE AWFUL WASTE, OF, THE MANY
POLLOCK. ONE MAJOR PROBLEM WAS "EXTREMELY
POOR MANAGEMENT" SETTING A MUCH FASTER
THAN NORMAL PRODUCTION PACE FOR TOO FEW
WORKERS. THIS RESULTED IN NOT THOROUGHLY
SCREENING FISH FOR WORMS, AND BONES. ALSO,
ANY POLLOCK THAT HAD ANY BONES, OR SKIN WAS
THROWN AWAY, MANY SLIPPED THRU THAT HAD
WORMS, AND THE MACHINES RUINED A LOT.

THE SUPERVISORS ALSO SPREAD A LOT OF FALSE STATEMENTS TO THE WORKERS, AND SIMPLY LIED TO US.

I BELIEVE ALASKA IS GETTING THE SHORT END OF THE INDUSTRY AS A WHOLE. I'VE SEEN A LOT OF VESSELS THAT WEREN'T FROM ALASKA, AND WORKED WITH, AND MET, A LOT OF PEOPLE WHO WERE NEW HERE.

IN REFERENCE TO THE POLLOCK LIMIT; I'D LIKE TO SEE MORE RESTRICTIONS IMPOSED. IT JUST DOESN'T MAKE SENSE TO ME TO THROW AWAY THE WHOLE FISH, IF IT HAS A FEW BONES OR A LITTLE SKIN ON IT - THEY CAN BE SAVED. IF EMERALD SEAFOODS DON'T APPRECIATE OUR CONSERVATION EFFORTS, LET THEM FISH SOMEWHERE ELSE.

SINCERELY


DEAN PANKRATZ

CC U.S. Commerce Sec.
CC RON BERG
CC FISH & GAME, COM'L FISH. DIV.
CC DEPT. COMMERCE, NTL MARINE FISHERIES SERV.
CC ERIK SILBERSTEIN E.R.M