

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke
Executive Director



DATE: September 15, 1993

SUBJECT: Exclusive Registration

ESTIMATED TIME 3 HOURS

ACTION REQUIRED

Final consideration of exclusive registration alternative.

BACKGROUND

In December of 1992 the Council approved an amendment to both groundfish plans which would have required trawl vessels fishing for pollock to register in either the BSAI or the western/central GOA. In June of 1993 the Council rescinded this action and notified the industry and public that they would reconsider the issue at the September meeting. The Council was explicit that the alternatives to be considered in September would be either (1) the status quo (no exclusive registration) or (2) Alternative 8 from the original analysis, which is exclusive registration (entire GOA or BSAI) for all trawl vessels for all groundfish species.

The original analysis, along with an Executive Summary emphasizing the results of Alternative 8, was released for public comment in mid-August. The Executive Summary is contained in the notebooks as Item D-2(b)(1). Written comments received are under Item D-2(b)(2).

EXECUTIVE SUMMARY

for the

Exclusive Registration Amendment

(Gulf of Alaska and Bering Sea Aleutian Islands)

Prepared August, 1993

BACKGROUND

In 1991 the Council received proposals urging consideration of exclusive registration due to the influx of vessels into the Western Gulf once the halibut bycatch caps for the Pacific cod fisheries had been reached in the BSAI. This influx of vessels resulted in the cod catch quotas in the Western Gulf being reached very early in the year, and in fact, overruns of the TAC occurred due to this large, unexpected effort. In 1992, approximately 93% of the annual P. cod TAC was taken in the first quarter of the year due primarily to relocation of vessels to the GOA after February 16 when the BSAI was closed to bottom trawling due to halibut bycatch. As recently as 1990, the first quarter catch of P. cod was less than 40% of the annual TAC, which permitted participation by vessels from the GOA during a larger portion of the fishing year.

Also in 1992, the first quarter catch of pollock in the westernmost district (61) was 12,638 mt, an overrun of the TAC of 7,808 mt. This was due to a larger influx of effort from vessels which moved in from the BSAI after completing the pollock 'A' season. Because of this unanticipated effort, NMFS was unable to close the fishery soon enough.

In December of 1992, the Council voted to establish exclusive registration for trawl vessels engaged in directed pollock fisheries. This amendment was not forwarded for Secretarial review as of the June 1993 Council meeting where the Council received an additional proposal to add flatfish to the exclusive registration amendment. The proposers cited high halibut bycatch rates by the offshore catcher/processor fleet per unit of flatfish retained, thereby resulting in inefficient use of the existing halibut trawl bycatch caps for the GOA. At that time the Council voted to rescind its previous action specific to pollock and to reconsider the issue of exclusive registration in a more comprehensive fashion; i.e., either stay with the status quo or implement Alternative 8 which would apply to trawl vessels only but would include all groundfish species.

ALTERNATIVES

The analysis looked at three different classes of vessels (all groundfish vessels, trawl vessel and longline catcher/processor vessels, and trawl vessels only) for each of three different registration proposals (all groundfish, pollock only, and Pacific cod only). This results in nine species-vessel alternatives to the status quo. The authors of the analysis note that this combination of alternatives should provide a representative picture of the direction and magnitude of impacts for any combination of species. Though based on 1991 data, these impacts would hold basically true today. Although this summary may touch on other alternatives, as they relate to the overall picture, it will concentrate on Alternative 8 from the document, which is for trawl vessels only, but includes all groundfish species.

ANALYTICAL METHODOLOGIES

(1) Cost/benefit analysis (net benefit to the nation) - use area choice model to measure resulting costs and revenues. Major components of this model are:

- (a) Choice of fishing area is related to the incremental profits expected to be gained from participating in a fishery relative to expected incremental profits from fishing in other area.
- (b) Estimates set of statistical relationships between effort and catch and landed value using data from 1991 fishing year.
- (c) Uses these equations to predict catch and value for vessels in the fisheries in which it could legally, but did not actually fish.
- (d) Estimates statistical relationship predicting which area and fishery a vessel will choose.
- (e) Since choice is modeled as a function of expected incremental profit, one can implicitly recover a marginal cost from the estimated choice relationships.

(2) Impact analysis - estimates local and regional changes in income using the Alaska Fisheries Economic Assessment Model (Radtke-Jensen model). Model is used to project how changes in the harvests between onshore and offshore processing, due to exclusive registration, would change the contribution of groundfish processing to income in Dutch Harbor and Kodiak, as well as total U.S. direct income. These communities are used as proxies for all GOA and BSAI regions. Note that the model does not attempt to project actual contribution of groundfish to income, but rather the change in the contribution of landings to income which may result from different policies. Incorporates assumptions about:

- (a) Volume of groundfish delivered to onshore processors and offshore processors supported by a community.
- (b) Product forms, wages, salaries, non-wage expenditures, and revenues resulting from harvesting and processing.
- (c) Where these revenues or wages are received.
- (d) Lastly, how further flow of these revenues generates induced income at the local, regional, and national level.

RESULTS

(1) Choices of affected vessels (Summarized in Table 3.5 attached)

- (a) Majority of trawl catcher/processors choose BSAI under the all species alternative, resulting in a 94% decrease in the number of these vessels operating in the GOA.
- (b) Trawl catcher vessel activity in GOA would decline by 39%.
- (c) Overall effort in both areas will be reduced.

(d) Trawl catcher vessels from Dutch Harbor and Akutan will be faced with particular problems because they typically operate back and forth among several fisheries during the fishing year.

(2) Effects on landed catch (Summarized in Table 3.10 attached)

(a) Large decline in trawl catcher/processor for all species in the GOA, and a slight increase for the BSAI.

(b) Many trawl catcher vessels will exit from GOA to BSAI, but, overall harvest for this group actually declines slightly in BSAI and increases slightly for GOA, due to increased effort by remaining boats.

(c) Transfer of trawl vessels from GOA to BSAI results in more fish available for fixed gear operators in GOA.

(d) Generally expect seasons in the GOA to lengthen while seasons in BSAI will remain relatively unchanged.

(e) Little overall change in onshore vs. offshore landings, all species considered.

(3) Net economic benefits (Summarized in Table 3.17 attached)

(a) Net economic loss of \$18.5 million for Alternative 8 - all species for trawl vessels only. This compares to \$23.5 million net loss if all vessels are included.

(b) Net loss to society is much smaller under the pollock only alternative - around \$5 million per year.

(c) Projected costs to trawl catcher boats overshadow all other effects (\$17.7 million annually).

(d) Benefits are transferred from trawl vessels to fixed gear vessels - average trawl catcher processor loses \$100,000 per year; average trawl catcher vessel loses \$70,000 per year, average longline catcher/processor gains \$100,000 per year.

(e) Inshore/offshore amendment likely reduces the net loss estimates, but does not eliminate them. Trawl catcher/processors in particular face costs from exclusive registration which are independent of inshore/offshore considerations - lost opportunities for other species, principally rockfish and flatfish, impose a large portion of the estimated costs. Conversely, total costs associated with inshore/offshore for this sector may be exacerbated by exclusive registration.

(4) Distributions of net economic impacts

(a) Effects on trawl vessels do not depend on whether fixed gear vessels are included in the exclusive registration.

(b) Costs to trawl catcher vessels will be shared by motherships and shoreside processors, but accrue primarily to vessel owners.

(c) Larger catcher trawlers suffer much greater costs under this proposal than do smaller catcher trawlers.

(5) Income impact analysis (Summarized in Table 3.26 attached)

(a) Effects in the BSAI are to increase offshore landings while reducing onshore landings by the same amount. Effects in GOA are to increase onshore landings while reducing offshore landings by the same amount.

(b) Relatively little redistribution of landings occurs among vessels currently making onshore landings in Alaska.

(c) Most of the net impacts on direct income result from impacts in the GOA. The increase in value due to increased onshore landings in the GOA (an increase of \$51 million in direct local income) significantly outweighs the loss in value due to decreased offshore landings in the GOA (a decrease of \$22 million in direct local income).

(d) Overall net effects show a projected increase in total local direct income of \$28 million, and a projected increase in total U.S. direct income of \$34.1 million.

(e) Income impacts projected by this input/output analysis overstate actual income impacts to the extent that resources are drawn from other productive activities. In an accounting sense, total income impacts calculated may be viewed as the total income flows from the industry or policy action. These impacts cannot be interpreted as additions to total U.S. income since some productive resources currently employed in other industries had to be redirected to the modeled industry.

(6) Conclusions

(a) The analysis projects an increase in total U.S. direct income of \$34.1 million, yet it projects a net loss to the nation of \$18.5 million.

(b) To reconcile these two apparently contradictory findings, one must view it from the following accounting perspective: A total of \$52.6 million in implied costs are incurred by the exclusive registration Alternative 8. This is partially offset by the increase of \$34.1 in income (most of which is realized at a local, not U.S., level) so that the overall net loss to the nation is \$18.5 million.

(c) No adverse biological or environmental impacts are projected for the exclusive registration alternatives.

SUPPLEMENTARY INFORMATION

(1) Recent Pacific cod allocation

The effects of the exclusive registration alternative are expected to be mitigated somewhat by the Council's recent Pacific cod allocation amendment. Because a majority of the impacts projected are due to a redistribution of benefits to fixed gear vessels, fixing this gear's percentage would likely reduce the

net loss predicted for Alternative 8 (as well as the other alternatives in the analysis). However, because the Pacific cod split is for the BSAI only, and most of the projected redistributions occurred in the GOA, the difference in overall net loss will not likely be significant.

(2) Bycatch and discard considerations

High discard rates and inefficient use of halibut PSC apportionments by the mobile, offshore fleet operating in the GOA (primarily Central GOA) have been cited as reasons for expanding the original pollock only exclusive registration amendment. The primary targets of these vessels are flatfish and rockfish species. A review of the 1992 catch, discard, and bycatch information for the Central GOA flatfish fisheries is summarized below:

- (a) For all flatfish fisheries, including arrowtooth flounder, Catcher/Processors (C/Ps) discarded around 70% of their catch, retained 4,117 mt of flatfish, and used approximately 367 mt of halibut mortality.
- (b) Shorebased vessels (S/Bs) discarded about 28% of their total flatfish catch (when arrowtooth flounder and plant discards are included), retained 8,781 mt of flatfish, and used approximately 309 mt of halibut mortality.
- (c) Both C/Ps and S/Bs discarded nearly 100% of their arrowtooth flounder catch. Overall catch of flatfish by C/Ps was mainly arrowtooth flounder, while overall catch of flatfish by S/Bs was mainly deepwater flatfish, shallow water flatfish, and flathead sole.

For 1993 flatfish fisheries in the Central GOA (through July) the catch, discard, and bycatch information is summarized below:

- (a) Both sectors again discard nearly 100% of arrowtooth flounder.
- (b) Including arrowtooth flounder and plant discards, S/Bs discarded flatfish at about 53% rate.
- (c) C/Ps discarded flatfish at about 68% rate.
- (d) S/Bs retained 4,498 mt of flatfish while using approximately 285 mt of halibut mortality.
- (e) C/Ps retained 4,859 mt of flatfish while using approximately 386 mt of halibut mortality.

(3) SSC Minutes

For reference, the minutes on Exclusive Registration from the Council's Scientific and Statistical Committee, from December 1992, are attached to this Executive Summary.

**Table 3.5 Number of Vessels and Change in Participation Projected
under Exclusive Registration Proposals for Trawlers**

Affected Fishery	Number of Vessels Projected to Remain in the Bering Sea and Gulf of Alaska				Assumed Percentage Change in Number of Participating Vessels Relative to Status Quo			
	Catcher-processors		Catcher Vessels		Catcher-processors		Catcher Vessels	
	Trawl	Longline	Trawl	Fixed-gear	Trawl	Longline	Trawl	Fixed-gear
All groundfish								
BSAI	67	41	147	175	-4%	0%	-18%	0%
GOA	3	19	109	1592	-94%	0%	-39%	0%
Pollock only								
BSAI	66	-	71	-	-2%	-	-13%	-
GOA	4	-	66	-	-55%	-	-27%	-
Cod only								
BSAI	70	41	107	109	0%	0%	-15%	0%
GOA	0	19	101	616	-100%	0%	-31%	0%

Notes: Only trawl catcher-processors and trawl catcher boats are assumed subject to exclusive registration. Distribution of other vessels assumed to follow historical pattern, with reallocation from Bering Sea to Gulf of Alaska to preserve the same relative catch per vessel as before exclusive registration. Figures in pollock and cod rows reflect only vessels fishing for those species under exclusive registration for those species alone.

**Table 3.10. Percentage Change in Alaska Groundfish Harvest Under Full
Exclusive Registration Proposal for Trawlers
by Fishery and Type of Fishing Vessel**

	Offshore Sector								Onshore Sector			
	Catcher-processors				Catcher Vessels				Trawl	Longline/Jig	Pot	Total
	Trawl	Longline	Pot	Total	Trawl	Longline	Pot	Total				
Pollock												
BSAI	5%	9%	--	5%	-10%	--	--	0%	-10%	9%	--	-10%
GOA	-88%	--	--	-88%	21%	--	--	0%	21%	98%	98%	21%
Total	3%	9%	--	3%	-9%	--	--	-1%	-4%	97%	98%	-4%
Cod												
BSAI	2%	7%	7%	5%	-12%	7%	--	0%	-12%	7%	7%	-11%
GOA	-91%	49%	49%	-55%	-9%	49%	49%	0%	-9%	49%	49%	8%
Total	-10%	8%	9%	1%	-11%	26%	49%	-65%	-10%	43%	49%	2%
Other												
BSAI	1%	6%	6%	1%	-13%	--	--	0%	-13%	6%	6%	-8%
GOA	-89%	86%	--	-79%	14%	86%	--	0%	14%	86%	86%	75%
Total	-14%	30%	6%	-13%	-12%	86%	--	0%	3%	83%	60%	64%
All groundfish												
BSAI	4%	7%	7%	4%	-10%	7%	--	0%	-10%	6%	7%	-10%
GOA	-89%	65%	49%	-78%	4%	77%	49%	0%	7%	79%	49%	26%
Total	0%	10%	9%	0%	-10%	60%	49%	-10%	-5%	74%	49%	3%

Note: Assumes no inshore-offshore amendment. Inshore-offshore amendment will result in additional reallocations.

**Table 3.17. Estimated Net Benefits of Exclusive Registration
For Trawl Vessels
By Type of Vessel**

Vessel Type	Net Benefits per Vessel (\$1,000 per year)	Number of Vessels	Total Net Benefits (\$1,000 per year)
All Groundfish			
Catcher-Processors			
Trawl	(\$102)	\$70	(\$7,126)
Longline	\$108	\$42	\$4,540
Pot	--	\$9	--
Catcher Boats			
Trawl	(\$69)	\$256	(\$17,741)
Fixed Gear	\$1	\$1,646	\$1,837
Total		\$2,023	(\$18,490)
Pollock Only			
Catcher-Processors			
Trawl	(\$17)	\$70	(\$1,183)
Longline	\$0	\$42	\$0
Pot	--	\$9	--
Catcher Boats			
Trawl	(\$16)	\$256	(\$4,045)
Fixed Gear	\$0	\$1,646	\$0
Total		\$2,023	(\$5,228)
Cod Only			
Catcher-Processors			
Trawl	(\$1)	\$70	(\$77)
Longline	\$39	\$42	\$1,655
Pot	--	\$9	--
Catcher Boats			
Trawl	(\$55)	\$256	(\$13,978)
Fixed Gear	\$0	\$1,646	\$54
Total		\$2,023	(\$12,345)

Parentheses indicate negative numbers, that is, losses.

Table 3.26: Alaska Fisheries Economic Assessment Model Projections of Impacts on Income of Exclusive Registration for Trawl Vessels for all Groundfish

	Bering Sea/ Aleutians Onshore	Bering Sea/ Aleutians Offshore	Gulf of Alaska Onshore	Gulf of Alaska Offshore	Total
ESTIMATED IMPACTS ON INCOME PER THOUSAND METRIC TONS LANDED (\$000)*					
POLLOCK					
Impacts on local direct income	71	31	143	31	
Impacts on local total income	88	40	205	40	
Impacts on U.S. direct income	465	600	216	600	
COD					
Impacts on local direct income	106	29	386	29	
Impacts on local total income	143	42	536	42	
Impacts on U.S. direct income	714	578	600	578	
OTHER					
Impacts on local direct income	728	60	2500	1131	
Impacts on local total income	908	93	3384	1726	
Impacts on U.S. direct income	4711	1197	3785	1878	
PROJECTED CHANGES IN LANDINGS (000 MT)**					
Pollock	-18	18	11	-11	0
Cod	-3	3	5	-5	0
Other Species	0	0	19	-19	0
PROJECTED CHANGES IN INCOME (\$000)					
POLLOCK					
Impacts on local direct income	-1,270	556	1,576	-340	522
Impacts on local total income	-1,587	714	2,255	-437	946
Impacts on U.S. direct income	-8,373	10,794	2,377	-6,596	-1,799
COD					
Impacts on local direct income	-317	86	1,929	-143	1,554
Impacts on local total income	-430	126	2,679	-209	2,165
Impacts on U.S. direct income	-2,143	1,733	2,998	-2,888	-300
OTHER					
Impacts on local direct income	0	0	47,500	-21,488	26,012
Impacts on local total income	0	0	64,297	-32,798	31,499
Impacts on U.S. direct income	0	0	71,921	-35,688	36,233
TOTAL					
Impacts on local direct income	-1,587	642	51,006	-21,971	28,089
Impacts on local total income	-2,017	840	69,231	-33,444	34,610
Impacts on U.S. direct income	-10,516	12,527	77,295	-45,172	34,134

*From Table 3.22 (figures were multiplied by 2.2046 because of change in units). **From Table 3.14.

Note: As discussed in the introduction, "income impacts" may overstate actual net impacts to the extent that resources are withdrawn from other productive sectors.

D-3(b) EXCLUSIVE AREA REGISTRATION PROPOSAL

The Draft EA/RIR for Exclusive Area Registration contains analyses of both net economic benefits and economic impacts. We address these two analyses in order.

Net Economics Benefits (Benefit/Cost Analysis)

This analysis has been developed to estimate the increase or decrease in net earnings likely to occur throughout various segments of the groundfish fleet due to exclusive area registration proposals. It does this using an innovative empirical approach which uses detailed information on catch and revenue by area/season/vessel characteristics to predict how vessel operators choose fishing areas. The model assumes vessel owners select fishing areas based upon expected net earnings. When an area is closed due to regulation, the vessel operator will seek out another area with next-best earning opportunities. Because each operator will choose the best areas first, any reduction in areas available may cause a reduction in expected profits for that vessel type. Exclusive registration areas essentially cause a restriction in the ability of vessels to make the best adaptations to fishing conditions. Hence, the model will not predict an increase in net economic benefits, and will generally cause a reduction in net benefits. This characteristic of the economic model dictates that increasing restrictions on area of operation will impose costs on the fishing fleet. Gauging the magnitude of the costs and distribution of costs and benefits among segments of the fishery requires quantitative specification of the model.

The analysts estimated a choice model for groundfish fleets in the BS/AI and GOA using individual vessel catch and revenue (weekly reports or fish ticket) data. The resulting cost estimates are specific to circumstances encountered in 1991, as well as numerous assumptions built into the economic model. The SSC finds the model to be a promising extension of existing approaches to economic assessment, and is pleased with its ability to correctly model and measure the impacts of area restrictions. While the technically complex choice model needs further review and, possibly, more thorough development, the direction of change in economic benefits predicted is correct under the assumptions and the magnitude seems reasonable. If the model were updated to include data of more recent years (years that encompass recently adopted fishery regimes, i.e. onshore-offshore allocation, CVOA, etc) the quantitative estimate of economic loss might be different. But the difference would be of degree, not kind.

Economic Impact Analysis

The EA/RIR contains a brief analysis of potential income impacts of exclusive area registration based upon the Alaska Fisheries Economic Assessment Model. As with all such models, the predicted impacts depend upon a large number of assumptions and estimated parameters (i.e. prices, production yields, distribution of raw fish to product categories, etc.). Unfortunately this particular impact model continues to be poorly documented. The authors of the EA/RIR note that the model is the best information available to the analysts. The SSC finds it to be less than acceptable.

Anomalous results of the analysis detract from our confidence in it. For example, the large economic impact gain associated with shifting "other groundfish" to the onshore sector in GOA (Table 3.26) is not very credible. It is unclear how a net increase of \$34 million can be generated from redistribution of fish. It is likely that this large magnitude of income increase is due to a fallacious assumption that low-valued groundfish offshore can be converted to high-valued groundfish onshore.

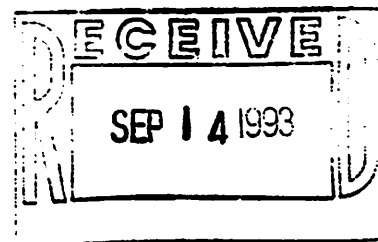
Given the poor documentation provided, we cannot determine what exactly accounts for the reported impacts; neither can the analysts doing the work. Hence, we conclude that the current model for economic impact assessment in Alaska's fisheries is not an acceptable scientific tool of analysis.



Fishermen's
Finest

North Pacific Fishing, Inc. --

4039 21st Ave. W. #201 ■ Seattle, WA 98199
(206) 283-1137 ■ TWX 5101004709 N PAC FI ■ FAX 2062818681



September 10, 1993

Richard B. Lauber, Chairman
North Pacific Fisheries Management Council
605 West 4th Avenue
Anchorage, AK 99501

RE: Groundfish Plan Amendments, Exclusive Registration in GOA & BSAI, Agenda Item D-2

Dear Chairman Lauber:

North Pacific Fishing, Inc. operates a trawl vessel in the Bering Sea and Gulf of Alaska and will be significantly effected by the proposed Exclusive Registration proposal. The proposal has been extended beyond the pollock fishery on the grounds that it will protect a specific flatfish fishery in the Gulf of Alaska from preemption by other fishermen. The plan to solve this problem by forcing any vessel participating in the Groundfish fishery to fish exclusively in the Bering Sea or Gulf of Alaska is unnecessarily burdensome. The goal of preserving this fishery could be achieved by the more traditional means of creating a separate halibut cap by species or subarea.

The proposal will effect all of the GOA fisheries and reduce the overall economic yield to the nation by between \$18.5 and \$23.5 million (EA/RIR Table 13.7). While there may be social reasons to justify a loss, those reasons do not justify a \$18.5 to \$23.5 million dollar loss to the nation when another management measure would also preserve the fishery but at a much smaller cost to the nation.

The proposal's proponents assert that there has been excessive halibut bycatch by offshore processors. However, there is significant evidence to suggest that catcher only vessels are responsible for higher halibut bycatch rates than the observed catcher/processors. The findings of the Coast Guard boardings by the USCGC MIDGET last Spring showed high halibut bycatch rates on inshore trawl vessels which did not have observers. Prior to making the decision to implement exclusive registration to prevent supposedly high halibut bycatch offshore processors from taking flatfish inefficiently, the Council and NMFS would be wise to implement 100% observer coverage to determine if there is indeed a reduced halibut bycatch by the inshore vessels.

The plan's proponents are attempting to justify the creation of an exclusive fishing region by stating that in order to optimize the fisheries yield the nation must sacrifice between \$18.5 and \$23.5 million dollars in net revenue. This is of course reducing the yield of the fishery in an attempt to increase the same yield. It does not make sense.

R. Lauber, NPFMC, 9/10/93, page 2

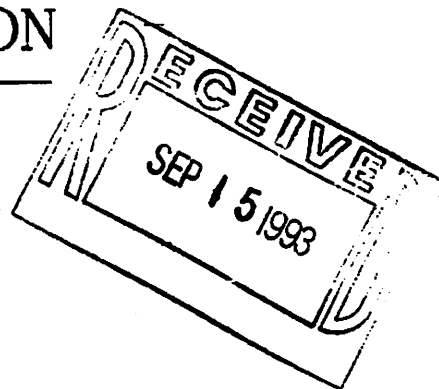
The continued movement toward cutting the Bering Sea and Gulf fisheries into smaller and smaller pieces in an effort to maintain the status quo for various groups is only contributing to the overall destruction of every fisherman's options and is damaging all fishermen. The Council should choose the least intrusive means of managing the fishery not the most effective means of creating private fishing rights.

Sincerely,

A handwritten signature in cursive script that reads "Rudy A. Petersen". The signature is written in black ink and is positioned above the typed name.

Rudy A. Petersen
President

AMERICAN FACTORY TRAWLER ASSOCIATION



September 15, 1993

Mr. Rick Lauber, Chairman
North Pacific Fishery Management Council
Post Office Box 103136
605 West fourth Avenue, Suite 306
Anchorage, Alaska 99510

SENT VIA FAX

Re: Exclusive Registration Amendment for the Gulf of
Alaska and Bering Sea Groundfish Fisheries

Dear Mr. Lauber:

The purpose of this letter is to comment on the above-referenced amendment to the Gulf of Alaska (GOA) and Bering Sea/Aleutian Islands (BSAI) groundfish management plans, and the analytical documents that have been prepared in support of the proposed amendment.

At the outset, we would like to point out that the proposed amendment is only the latest in a series of allocation disputes that have arisen among various sectors of the Alaskan groundfish fishery. It has been and remains AFTA's position that the only viable solution to allocation problems such as those underlying the current proposal is a comprehensive management plan that allows market forces to rationalize the various fisheries under the Council's jurisdiction. The Council has embarked on the arduous and time-consuming task of developing such a rationalization plan but still has a long way to go before the plan can be implemented. In the meantime, proposals such as the one in question only serve to delay the time when a comprehensive plan can be implemented by diverting the Council's time, energy and other limited resources away from the real task at hand. In AFTA's view, the Council should get on with comprehensive management and stop getting involved in allocation skirmishes designed to benefit one interest group at the expense of others while the rest of the industry languishes under the universally discredited open access system.

Turning to the amendment package itself, we have a number of specific comments about the Exclusive Registration proposal and the underlying analysis. They are set forth below.

Mr. Rick Lauber, Chairman
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1. The Analysis is Inadequate to Support the Proposed Action. Executive Order 12291 requires the preparation of a Regulatory Impact Review (RIR) for all regulatory actions that are of significant public interest. Among other things, the purpose of an RIR is to: provide a review of the problems and policy objections prompting a regulatory proposal and an evaluation of the major alternatives that could be used to solve the problem; and ensure that the Council systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost effective ways. The analysis that has been circulated in connection with the Exclusive Registration Amendment fails to meet either of these critical tests -- there is no clear statement of the problem(s) that the Council is dealing with, and there is not sufficient review of alternatives that might be available to deal with the problem(s) in the most efficient and cost effective way.

The current analysis consists of two documents: an EA/RIR, which was prepared last December; and an "Executive Summary," which was prepared by Council staff in August of 1993. The EA/RIR identifies the problem underlying the proposed amendment as one of preemption in the Western GOA cod and pollock fisheries. According to the EA/RIR, the problem is caused by BSAI vessels moving into the Western GOA and harvesting a disproportionate share of the local cod and pollock resource in that area. The examples cited, however, either predate implementation of Amendment 23 (the inshore/offshore allocation scheme that gave all of the GOA pollock and 90% of the GOA cod to shoreside processors); or, they result from one shoreside sector (e.g., shorebased BSAI catcher vessels) moving into the Western GOA and harvesting resources that GOA shorebased catcher vessels wanted to catch. In either case, the problem cited by and analyzed in the EA/RIR has nothing whatsoever to do with the offshore fleet. If, as the EA/RIR suggests, the problem we are dealing with is preemption in the Western GOA cod and pollock fisheries, then factory trawler vessels should be exempt from the Exclusive Registration Amendment since they do not fish for either of these species in the GOA. The cited problem simply has nothing to do with the at-sea fleet.

The recently released Executive Summary references an entirely new and different problem. It cites allegations that the offshore fleet (which, after inshore/offshore, only fishes for rockfish, atka mackerel and some flatfish species in the GOA) takes a disproportionate share of the halibut PSC when fishing

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for flatfish in the GOA. This is an entirely new problem that lies completely outside the scope of the EA/RIR's analysis.¹

The "Executive Summary" does not attempt to analyze whether or not there really is a new problem, or how any of the alternatives considered in the EA/RIR might deal with the new problem. Nor does the document identify any new alternatives that might be available to deal with the newly identified problem. The Executive Summary simply provides an analysis of the impacts and cost/benefits associated with an exclusive registration system, and cites some bycatch and discard information from the 1992 and 1993 GOA flatfish fisheries.

The bycatch and discard rate differentials cited in the "Executive Summary" are subject to question due to the fact that shorebased vessels carry only 30% observer coverage while factory trawlers have 100% coverage. Even if those differentials could be relied upon to demonstrate the existence of a problem requiring regulatory action, there are several obvious solutions that need to be considered. One would be to delay the opening date of the flatfish fisheries until later in the year; another would be to divide the halibut PSC among the various target fisheries in the GOA -- just as the Council has done in the BSAI. Yet such solutions are not even included as alternatives in the amendment package. This is not surprising since all the alternatives considered in the EA/RIR were identified in connection with the prior problem -- not the new problem recently cited in the "Executive Summary."

Simply put, there are solutions to the PSC problem that do not impose significant costs on any sector of the industry. Such solutions would be preferable from a cost/benefit standpoint and could be imposed without the large-scale "net national losses" that are projected to result from the "preferred alternative" (No. 8).

The failure to include PSC apportionment or seasonal delay alternatives in the list of options to be considered is critical since those alternatives are the ones that address the only problem associated with offshore operations in the GOA. In short, the proposed amendment is not "the most efficient and cost effective way" of dealing with the new problem as required by

¹The Executive Summary was prepared by Council staff following the June meeting of the Council. Although titled an "Executive Summary," there is no underlying document that it summarizes. It is the only document that mentions the new problem of disproportionate PSC usage.

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Executive Order 12291. For the same reasons, the proposed amendment violates National Standard No. 7, that requires fisheries regulations to "minimize costs" wherever practicable.

2. How Many Alternatives Are Being Considered? The EA/RIR identifies ten possible alternatives for consideration by the Council. But the "Dear Reviewer" letter the Council issued on August 14, 1993, indicates that the Council will only consider two alternatives in September -- status quo (no action); or Exclusive Registration for all trawl vessels, on all species, throughout the GOA (Alternative No. 8). In other words, it's "all or nothing," and nothing in between. Comments on the other eight alternatives identified in the EA/RIR would, therefore, appear to be a waste of time. This is an unusual approach and seems to be violative of the spirit and intent of Executive Order 12291 and other applicable law that requires a review of the problems and policy objectives prompting regulatory proposals and an evaluation of the major alternatives that could be used to solve the problems. The Council has apparently preselected a preferred alternative -- before any public comment on the new problem -- and has eliminated eight of the ten alternatives identified and discussed in the EA/RIR. So much for the public review process!

3. Exclusive Registration Was Rejected as an Option in Amendment 23. Ironically, the Council steadfastly refused to consider Exclusive Registration as an alternative solution to the "preemption" problems being dealt with in connection with Amendment No. 23 (the inshore/offshore allocation scheme). Despite repeated requests by AFTA that an Exclusive Registration alternative be included in the inshore/offshore analysis, the Council refused to consider such an option. How can Exclusive Registration now be a viable option (indeed, the only option under consideration other than "status quo") when the Council totally rejected it as a solution to preemption problems two years ago?

If the Council truly wants to consider Exclusive Registration for all trawl species in the GOA, then the inshore/offshore amendment should be rescinded. With cod and pollock then available to the offshore fleet in the GOA, an Exclusive Registration system might be a viable solution to the preemption problems which apparently persist in the GOA. To lay Exclusive Registration on top of the inshore/offshore allocation regime, however, imposes unconscionable costs on the offshore fleet whose operational options in the GOA were drastically curtailed by Amendment No. 23.

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4. The Proposal Should be Rejected Because it Will Result in a Failure to Achieve the Optimum Yield from GOA Groundfish Resources. Without cod or pollock on the menu of available species in the GOA, it is doubtful that the limited atka mackerel, rockfish or flatfish fisheries would support a viable stand-alone fishery in the GOA for offshore vessels. Since those fisheries are exclusively prosecuted by the offshore fleet, an Exclusive Registration scheme is likely to result in those species going under-harvested in the GOA. (This seems to be the conclusion indicated on Table 3.10 of the Executive Summary which predicts a 78% decline in the total groundfish harvest in the GOA by offshore vessels if Alternative No. 8 was adopted.) Such a result would violate the achievement of OY objective of National Standard No. 1.

5. The Proposal Would Result in a Net National Loss. While Kodiak and other similarly situated shoreside communities in the GOA stand to gain another round of windfall benefits (it was only two years ago that the Council gave GOA shoreside processors 100% of the GOA pollock harvest and 90% of the cod harvest), those benefits would again come at great cost to the offshore fleet and to the nation. Indeed, the Executive Summary projects a net loss to the nation in excess of \$18.5 million if Alternative No. 8 is adopted. No offsetting social benefits are cited that would justify such a substantial economic loss to the nation. On its face, the proposed amendment would seem to violate the MFCMA's requirement that the Council manage the fisheries under its jurisdiction for the "benefit of the nation as a whole."

6. Comparing Bycatch and Discard Rates Between Offshore and Inshore Vessels is Misleading and Inappropriate. The Executive Summary cites bycatch and discard rate differentials between inshore and offshore vessels as somehow justifying the imposition of an Exclusive Registration Amendment. Yet the Executive Summary fails to note that offshore vessels carry 100% observer coverage while shorebased vessels only carry 30% coverage. There is no current requirement that shoreside vessels have 30% coverage on all their fisheries (e.g., pollock, flatfish and cod). Indeed, under current regulations, vessels with only 30% coverage have an opportunity to orchestrate their coverage so that fisheries with higher discard and/or bycatch components are observed less than "cleaner" fisheries in which they engage. As a result of possible manipulation of coverage, NMFS will be requiring vessels in the 30% category to have representative observer sampling from all directed fishing operations beginning next year. In the meantime, data from the 30% vessels has been and continues to be suspect -- especially

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when efforts are made to compare data from 30% vessels to data from 100% vessels for allocation purposes. It was for this reason that NMFS has cautioned that "with the data currently available, direct comparisons of discard rates among the processing sectors are misleading, because estimates of the shoreside sector's discards do not represent total discard as do the catcher/processor and mothership estimates."

Under the circumstances, the data cited in the Executive Summary is totally inappropriate to support any conclusions regarding comparative discard and/or bycatch rates between inshore and offshore vessels operating in the GOA. Based on the information available, it is impossible to even demonstrate the existence of a problem -- much less design an efficient and cost effective solution.

7. Exclusive Registration will have Adverse Biological and/or Environmental Impacts. The Executive Summary summarily concludes that no adverse biological or environmental impacts are projected for the Exclusive Registration Alternative. We believe this is wrong. In the first place, displacement of vessels carrying 100% observer coverage and their replacement by vessels carrying 30% observer coverage will inevitably result in a degradation of data available from the GOA fisheries -- especially given suspicions concerning possible data manipulation by the 30% fleet. Secondly, displacement of catcher/processors by shorebased vessels is likely to result in increased fishing effort in near-shore areas -- leading to the possibility of localized depletion of groundfish resources and increased fishing activities in and around sensitive marine mammal areas. Finally, replacement of catcher/processors capable of daily reporting to NMFS with shorebased catcher vessels will lead to longer delays in data reporting. This will make it more difficult for NMFS to make critical management decisions. Over-harvests of small TACs (such as happened in the Western GOA in 1992) will be harder to prevent. All of these are examples of "biological or environmental" implications of the proposed measures that were not even mentioned, much less analyzed in the EA/RIR or Executive Summary.

8. The Analysis Failed to Consider Other Alternatives that Might be More Effective in Dealing with the Problems of Preemption and/or Bycatch than Those Identified in the EA/RIR or Executive Summary. An ITQ system is clearly a preferred option insofar as the preemption issues involved in this amendment package are concerned. Yet there is no mention of ITQs as an alternative approach. Another possible solution would be quarterly apportionments of TACs on species such as cod in order

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to spread the Western GOA fishery out over longer periods of time. Finally, as indicated in the discussion under item No. 1, there are effective ways of dealing with the bycatch of halibut in the GOA flatfish fisheries (season delays, PSC apportionment among fisheries, etc.), but none of them are included in the array of alternatives that were evaluated in the EA/RIR or that are now before the Council.

Conclusion

For all the foregoing reasons, AFTA believes that the proposed amendment should be rejected and that the Council should go on with the development of a comprehensive management plan with all deliberate speed.

Thank you for the opportunity to present these comments. We will be at the meeting in Anchorage to testify on the proposed amendment and will be happy to respond to any questions that you have at that time.

Sincerely yours,

AMERICAN FACTORY TRAWLER ASSOCIATION



Joseph R. Blum

TO: CLARENCE PAUTZKE, EXECUTIVE DIRECTOR
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

RE: COMMENTS ON EA/RIR FOR EXCLUSIVE
REGISTRATION PROPOSAL IN THE BERING
SEA AND GULF OF ALASKA



DATE: SEPTEMBER 13, 1993

SENT BY EXPRESS MAIL

**ALASKA GROUND FISH DATA BANK'S
COMMENTS ON THE EA/RIR FOR EXCLUSIVE REGISTRATION PROPOSAL
IN THE BERING SEA AND GULF OF ALASKA**

Documentation of the catch, bycatch and halibut bycatch in the Gulf of Alaska 1992 and 1993 is contained in the attached report "Gulf of Alaska Trawl Fisheries 1992 and 1993 Thru Third Quarter."

**I. PROBLEMS RESOLVED BY THE PROPOSAL WHICH WERE NOT DEALT WITH IN
THE EA/RIR**

AGDB's original proposal was for exclusive registration for trawl pollock and flounder in the Central Gulf and Bering Sea. The Council voted to send out a proposal for exclusive registration between the Gulf and Bering Sea for all trawl species -- a decision which has proved prescient as additional problems arose this year in the rockfish fisheries.

In short, maintaining viable trawl fisheries in the Gulf between now and the time that a rationalization program can be implemented requires either a continuing series of regulatory measures in response to brush fires or exclusive registration.

The need for exclusive registration is different for different target species. Each trawl target species is discussed below.

A. POLLOCK

When inshore/offshore was implemented the quarterly Gulf apportionments of pollock occurred when the Bering Sea pollock fishery was open. This synchrony of seasons was seen as adequate protection against catcher boat influxes from the Bering Sea.

BERING SEA EFFORT

Subsequently Bering Sea seasons have shortened and the B season opening date has changed. Three of the Gulf's four quarterly pollock openings now occur when the Bering Sea is closed and some Bering Sea effort now moves into the Gulf when Gulf pollock opens; the amount of effort can be expected to increase over time.

SMALL GULF QUOTAS AND SEA LIONS

Because the Gulf time/area quotas are small, any influx of effort exacerbates the problem of keeping the catch within the quota. Because sea lions are threatened and declining, any quota overages may have adverse affects on sea lions.

CATCH FOREGONE

If faced with small quotas, unpredictable efforts and the necessity of protecting sea lions, NMFS has no choice but to manage conservatively. In 1991, prior to the implementation of inshore/offshore, an influx of factory trawl effort into the Gulf fourth quarter fishery caused an early closure of the fishery and 7,000 MT of quota was left on the grounds

In July 1993, with only existing effort on the grounds, the quota in Area 620 of the Central Gulf was exceeded second quarter. In an effort to hold the catch within the third quarter quota a closure date was preannounced, but there was no effort in 620 prior to the preannounced closure. Based on a NMFS survey of expected vessel capacity from the Bering Sea and Gulf on the grounds, the fishery was reopened for a 24 hour fishery August 9 and about half the quota taken.

Kodiak processors in cooperation with AGDB participate in a voluntary inseason survey of landings and fleet distribution during each fishing period in an effort to assist NMFS in closing the fishery before the quota is reached. Influxes of outside effort make this effort ineffective.

GULF POLLOCK APPEARS TO BE DECLINING

The most recent survey data suggests pollock recruitment in the Gulf has been less than required to sustain the biomass in 1989, 1990, 1991 and probably 1992. As the pollock biomass declines and the quotas decrease, all the problems of managing the fishery increase. We expect an increasing percentage of the catch may be foregone as the fishery becomes increasingly unmanageable.

Without exclusive registration the Gulf pollock will become increasingly unmanageable. Either an increasing percentage of the quota will be foregone or the quota will be exceeded as influxes of Bering Sea effort increase and/or quotas decline.

POTENTIAL SOLUTIONS

1. Synchronize the Bering Sea and Gulf pollock openings. This potential solution appears blocked by the necessity to have quarterly openings to protect sea lions and the impossibility of rearranging the Bering Sea seasons to match the Gulf's seasons.
2. Exclusive Registration.

B. PACIFIC COD

Pacific cod in the Gulf is fished by trawls, longlines and pots. The last two years the quota has been reached in the Western Gulf late February and early March; in the Central Gulf the quota has been reached in early April. In 1993 longline effort was considerably less in the Central Gulf than in 1992.

Gulf Pacific cod is declining at about 10% per year due to lack of recruitment.

BERING SEA EFFORT

Effort crossing into the Gulf from the Bering Sea, so far, has affected mainly the Western Gulf. The split of the Pacific cod quota in the Bering Sea between trawl and fixed gear groups has the potential to increase the amount of trawl effort moving into the Western Gulf if the Bering Sea Pacific cod fishery closes before the Western Gulf.

ALLOCATIVE BALANCE AMONG GULF GEARS AND AREAS EASILY UPSET

When the Western Gulf closes some effort from the Western Gulf shifts to the Central Gulf. This year a small amount of Central Gulf effort shifted to the Eastern Gulf after the Central Gulf closed.

Any increase in effort in one gear type decreases the quota share of other gear types. The gear types and areas in the Gulf have so far coexisted with minimal friction and should be able to continue to coexist as long as there is not a major influx of effort from the Bering Sea.

Any major increase in trawl effort is expected to spur a request from fixed gear for a separate Pacific cod allocation.

As the Pacific cod stocks decline or fixed gear takes a larger share of the Pacific cod quota, the total trawl groundfish tonnage delivered to shorebased communities will also decline.

Much of the halibut bycatch "saved" in the shorebased Pacific cod fishery, instead of being used by shorebased operations to increase flatfish production, will be used by factory trawlers.

Increased trawl effort in the Pacific cod fishery will set off a chain reaction of reallocation of Pacific cod among Gulf areas and gear types and proposals for allocations by gear type.

Reduction in trawl catch due to declining stocks or increases in the quota share of fixed gear catch effectively reallocates trawl halibut bycatch to factory trawlers and reduces the total tonnage of bottom trawl deliveries to shorebased operations.

POTENTIAL SOLUTIONS

1. A mess of measures allocating Pacific cod among gear types, perhaps among Gulf areas and allocating trawl halibut cap between shorebased catcher boats and factory trawlers.
2. Exclusive Registration.

C. ROCKFISH AND FLATFISH

The rockfish and deep flatfish fishery will increasingly be driven by Pacific Ocean Perch and Thornyheads as well as halibut. The Gulf Plan Team at its September 1993 meeting noted that there is not enough quota of either of these two species to provide for bycatch needs in the combined deep flatfish and rockfish fisheries.

Only a change in the calculation of the overfishing definition for Pacific Ocean Perch prevented total closure of the Gulf fourth quarter deep flatfish fisheries in 1992. This year it appears recalculation of the thornyhead catch in the longline

fleet may result in thornyhead reaching the overfishing definition and closing the Gulf fourth quarter deep flatfish fishery.

CENTRAL GULF PAYING THE PRICE FOR PACIFIC OCEAN PERCH REBUILDING

In 1993 the Pacific Ocean Perch quota in the Gulf was reduced by about 50% to allow for stock rebuilding. Factory trawl total catch of all rockfish actually increased by 200 MT Gulfwide and by 1,100 MT in the Central Gulf. Effort shifted to the Central Gulf where the abundant Northern rockfish could be used to offset the reduction in Pacific Ocean Perch.

Because 15% thornyhead, trawl sablefish and shortraker/rougheye can be retained against deep flatfish and rockfish, increased effort on Central Gulf Northern rockfish meant effort on trawl sablefish, shortraker/rougheye and Northern rockfish also increased. By end of third quarter thornyhead, trawl sablefish and shortraker/rougheye were all on PSC status.

THORNYHEAD AND LONGLINE SABLEFISH

About half the thornyhead taken in 1993 was taken in the longline sablefish fishery as bycatch. According to NMFS the longline bycatch of thornyhead appears to be unavoidable.

As long as the longline fleet fishes early in the year, thornyheads should not reach the overfishing definition before the sablefish fishery is over. However, when the sablefish ITQ program is implemented, it is possible that longliners will still be forced to fish sablefish early in the year to avoid being shut down by thornyheads reaching the overfishing definition.

PACIFIC OCEAN PERCH BYCATCH AND REX SOLE

Pacific Ocean Perch is bycatch in both the Rex sole flatfish fishery and rockfish fishery. As long as both Rex sole and Dover sole were combined into one complex, Dover sole had to shut down as well as Rex sole if Pacific Ocean Perch reached the overfishing definition.

This year the Plan Team is recommending separate quotas for Rex sole and Dover sole to allow the Dover sole to remain open if Pacific Ocean Perch reaches the overfishing definition.

ARROWTOOTH IN THE FLATFISH FISHERIES: EFFECT ON HALIBUT BYCATCH

The rex sole fishery appears to take about 75% arrowtooth flounder while the Dover sole fishery appears to take 16 to 48% arrowtooth. In 1993, through third quarter, 480 MT of Gulf halibut mortality was used to take arrowtooth flounder.

INFLUX OF FACTORY TRAWLERS

Factory Trawlers first arrive in the Gulf in two groups: in late February after Zone 1 in the Bering Sea closes to rock sole about 10 vessels arrive and in March after Atka Mackerel closes in the Bering Sea. The vessels target every species including arrowtooth. They return to the Bering Sea when the second quarter halibut cap is reached.

Third quarter the target is rockfish and the fleet arrives when the third quarter halibut cap is released.

Fourth quarter the target is mainly flatfish.

Most of the factory trawl effort occurs in the Central Gulf.

FUTURE OF THE GULF FLATFISH AND ROCKFISH FISHERIES

If no changes are made in the Gulf flatfish and rockfish fisheries, the lack of thornyhead and/or Pacific Ocean Perch quota to cover bycatch needs will eliminate the fourth quarter deep flatfish fishery.

If decreases in the trawl Pacific cod fishery occur, more effort will occur on deep flats early in the year, increasing the probability that the longline sablefish fishery could be curtailed by thornyheads reaching the overfishing definition.

Overall, the fisheries will become increasingly chaotic: discards and waste will increase as will halibut bycatch in the trawl fisheries -- the usual fall outs of unbridled competition for scarce resources.

Reallocations of fish resources in the Gulf is being driven by inadequate amounts of halibut cap, shortraker/rougeye, thornyheads and trawl sablefish. In the future the longline fleet may be effected by the shortage of thornyhead. The Council can allow a continued free-for-all or direct the reallocation process to achieve the maximum retained catch.

The result of a continued free-for-all is increased discards and reduced quota share for shorebased operations.

POTENTIAL SOLUTIONS:

1. Set the rockfish and Rex sole quotas low enough to hold the amount of thornyhead and Pacific Ocean Perch bycatch within a pre-set limit or close these two fisheries when the thornyhead or Pacific Ocean perch bycatch reaches a preset percentage of the quota. PLUS, allocate halibut bycatch among inshore and offshore users.
2. Exclusive Registration which will reduce the number of factory trawlers in the Gulf, stretching out the rex sole and rockfish fisheries over time and creating a vested interest in reducing halibut bycatch and bycatch of all the trawl bycatch only fisheries.

D. ATKA MACKEREL

Atka Mackerel is a new potential fishery for the Gulf. Though halibut bycatch rates in the Atka Mackerel fishery are lower than in many other Gulf fisheries, allowing the development of an Atka Mackerel fishery, under current Gulf management, represents a reallocation of halibut bycatch from shorebased to factory trawl operations.

POTENTIAL SOLUTION:

1. Reduce the Atka mackerel quota to bycatch needs only.
2. Exclusive Registration

E. OTHER CONSIDERATIONS**BOTTOM TRAWL FISHING PERIODS TOO SHORT FOR BYCATCH CONTROL**

The Gulf bottom trawl fishing periods are currently four to five weeks per quarter. By the time pin number data is available to for any bycatch control program, the halibut cap is within a week or two of being reached.

UNEMPLOYMENT IN KODIAK

Any month in which Kodiak does not have a fishery in process, unemployment reaches 14 to 17%.

LOSS OF WORKFORCE

During closures of more than a couple of weeks Kodiak's portions of Kodiak's workforce leave the island permanently. Slowly Kodiak is sliding back to the days when its workforce was seasonal rather than resident. Lack of adequate workforce is becoming an increasing problem.

COMMENTS ON EA/RIR ECONOMIC ANALYSIS**PARTS OF EA/RIR IMPORTANT IN 1991 NOW IRRELEVANT**

The EA/RIR for the Exclusive Registration between the Gulf and the Bering Sea was prepared with 1991 data. Changes in the Gulf management, including inshore-offshore, since 1991 make many of the analysis' findings irrelevant to the current proposal.

The analysis also treats the Gulf as one unit, rather than as three separate areas and thus fails to identify in which area(s) economic losses to the nation may occur.

EA/RIR DOES NOT ADDRESS ISSUES BEYOND REALLOCATION OF PRODUCT

The EA/RIR is also a purely economic document which looks only at changes in net benefit from reallocating product from one segment of the fleet to another.

The EA/RIR DOES NOT:

1. Consider the net benefit or loss of increases or decreases in the amount of retained catch per metric ton of halibut bycatch which may occur if product is reallocated from one segment of the industry to another.
2. Consider the net benefit or loss of allowing fisheries which take Pacific Ocean Perch or thornyheads to be prosecuted to the point other fisheries are precluded because the overfishing definition of Pacific Ocean perch or thornyheads has been reached.
3. Consider the net benefit of loss of allowing effort to make fisheries so unmanageable catch is foregone.

Exclusive registration should mitigate to a great degree, at least during the years between now and the implementation of ITQs, discards, foregone quotas and decreasing catch per MT of halibut bycatch. All of these benefits offer offsets to the net loss to the nation shown by the EA/RIR economic analysis.

NO CHANGE IN PACIFIC COD ALLOCATION EXPECTED IN CENTRAL GULF

Of the expected \$18 million in net loss to the nation, \$12 million is associated with exclusive registration for Pacific cod.

However, no reallocation of Pacific cod is expected in the Central Gulf under exclusive registration. The reallocation of Pacific cod from catcher-processors to catcher boats occurred under inshore-offshore. Any further reallocations will occur in the Western Gulf.

Further, any reallocation from trawl to longline vessels as projected in the EA/RIR will also occur in the Western Gulf as the number of trawlers working in the Central Gulf is not expected to be substantially changed by exclusive registration.

Both because the major reallocation of Pacific cod between at-sea and onshore vessels has already occurred under inshore/offshore and because the any reallocation among catcher boats and/or gear will occur principally in the Western Gulf, the actual net loss to the nation of exclusive registration in the Pacific cod fishery is much less than the \$12 million estimated using 1991 data.

IN CONCLUSION

The Gulf has historically required protection from the large capacity of the Bering Sea fleet and nothing has changed since the State of Alaska implemented exclusive registration between the Gulf and the Bering Sea for the crab fisheries.

Under status quo the Gulf fisheries promise to become increasingly chaotic and unmanageable. In chaotic fisheries discards usually increase and catch per MT of halibut bycatch decreases.

Thornyheads and Pacific Ocean Perch will drive the future Gulf fisheries even more than the trawl halibut cap. The shortage of thornyhead quota could eventually curtail the longline sablefish fisheries as well as the trawl fisheries.

Allowing the Gulf to drift into chaos definitely represents a net loss to the nation. The multiple problems from high discards in the rex sole fishery to the shortage of Pacific Ocean Perch and thornyheads can be micro-managed year by year by manipulating quotas and/or allocating halibut bycatch between catcher boats and factory trawls OR exclusive registration can be implemented creating on Gulf fleet with the same vested interest in getting the most out of the available Gulf resources.

As long as a sizeable portion of the Gulf trawlers look to the Gulf for only five to ten weeks of fishing on high value products and depend on the Bering Sea for the remainder of the year, efforts to increase the overall harvests and fishing time in the Gulf are doomed to failure.



**GULF OF ALASKA GROUND FISH TRAWL FISHERIES
1992 AND 1993 THROUGH 3RD QUARTER**

PREPARED SEPTEMBER 13, 1993

**SUBMITTED TO THE NORTH PACIFIC FISHERY MANAGEMENT COUNCIL
AS PART OF ALASKA GROUND FISH DATA BANK'S COMMENTS
ON THE PROPOSED PLAN AMENDMENT TO IMPLEMENT
EXCLUSIVE REGISTRATION BETWEEN THE GULF OF ALASKA AND BERING SEA**

**PREPARED BY CHRIS BLACKBURN
ALASKA GROUND FISH DATA BANK**

GULF OF ALASKA TRAWL FISHERIES
1992 AND 1993 THROUGH THIRD QUARTER

EXECUTIVE SUMMARY

The following paper outlines past regulatory actions for the Gulf of Alaska groundfish fisheries, assesses the impact of the actions and compares the groundfish catch, discard and halibut bycatch for the trawl fisheries in the Gulf of Alaska through third quarter for 1992 and 1993. In both years the halibut cap closed third quarter to trawling in early August.

REGULATORY ACTIONS

The majority of the regulatory actions implemented for the Gulf of Alaska groundfish fisheries during the past ten years were designed to protect the Gulf operations from being shut down by influxes of effort from the Bering Sea. The capacity of the Bering Sea fleet is capable of taking the Gulf quotas, which represent months of work for the Gulf fleet, in a matter of weeks.

This same problem existed in the crab fisheries and was resolved under State management many years ago with exclusive registration. To date, within the Gulf of Alaska, there have been no regulatory actions designed to allocate among gear groups or Gulf areas.

POLLOCK

Inshore-Offshore has prevented the kind of unmanageable influx of Bering Sea effort which occurred in the Central Gulf in 1989 and fourth quarter 1991 and in the Western Gulf first quarter 1992.

At the time inshore/offshore was implemented, the Bering Sea and Gulf pollock fisheries were open at the same time and influxes of catcher boat effort from the Bering Sea were not anticipated to be a problem.

However, the shortening of the Bering Sea pollock season resulted in four Bering Sea catcher vessels fishing the Central Gulf 4th quarter 1992 and catch jumped from around 1,000 MT/day to 1,700 MT/day. There was also Bering Sea catcher boat effort in Area 620 of the Central Gulf August 9, 1993. Catch for that one day fishery was 2,742 MT.

In the Western Gulf the share of pollock quota taken by factory trawlers in 1992 was taken by catcher boats delivering to motherships in 1993.

Through third quarter bottom trawl pollock in the Gulf used 17 MT of halibut mortality in 1992 and 67 MT in 1993.

PACIFIC COD

In the Central Gulf shorebased operations took over 90% of the Pacific cod catch in both 1992 and 1993. The longline share of the catch dropped from 15% in 1992 to 7% in 1993.

In the Western Gulf shorebased share of the catch increased from 53% in 1992 to 64% in 1993 and catcher-processor share of the catch increased from 27% in 1992 to 30% in 1993. Mothership catch share dropped from 19% to 5%.

In 1992 the Gulf Pacific cod fishery took 443 MT of halibut mortality and in 1993, 398 MT of halibut mortality. The decrease in overall halibut mortality in 1993 reflects the lower quotas and mortality rates used in 1993 rather than any decrease in bycatch rates.

FLATFISH

In 1992, for the first three quarters of the year the Central Gulf flatfish fishery accounted for 17% of the total bottom trawl groundfish catch, 45% of the groundfish discards in the Gulf and 44% of the trawl halibut mortality in the Gulf.

In 1993 the Central Gulf flatfish fishery accounted for 25% of the total bottom trawl groundfish catch taken during the first three quarters of the year, 44% of the Gulf groundfish discards and 48% of the trawl halibut mortality.

Between 84 and 87% of all flatfish caught in the Gulf of Alaska are taken in the Central Gulf.

Arrowtooth flounder accounts for between 66 and 75% of the total catcher-processor flatfish catch and between 16 and 41% of the total shorebased flatfish catch, depending on quarter.

In 1992 factory trawlers used 400 MT of halibut mortality to retain 3,431 MT of flatfish; shorebased operations used 242 MT of halibut mortality to retain 8,045 MT of flatfish.

In 1993 factory trawlers used 445 MT of halibut mortality to retain 5251 MT of flatfish; shorebased used 374 MT of halibut mortality to retain 8,114 MT of flatfish.

ROCKFISH

In 1993 the delay of the Gulf rockfish opening from Jan. 20 to July 1 was in place. The overall halibut bycatch rate for rockfish targets dropped from 3.69% in 1992 to 2.54% in 1993. The drop in the halibut bycatch rate is believed to be the result of the season delay.

Also in 1993 the quotas for Pacific Ocean Perch were reduced 5,200 MT to 2,560 MT. However, the total rockfish catch, all species, increased from 13,708 MT in 1992 to 13,961 MT in 1993. Catch of Pelagic shelf rockfish and Other rockfish (mainly Northern rockfish) increased by about 190% between 1992 and 1993.

Rockfish catch declined slightly in both the Eastern and Western Gulf, but was increased about 1,100 MT in the Central Gulf between 1992 and 1993.

This increase in rockfish catch in the Central Gulf allowed for more trawl sablefish and shortraker/rougheye to be retained by factory trawlers in 1993 than in 1992.

The result is that bycatch of trawl sablefish and shortraker/rougheye was enough to put both species on prohibited species status by the end of third quarter. In 1992 there was still sablefish available for bycatch in the fourth quarter trawl fisheries.

Discards in the catcher-processor rockfish fishery through third quarter 1992 were 18% and in 1993, 32%. In 1992 11,286 MT of rockfish were retained and 415 MT of halibut mortality used by the rockfish target. In 1993 9,480 MT of rockfish were retained by catcher-processors who used 233 MT of halibut mortality in the rockfish target.

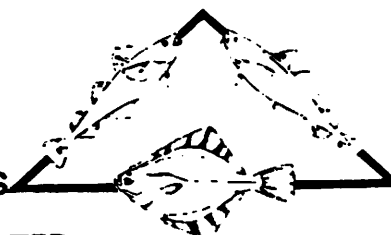
THORNYHEADS

The thornyhead quota decreased from 1798 MT in 1992 to 1062 MT in 1993. This decrease in quota, combined with an increase in catch by longliners in 1993, has resulted in the 1993 thornyhead catch being near or at the overfishing definition. If the overfishing definition is reached, it is unlikely there will be a fourth quarter deep flatfish fishery this year.

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GULF OF ALASKA TRAWL FISHERIES



1992 AND 1993 THROUGH THIRD QUARTER

I. INTRODUCTION

During the period June 1992 - June 1993 several major regulatory changes were implemented in the Gulf of Alaska:

INSHORE-OFFSHORE: Allocated 100% of the pollock and 90% of the Pacific cod to inshore operations. This management measure was taken to protect the Gulf communities after the Bering Sea fleet demonstrated its capacity was large enough to take an entire quota in a short time.

ROCKFISH FISHERY OPENING DATE MOVED from Jan. 20 to July 1: This management measure was implemented to reduce halibut bycatch in the rockfish fishery.

PACIFIC OCEAN PERCH REBUILDING PLAN: Pacific Ocean Perch quotas were significantly reduced to allow stock rebuilding. This proposal originated in Southeast Alaska and may have negatively affected other species and areas in the Gulf.

The Gulf has also been affected by changes in the Bering Sea management regime and implementation of existing management measures.

DELAY OF THE BERING SEA B SEASON POLLOCK OPENING from June 1 to August 15: This change unsynchronized the Gulf and Bering Sea pollock seasons.

MISCALCULATION OF THE POLLOCK/PACIFIC COD HALIBUT BYCATCH in 1992 prematurely closed the Bering Sea Pacific cod fishery and sent Bering Sea effort into the Western Gulf.

MISCALCULATION OF THE ROCK SOLE/OTHER FLATFISH FISHERY HALIBUT cap in 1993 prematurely closed the rock sole fishery and sent Bering Sea effort into the Gulf in March 1993.

The management measures proposed the last decade for the Gulf of Alaska have been targeted at restricting, mitigating or prohibiting influxes of effort from the Bering Sea into the Gulf of Alaska. There have been no proposals to allocate between Gulf areas or gears.

The potential for conflict between the fleets built for the large quotas in the Bering Sea and the fleets built to fish the small quotas in the Gulf has existed at least since the crab fisheries began. For the crab fisheries the conflict was resolved by the State of Alaska's implementation of exclusive registration between the Gulf and Bering Sea.

Also, the designation of Stellar sea lions as threatened has locked the Gulf pollock fishery into a quarterly apportionment system which prevents keeping the Gulf and Bering Sea pollock fisheries synchronous.

In September 1993 the North Pacific Fishery Management Council is scheduled to make its final decision on whether to implement exclusive registration between the Gulf of Alaska and Bering Sea for all trawl fisheries.

In preparation for this discussion, the following sections of this paper present the regulatory history of selected Gulf fisheries, attempt to assess the effects of the changes in Gulf management measures between 1992 and 1993 and discuss the problems currently existing in the Gulf trawl fisheries.

II. GULF POLLOCK FISHERIES - 1992 AND 1993

A. GULF POLLOCK MANAGEMENT HISTORY

1989 - BERING SEA FLEET OVERWHELMS GULF

After 1989 when the catching capacity and effects of an influx of Bering Sea factory trawlers on Gulf pollock were demonstrated, the Gulf sought quarterly apportionments of its pollock quota as an interim measure to mitigate any future "1989" event until a more effective allocative measure could be enacted.

1990 - QUARTERLY APPORTIONMENT IMPLEMENTED

Splitting the Bering Sea pollock season into a Jan. 1 A season and June 1 B season did not affect the Gulf as long as it kept its second quarter opening moved to June 1 to coincide with the Bering Sea.

1991 - GULF POLLOCK QUOTA SPLIT BETWEEN TWO AREAS (SEA LIONS)

Sea lion protective measures included maintaining the Gulf's quarterly pollock apportionment and splitting the quota among areas. The first split made two Gulf areas and resulted in a substantial portion of the quota being taken in the Western Gulf by all modes.

1992 - GULF POLLOCK QUOTA SPLIT AMONG THREE AREAS (SEA LIONS)

Kodiak responded by proposing three quota areas and acknowledging that the portion of the pollock biomass in the Western or Shumagin Area was not fish Kodiak could hope to claim. Kodiak operations also realized that the Chirikof area would be a shared area between the Western and Central Gulf pollock operations.

1992 - INSHORE/OFFSHORE IMPLEMENTED

Inshore-Offshore was implemented in mid 1992 and eliminated concerns that a repeat of the 1989 effort influx could occur. The regulations, however, did not exclude a shorebased floating processor from moving between the Gulf and the Bering Sea with its own fleet.

1993 - BERING SEA POLLOCK B SEASON OPENING MOVED TO AUGUST 15

In 1993 the Bering Sea B season opening date was moved back to August 15, leaving the Gulf operations concerned that as Bering Sea seasons shortened and the problems of over-capitalization intensified, there would be increasing pressure on Bering Sea catcher boats to supplement their seasons with Gulf pollock in June and July when the Gulf was open and the Bering Sea closed.

B. CHANGES IN THE GULF POLLOCK FISHERY BETWEEN 1992 AND 1993

EFFECT OF INSHORE/OFFSHORE

During the first two quarters of 1992 there was no allocation of Gulf pollock between inshore and offshore modes, while 1993's first two quarters were managed under inshore/offshore regulations which allocated all Gulf pollock to onshore operations.

The Western Gulf, which is next door to the Bering Sea, is most vulnerable to influxes of effort from the Bering Sea. In 1992 45% of the Western Gulf pollock catch during the first half of the year was taken by vessels in the offshore

component. In 1993 the offshore share dropped to less than 1% of the combined quarter 1 and 2 catch.

The reduction in the offshore pollock share principally benefited onshore mothership operations, whose share of the catch increased from 11% in 1992 to 53% in 1993.

The data available from the NMFS Bulletin Board does not provide data to determine if there was any change in the catch shares between Gulf side and Bering Sea side shorebased plants between 1992 and 1993.

In the Central Gulf 98% of the 1992 pollock catch for the first two quarters was processed in shorebased plants. In 1993 a shorebased mothership operation with its own fleet took 3% of the combined quarter 1 and 2 catch, reducing the shorebased plant share to 97%.

EFFECT OF BERING SEA OPENING AND CLOSING DATES

Any influx of additional vessels into a fishery results in an increase in catch per day. As shown in Table 1, the average catch/day of pollock in the Western Gulf increased over 3000% in 1992 when the Bering Sea closed.

As a result of the sudden influx of effort into the Western Gulf, the first quarter quota was exceeded to the point the second and third quarter quotas were drastically reduced and the 4th quarter fishery didn't have enough quota left to open.

Through 3rd quarter 1993 there were no incidents of pulse pollock fishing in the Western Gulf. The lack of pulse pollock fishing appears directly related to the implementation of inshore/offshore.

TABLE 1: WESTERN GULF POLLOCK CATCH, QUOTA STATUS AND AVERAGE CAT/DAY BY QUARTER AND BERING SEA STATUS - 1992 AND 1993

YEAR	I/O?	QTR	BS OP/CL	WG OP DATES	WG CAT MT	WG RMDR MT	#FISH DAYS-WG	WG MT/DAY
1992	NO	1	OP	1/20-3/06	4136	694	46	90
1992	NO	1	CL	3/07-3/10	8438	-7742	3	2813
1992	YES	2	OP	6/01-6/03	2406	-159	3	802
1992	YES	3	OP	6/29-6/30	2502	-332	37	68
1992	YES	4	CLOSED		CLOSED	1193	0	0
1993	YES	1	OP	1/20-3/13	1740	4282	52	33
1993	YES	1	OP	3/14-3/24	3751	531	11	341
1993	YES	2	CL	6/01-6/14	7777	-1670	13	593
1993	YES	3	CL	7/01-7/11	7272	-2071	11	661

The Central Gulf, as shown in Table 2 below, did not have any pulse fishing incidents in 1992. In 4th quarter 1992 there was a mothership with its own fleet present in the Central Gulf as well as several Bering Sea catcher vessels delivering to Kodiak shorebased processors.

During the first three quarters of 1993 pollock tended to be less available to trawls than usual. The strange distribution of pollock in the Central Gulf is popularly believed to be a result of the unusually warm weather. In June schools of commercial sized pollock were actually boiling at the surface.

Prior to the opening of 3rd quarter, NMFS preannounced a July 5 closure of Area 620 in the Central Gulf. The preannounced closure was based on the amount of effort in area 620 at the end of 2nd quarter and the small quota remaining.

The fleet, however, didn't fish area 620 prior to the preannounced closure. Area 620 was reopened August 9. Two Kodiak processors were unable to participate because their plants were busy with salmon; some vessels traveling to the Bering Sea did participate.

TABLE 2: CENTRAL GULF POLLOCK CATCH, QUOTA STATUS AND AVERAGE CAT/DAY BY QUARTER AND BERING SEA STATUS - 1992 AND 1993

YEAR	I/O?	QTR	BS OP.CL	CG OP DATES	CG CAT MT	CG QUOTA RMDR MT	#FISH DAYS-CG	CG MT/DAY
1992	NO	1	OP	1/20-2/07	17890	-1720	17	1052
1992	YES	2	OP	6/01-6/17	16541	- 110	16	1034
1992	YES	3	OP	6/29-7/12	13598	-1121	13	1046
1992	YES	4	CL	9/28-10/8	17700	-1049	10	1770
1993	YES	1*	OP	1/20-2/25	24038	-2309	36	668
1993	YES	2	CL	6/01-6/24	21442	- 924	24	893
1993	YES	3	CL	7/01-7/20	18030	2214	20	902
1993	YES	3~	CL	8/09-8/10	2742	- 528	1	2742

*Price tie-up restricted fishing until February 7. MT//DAY is slightly lower than it would have been without the tie-up.

~ A 24 hour opening was held August 9 in Area 620. Catcher vessels from the Bering Sea and Gulf both participated.

C. GULF POLLOCK CONCERNS

1. INFLUX OF BERING SEA VESSELS

When the quarterly allocation system and Inshore/Offshore were each implemented, the Gulf and Bering Sea pollock seasons were synchronous. The shortening of the Bering Sea pollock seasons, combined with the delay of the B season opening until August 15 has left the Gulf with three pollock openings (Quarters 2, 3 and 4) when the Bering Sea is closed.

The Gulf is well aware that the catcher boat fleet in the Bering Sea is capable of catching around 4,000 MT/day -- or about one day's fishing in the Western Gulf, one day's fishing in Area 620 of the Central Gulf and 3 to 4 days in Area 630 of the Central Gulf.

To date only a few motherships and a limited number of Bering Sea catcher boats have taken advantage of the lack of synchrony in the Gulf and Bering Sea pollock seasons. Gulf residents have no confidence that the current effort level will remain stable until a rationalization program is in place, but expect to

see steadily increasing effort from the Bering Sea. Waiting until there is a crisis seems absurd.

Potential Solutions:

1. Change the Bering sea seasons to quarterly seasons to match the Gulf openings.
2. Change the Gulf openings to match the Bering Sea openings (though start the Gulf on September 1 to allow for salmon processing needs).
3. Implement exclusive registration.

2. STAYING WITHIN THE QUARTERLY QUOTAS

The quarterly quota within each Gulf area is small and difficult for NMFS to manage. In the Central Gulf AGDB does inseason surveys of the local processors for NMFS' use and also tracks changes in fish availability, processing capacity, etc. A similar program has been implemented by operations working in the Western Gulf in conjunction with the Dutch Harbor NMFS management biologist.

These programs can only be useful when all the processors are cooperating and vessel capacity is relatively stable week to week. Changes in the number of operations in a Gulf area during a fishing period or changes in fish availability (big problem in the Central Gulf) both result in quota overages or underages.

Potential Solutions:

1. Two instead of four seasons in the Gulf.
2. Exclusive registration to stabilize vessel effort.

D. GULF POLLOCK CATCH AND DISCARDS BY MODE
QUARTERS 1 & 2 COMBINED - 1992 AND 1993

TABLE 3: WESTERN GULF POLLOCK FISHERY - 1992 AND 1993
THROUGH SECOND QUARTER - CATCH AND DISCARD IN MT

YEAR	CATCH	DISCARD	RETAINED	%DISC	QUOTA	%TOT CAT
SHRBSD						
1992	9170	964	8206	10.51	14821	43.10
1993	6151	281	5870	4.57	11532	46.59
MTHRSHP						
1992	2283	572	1811	24.00	14821	11.20
1993	6941	294	6647	4.24	11532	52.58
CAT PROC						
1992	9722	591	9131	6.08	14821	45.70
1993	110	106	4	96.36	11532	0.83
TOTAL						
1992	21275	2127	19148	10.00	14821	100.00
1993	13202	681	12521	5.16	11532	100.00

TABLE 4: CENTRAL GULF POLLOCK FISHERY - 1992 and 1993
THROUGH SECOND QUARTER - CATCH AND DISCARD IN MT

YEAR	CATCH	DISCARD	RETAINED	%DISC	QUOTA	%TOT CAT
SHRBSD						
1992	33864	244	33620	.72	51504	99.97
1993	43854	1243	42611	2.83	65187	97.21
MTHRSHP						
1992	7	5	2	71.43	51504	0.01
1993	1359	139	1220	10.23	65187	2.78
CAT PROC						
1992	652	644	8	98.77	51504	0.02
1993	268	267	1	99.63	65187	0.00
TOTAL						
1992	34523	893	33630	2.59	51504	100.00
1993	55798	3020	52778	5.41	65187	100.00

**E. HALIBUT BYCATCH IN THE GULF BOTTOM TRAWL POLLOCK TARGET
THROUGH QUARTER 3 - 1991 AND 1992**

(Target catch includes all catch taken in conjunction with the target species. Target species is the predominant species in the catch)

Halibut bycatch in the Gulf bottom trawl pollock target is an insignificant portion of the total Gulf halibut bycatch. Low observer coverage in 1993's bottom trawl pollock target fishery resulted in the same halibut bycatch rate being used for all areas. The difference between 1992 and 1993's halibut bycatch appears to be the result of one weekly observer report with a high halibut bycatch rate.

**TABLE 5: GULF BOTTOM TRAWL POLLOCK TARGET HALIBUT BYCATCH
THRU QTR 3 - 1992 AND 1993 BY AREA AND MODE**

YEAR	AREA	MODE	MT TARGET	MT HAL	%HAL	MT MORT
SHOREBASED						
1992	610	SHRBSD	7961	11	0.14	7
1993	610	SHRBSD	467	4	0.92	2
1992	620	SHRBSD	2169	0	0.02	0
1993	620	SHRBSD	1341	12	0.92	7
1992	630	SHRBSD	7493	14	0.19	9
1993	630	SHRBSD*	11470	105	0.92	58
1992	TOT	SHRBSD	17623	26	0.15	17
1993	TOT	SHRBSD	13279	123	0.92	67
MOTHERSHIP						
1992	610	MTHSHP	280	0	0.00	0
1993	610	MTHSHP	1943	0	0.00	0
1992	620	MTHSHP	0	0	0.00	0
1993	620	MTHSHP	641	1	0.01	0
1992	TOT	MTHSHP	280	0	0.00	0
1993	TOT	MTHSHP	2584	1	0.00	0

*Increase in bottom pollock reflects the problems finding midwater pollock in 1993.

III. GULF PACIFIC COD FISHERIES - 1992 and 1993

A. GULF PACIFIC COD MANAGEMENT HISTORY

1993 - INSHORE OFFSHORE IMPLEMENTED

Unlike pollock, there have been no other regulatory measures specifically for Gulf Pacific cod.

B. CHANGES IN THE GULF PACIFIC COD FISHERY BETWEEN 1992 AND 1993

EFFECT OF INSHORE/OFFSHORE

There is no discernable change in the mode share of the Pacific cod catch in either the Western or Central Gulf which appears directly related to the implementation of inshore/offshore.

In the Western Gulf mothership share dropped from 1992's 19% to 5% in 1993; while shorebased plants' share increased from 53% to 64%. This change in mode share, however, is more likely the result of an uninterrupted 1993 Bering Sea Pacific cod season than of the implementation of inshore/offshore. The premature closure of the Pacific cod fishery in 1992 sent Bering Sea catcher boats into the Western Gulf as shown by the jump in catch/day in Table 6 below.

Catcher processors in both 1992 and 1993 took about 30% of the Western Gulf Pacific cod catch. Much of the catcher-processor effort may have been freezer longliners under 125-feet in length.

In the Central Gulf, as shown in Table 6, in 1992 and 1993, over 90% of the Pacific cod catch was taken by vessels delivering to shorebased plants.

For Pacific cod Inshore/Offshore offers protection for the Gulf in the event the Bering Sea Pacific cod fishery closes before the Gulf Pacific cod fisheries.

EFFECT OF BERING SEA PACIFIC COD CLOSURES

While the NMFS Bulletin Board information allows looking at catch shares among processing modes, it does not provide information on port of landing. Therefore, an increase in the shorebased catcher-boat fleet in the Gulf as the result of closures in the Bering Sea can only be inferred through changes in weekly catch.

In the case of Pacific cod catch rates increase as the fish school up for spawning. The peak catch period in the Western Gulf is late February and, in the Central Gulf, mid to late March. The bulk of the trawl catch is taken during the two to three week peak period in each area.

In the Western Gulf average catch per day prior to the peak catch period was 530 MT in 1992 and 346 MT in 1993. The Bering Sea closed to Pacific cod fishing just before the Western Gulf Pacific cod stocks should have been reaching their peak and catch jumped to 1,345 MT/day. In 1993 the peak period catch was 1364 MT/day.

Because the closure of the Bering Sea Pacific cod fishery and the expected period of peak production in the Western Gulf occurred at about the same time, there is

no clear evidence that substantial effort moved from the Bering Sea to the Western Gulf in 1992 following the Bering Sea closure.

In the Central Gulf there were no substantive changes in catch rates between 1992 and 1993 indicating that there was no influx of Bering Sea effort into the Central Gulf in either 1992 or 1993.

TABLE 6: WESTERN GULF PACIFIC COD SEASON - CATCH, QUOTA STATUS, AVERAGE CATCH/DAY BY QUARTER AND BERING SEA STATUS - 1992 & 1993

YEAR	I/O?	BS OP/CL	WG OP DATES	WG CAT MT	WG RMDR MT	#FISH DAYS-WG	WG MT/DAY
1992	NO	OPEN	1/20-2/16	9177	14323	27	530
1992	NO	CLSD	2/17-3/05	24202	- 9879	18	1345
1993	YES	OPEN	1/20-3/06	12495	4335	45	346
1993	YES	OPEN	3/07-3/09	4093	242	3	1364

TABLE 7: CENTRAL GULF PACIFIC COD SEASON - CATCH, QUOTA STATUS, AVERAGE CATCH/DAY BY QUARTER AND BERING SEA STATUS - 1992 & 1993

YEAR	I/O?	BS OP/CL	CG OP DATES	CG CAT MT	CG RMDR MT	#FISH DAYS-WG	CG MT/DAY
1992	NO	OPEN	1/20-2/09	1144	37856	20	57
1992	NO	OP/CL	2/10-3/01	4767	33089	20	238
1992	NO	CLSD	3/02-4/04	26664	6425	33	808
1993	YES	OPEN	1/20-2/13	2247	29433	24	94
1993	YES	OPEN	2/14-3/06	9340	20113	20	467
1993	YES	OPEN	3/07-3/24	19790	303	17	1164

The Central Gulf Pacific cod fishery divides into three phases: during pollock, after pollock and peak.

C. GULF PACIFIC COD CONCERNS

1. INFLUX OF BERING SEA VESSELS

In 1992 the premature closure of the Bering Sea Pacific cod trawl fishery appears to have sent a pulse of effort into the Western Gulf. The Gulf remains concerned that any burp in the Bering Sea Pacific cod fishery will result in substantial losses to the Gulf based operations.

Potential Solutions:

1. Assure that the Bering sea Pacific cod fishery doesn't close before the Gulf Pacific-cod fisheries.
2. Implement exclusive registration.

**D. GULF PACIFIC COD CATCH AND DISCARDS BY MODE
QUARTERS 1 & 2 COMBINED - 1992 AND 1993**

**TABLE 8: WESTERN GULF PACIFIC COD FISHERY - 1992 AND 1993
THROUGH SECOND QUARTER - CATCH AND DISCARD IN MT**

YEAR	CATCH	DISCARD	RETAINED	%DISC	QUOTA	%TOT CAT
SHRBSD						
1992	18487	5	18482	0.03	23500	53.36
1993	11670	433	11237	3.71	18700	64.17
MTHRSHP						
1992	6438	112	6326	1.74	23500	18.58
1993	854	10	844	1.17	18700	4.57
CAT-PROC						
1992	9722	591	9131	6.08	23500	26.90
1993	5663	366	5297	6.46	18700	30.48
TOTAL						
1992	34647	708	33939	2.04	23500	100.00
1993	18187	809	17378	4.45	18700	100.00

**TABLE 9: CENTRAL GULF PACIFIC COD - 1992 AND 1993
THROUGH SECOND QUARTER - CATCH AND DISCARD IN MT**

YEAR	CATCH	DISCARD	RETAINED	%DISC	QUOTA	%TOT CAT
SHRBSD						
1992	30787	141	30646	0.46	39000	90.46
1993	30672	954	29718	3.11	35200	95.89
MTHRSHP						
1992	2059	21	2038	1.02	39000	6.05
1993	15	0	15	0.00	35200	0.05
CAT PROC						
1992	1188	119	1069	10.02	39000	3.49
1993	1301	560	741	43.04	35200	4.07
TOTAL						
1992	34034	281	33753	0.83	39000	100.00
1993	31988	1514	30474	4.73	35200	100.00

E. HALIBUT BYCATCH IN THE GULF TRAWL PACIFIC COD FISHERY

The Gulf Pacific cod fishery uses around 30% of the annual trawl halibut mortality cap. It is the first bottom trawl target fishery of the year and therefore is not affected by halibut bycatch in other bottom trawl fisheries.

The estimated mortality factor for trawl caught halibut in the Pacific cod fishery dropped from .65 in 1992 to .55 in 1993. Halibut bycatch rates, however, increased between 1992 and 1993 for all areas and modes, so there was little change in total halibut mortality in the Pacific cod fishery.

TABLE 10: HALIBUT BYCATCH IN THE GULF TRAWL PACIFIC COD FISHERY
THRU QUARTER 2 - 1992 AND 1993 BY AREA AND MODE

YEAR	AREA	MODE	MT TARGET	MT HAL	%HAL	MT MORT
SHOREBASED						
1992	610	SHRBSD	19309	170	0.88	110
1993	610	SHRBSD	12544	200	1.59	110
1992	620	SHRBSD	8376	99	1.18	64
1993	620	SHRBSD	5541	67	1.21	37
1992	630	SHRBSD	10649	253	2.38	164
1993	630	SHRBSD	15583	397	2.55	218
1992	TOT	SHRBSD	38334	522	1.36	338
1993	TOT	SHRBSD	33668	664	2.00	365
FAC TRWL						
1992	610	FAC TRW	4024	72	1.79	47
1993	610	FAC TRW	0	0	0.00	0
1992	620	FAC TRW	367	11	2.98	7
1993	620	FAC TRW	32	5	15.97	3
1992	630	FAC TRW	289	10	3.33	6
1993	630	FAC TRW	1258	41	3.29	23
1992	TOT	FAC TRW	4660	93	2.00	60
1993	TOT	FAC TRW	1290	46	3.57	26
MOTHERSHIP						
1992	610	MTHRSHP	7984	67	0.84	43
1993	610	MTHRSHP	875	14	1.59	8
TOTAL ALL MODES						
1992	ALL	ALL	50978	682	1.33	443
1993	ALL	ALL	35833	724	2.02	398

F. GULF PACIFIC COD - GEAR SHARES BY AREA - 1992 AND 1993
THROUGH QUARTER 2

Between 1992 and 1993 there was no significant change in Pacific cod catch share by gear type in either the Central or Western Gulf.

TABLE 11: GULF PACIFIC COD FISHERY - CATCH BY GEAR TYPE

YEAR	AREA	TRAWL		LONGLINE		POT GEAR		TOTAL MT
		MT	CAT (%TOT)	MT	CAT (%TOT)	MT	CAT (%TOT)	
1992	WEST	26510	(79)	6648	(20)	433	(1)	33591
1993	WEST	12529	(74)	3773	(22)	627	(4)	16929
1992	CENT	16957	(60)	4149	(15)	7150	(25)	28256
1993	CENT	21028	(66)	2290	(7)	8440	(27)	31758

IV. GULF FLATFISH FISHERIES - 1992 AND 1993

A. REGULATORY HISTORY

1990 - TRAWL HALIBUT MORTALITY CAP APPORTIONED QUARTERLY

The apportionment of the Gulf trawl mortality cap among four quarters effectively apportioned the Gulf flatfish fishery into four quarters. This is the only management measure affecting Gulf flatfish which has been taken.

B. DISCUSSION OF THE CENTRAL GULF FLATFISH FISHERY

As shown in Table 12 below, most of the flatfish catch in the Gulf is taken in the Central Gulf. Therefore, this section will deal only with the Central Gulf flatfish fishery.

TABLE 12: CENTRAL GULF AND TOTAL GULF FLATFISH CATCH
1992 AND 1993 THROUGH QUARTER 3

SPECIES	92 TOTAL MT CATCH	92 CENT GULF MT CAT (%TOT)	93 TOTAL MT CATCH	93 CENT GULF MT CAT (%TOT)
ARROWTH	12220	10380 (85)	18351	15684 (85)
DEEP FLAT	7199	7013 (97)	6382	5933 (93)
SHLLW FLT	4699	3068 (65)	5244	4839 (92)
FLATHEAD	1602	1307 (82)	2424	1810 (75)
TOTAL	25720	21768 (85)	32401	28266 (87)

During the first three quarters of 1992 the Central Gulf flatfish fishery accounted for 17% of the total Gulf catch of bottom trawl groundfish species, 45% of the total Gulf groundfish discards and 40% of the trawl halibut mortality.

During the first three quarters of 1993 the Central Gulf flatfish fishery accounted for 25% of the total Gulf catch of bottom trawl groundfish species, 44% of the total Gulf groundfish discards and 48% of the total trawl halibut mortality.

Any effort to reduce trawl halibut mortality and discards in the Gulf of Alaska trawl fisheries will be most effective if the effort is directed at the flatfish fisheries.

TABLE 13: TOTAL GULF BOTTOM SPECIES AND FLATFISH CATCH, VESSEL
DISCARD AND HALIBUT BYCATCH MORTALITY
1992 AND 1993 THROUGH QUARTER 3

YEAR	MT TOTAL BTM CATCH	MT CG FF CATCH	MT TOTAL DISCARDS	MT CG FF DISCARDS	MT TOT HAL MORT	MT FF HAL MORT
1992	128495	21768	22754	10257	1658	660
1993	111646	28266	33727	14817	1641	793

TABLE 14: FLATFISH CATCH, DISCARDS AND HALIBUT BYCATCH MORTALITY AS PERCENT OF GULF TOTALS - THRU 3RD QUARTER 1992 AND 1993

YEAR	CG FF CATCH %GULF BTM TOTAL	FF DISCARDS %GULF TOTAL	FF HAL MORT %GULF TOTAL
1992	16.94	45.08	39.81
1993	25.31	43.93	48.32

ARROWTOOTH FLOUNDER

The principle reason for the high rate of vessel discards in the Gulf flatfish fisheries is arrowtooth flounder -- a species whose biomass is increasing and which represents a substantial portion of the Gulf groundfish biomass. Biologically the discards of arrowtooth flounder shouldn't represent any problems since the total catch of arrowtooth represents a very small percentage of the biomass.

However, the bycatch of arrowtooth flounder represents a diversion of halibut bycatch from marketable to unmarketable catch. The Gulf's halibut mortality cap severely limits the Gulf bottom trawl fisheries and the use of halibut bycatch to catch arrowtooth represents a waste of halibut the Gulf fisheries cannot afford.

In 1992 the Central Gulf catch during the first three quarters of arrowtooth flounder was 10,479 MT; a catch which used 389 MT of halibut mortality or 24% of the halibut mortality available for the first three quarters.

In 1993 the cost in halibut of arrowtooth flounder during the first three quarters was higher: 15,374 MT of arrowtooth catch costing 480 MT of halibut mortality or 30% of the halibut mortality apportionment for the first three quarters.

It appears that the bycatch of arrowtooth flounder is increasing in the flatfish catches as shown in Table 16. This may be the result of a temporary shift in species distribution due to the unusually warm water temperatures or a reflection of an actual increase in comparative proportion of arrowtooth biomass in the flatfish complex.

The percentage of arrowtooth in the Central Gulf flounder catch is higher in the factory trawl flatfish catch where arrowtooth comprises 66-75% of the complex, than in the shorebased flatfish catch where arrowtooth represents between 16 and 41% of the complex, as shown in Table 16 below.

The lower percentage of arrowtooth in the flatfish complex catch of shorebased compared to factory trawl operations is believed to occur because shorebased operations target Dover sole in the deep flatfish complex and shallow flatfish while factory trawl operations target rex sole in the deep flatfish complex and little shallow water flatfish.

It is not practical for vessels which sort on deck to fish a species where 25% or less of the catch is "money fish," which is why shorebased vessels deliver little rex sole.

DISCARDS

Both in 1992 and 1993 Central Gulf shorebased vessels retained a portion of their arrowtooth which was delivered and used for meal. In 1993 a few factory

trawlers also began using onboard meal plants and also retained a portion of the arrowtooth catch.

During the first three quarters 1992 shorebased vessels discarded 12% of all flatfish taken and factory trawlers discarded 72%. In 1993 the discard percentages were 32% for shorebased vessels and 68% for factory trawlers. In 1993 factory trawlers retained 6% of the arrowtooth taken. The discard differential between shorebased vessels and factory trawlers appears to be directly related to the difference in the amount of arrowtooth flounder in the overall catch.

When halibut mortality is calculated against retained catch rather than overall catch, shorebased vessels' overall flatfish halibut bycatch rate for the combined first three quarters is 4.65% in 1992 and 7.90% in 1993; while factory trawlers' rates are 17.78% in 1992 and 15.12% in 1993.

C. GULF FLATFISH CONCERNS

The shorebased Gulf flatfish operations have only one concern: reducing halibut bycatch so more fish can be processed and fishing periods extended. The Gulf flatfish fishery is the fishery where the most gains could be made.

REDUCING BYCATCH RATES

Reducing halibut bycatch rates is an ongoing local project. However, the absence of Gulf pin number data the last quarter of 1992 and first half of 1993 have hampered local programs. Further, the fishing periods for flatfish -- about one month/quarter -- are so short that the fishery is nearly over when the first pin number data appears.

INCREASING RETAINABLE CATCH/MT HALIBUT BYCATCH

It doesn't take a rocket scientist to figure out that eliminating the rex sole fishery and its high percentage of arrowtooth flounder will allow more "money flounders" to be taken per MT of halibut.

The shorebased Gulf operations, however, recognize that there is a long range value to maintaining a species on the market and allowing a fishery to continue at some level so that experiments in gear design and fishing techniques can be carried out in the hope that a viable fishery can be created.

Exclusive registration will stop the pulse influx of Bering Sea factory trawlers who plan on a few weeks in the Gulf before returning to the Bering Sea. Presumably a few factory trawlers will choose to stay in the Gulf and therefore have a vested interest in prolonging the Gulf bottom trawl fishing periods.

Potential Solutions

1. Exclusive Registration
2. Increase Gulf halibut mortality cap to allow a larger percentage of the available fish to be taken. Another 1,000 MT of halibut mortality should add two to three months of fishing time for the Gulf bottom trawl operations.
3. Separate halibut caps for onshore and offshore operations. Halibut cap shares to be based on average retained catch 1992 and 1993.
4. Limit the Gulf to trawl vessels under 125 feet. Because of the ease with which vessels can shift their "target" in the Gulf a vessel size limit would probably have to apply to all targets.

TABLE 15: CENTRAL GULF FLATFISH CATCH AND DISCARDS BY MODE, QUARTER AND SPECIES - THROUGH 3RD QUARTER - 1992 AND 1993

YEAR	MODE	QTR	MT CATCH	MT DISCARD	MT RTND	%DIS
1992	SHRBSD	1+2+3	9110	1065	8045	11.69
1992	AT SEA	1+2+3	12582	9151	3431	72.73
1993	SHRBSD	1+2+3	11852	3738	8114	31.54
1993	AT SEA	1+2+3	16329	11078	5251	67.84

TABLE 16: CENTRAL GULF FLATFISH CATCH COMPOSITION BY MODE QUARTERS 1 AND 2 - 1992 AND 1993

SPECIES	SHRBSD-92		SHRBSD-93		CAT PR-92		CAT PR-93	
	CATCH	%TOT	CATCH	%TOT	CATCH	%TOT	CATCH	%TOT
ARROWTH	1309	23	2528	41	6673	66	8543	70
DEEP FLT	2713	48	1335	21	2975	29	3147	26
SHLLW FLT	1234	22	1805	29	247	2	86	1
FLATHEAD	377	7	550	9	284	3	513	4
TOTAL	5633		6218		10179		12289	100
RETAINED	4845	86	3926	63	2863	28	3709	30

QUARTER 3 - 1992 AND 1993

SPECIES	SHRBSD-92		SHRBSD-93		CAT PR-92		CAT PR-93	
	CATCH	%TOT	CATCH	%TOT	CATCH	%TOT	CATCH	%TOT
ARROWTH	555	16	1559	28	1798	75	3014	75
DEEP FLT	833	24	799	14	492	20	634	16
SHLLW FLT	1554	45	2710	48	3	0	218	5
FLATHEAD	535	15	566	10	111	5	174	4
TOTAL	3477		5634		2403		4040	100
RETAINED	3200	92	4188	74	568	24	1542	38

TABLE 17: CENTRAL GULF FLATFISH TARGETS HALIBUT BYCATCH BY MODE
 QUARTERS 1 AND 2 COMBINED - 1992 AND 1993

YEAR	QTR	MODE	TARGET	MT TGT	MT HAL	%HAL	HAL MORT
1992	1+2	SHRBSD	DP FLT	4401	234	5.31	152
1992	1+2	FAC TR	DP FLT	10409	458	4.40	298
1992	3	SHRBSD	DP FLT	1053	65	6.18	42
1992	3	FAC TR	DP FLT	1900	142	7.61	92
1992	1+2	SHRBSD	SHW FLT	394	30	7.71	20
1992	1+2	FAC TR	SHW FLT	245	10	4.38	6
1992	3	SHRBSD	SHW FLT	3101	45	1.44	28
1992	3	FAC TR	SHW FLT	6	0	0.00	0
1993	1+2	SHRBSD	DP FLT	2542	152	5.96	83
1993	1+2	FAC TR	DP FLT	326	18	5.59	11
1993	3	SHRBSD	DP FLT	1289	95	7.40	52
1993	3	FAC TR	DP FLT	1894	96	5.06	52
1993	1+2	SHRBSD	SHW FLT	2146	166	7.73	99
1993	1+2	FAC TR	SHW FLT	326	18	5.59	11
1993	3	SHRBSD	SHW FLT	3824	231	6.04	121
1993	3	FAC TR	SHW FLT	530	51	10.21	30
1992	1+2+3	SHRBSD	ALL FLT	8948	374	4.18	242
1992	1+2+3	FAC TR	ALL FLT	12560	610	6.45	400
1993	1+2+3	SHRBSD	ALL FLT	9818	644	6.55	374
1993	1+2+3	FAC TR	ALL FLT	15106	794	5.25	445

TABLE 18: HALIBUT BYCATCH RATE AS PERCENT OF RETAINED CATCH
 CENTRAL GULF COMBINED FLATFISH SPECIES
 THROUGH QUARTER 3 - 1992 AND 1993

YEAR	QTR	MODE	MT CATCH RETAINED	MT HALIBUT	RATE %HAL
1992	1+2+3	SHRBSD	8045	374	4.65
1992	1+2+3	AT SEA	3431	610	17.78
1993	1+2+3	SHRBSD	8114	644	7.90
1993	1+2+3	AT SEA	5251	794	15.12

V. GULF ROCKFISH FISHERIES - 1992 AND 1993 THROUGH 3RD QUARTER

A. GULF ROCKFISH MANAGEMENT HISTORY

1993 - ROCKFISH OPENING DELAYED UNTIL JULY 1

The delay in the Gulf rockfish fishery was implemented with industry support to reduce halibut and Chinook salmon bycatch. The delay was implemented in late March 1992; too late to stop an early target fishery. The regulation was in place for the start of 1993 season.

1993 - REDUCTION OF PACIFIC OCEAN PERCH QUOTAS

The reduction of the Pacific Ocean Perch quotas for rebuilding purposes was implemented before the July opening of the rockfish fisheries.

B. CHANGES IN THE GULF ROCKFISH FISHERIES 1992 AND 1993 THROUGH THIRD QUARTER

Rockfish, with the exception of shortraker/rougheye, is a factory trawl target fishery in the Gulf of Alaska. Shorebased catch (trawl and longline combined) is mostly incidental catch in other fisheries represented 11% of the total rockfish catch in the Gulf in 1992 and 1993. The following discussion will focus only on the factory trawl rockfish fishery.

EFFECT OF DELAYED OPENING

As shown in Table 21 below, moving the rockfish opening back to July 1 appears to have reduced the halibut bycatch rate from 1992's 3.69% to 2.54% in 1993, a 31% reduction in halibut bycatch between 1992 and 1993.

The delayed rockfish opening also eliminated targeting on rockfish during the first two quarters of the year in all areas except the Central Gulf. In the Central Gulf the deep flatfish fishery allowed retention of 15% rockfish. It is obvious in the data that some vessels caught deep flats in the Kodiak area and then moved to the Chirikof area to take the allowable percentage of rockfish.

EFFECT OF REDUCED PACIFIC OCEAN PERCH QUOTAS

Reduction in the Pacific Ocean Perch Quotas from 5200 MT in 1992 to 2560 MT in 1993 may have shifted effort from the Eastern Gulf into the Central and Western Gulf and may have intensified effort on sablefish.

Catcher-processor catch of Northern rockfish, which is significantly more abundant in the Central and Western Gulf than in the Eastern Gulf, increased enough to more than compensate for the decrease in the Pacific ocean perch quota, Table 19.

Overall the amount of rockfish taken in the Gulf in 1993 was about 200 MT more than in 1992; effort was shifted to the Central Gulf where about 1,100 MT more rockfish was taken in 1993 than in 1992, Table 20.

The shift of effort into the Central Gulf also increased factory trawl effort on sablefish, discussed in the next section below.

Also notable is the increase in discards of rockfish taken by catcher-processors between 1992 and 1993.

TABLE 19: CATCHER-PROCESSOR ROCKFISH CATCH - ALL GULF AREAS
THROUGH THIRD QUARTER 1992 AND 1993

YEAR	SPECIES	MT CATCH	MT DISCARD	%DISC	MT RETAINED
1992	POP	5725	1045	18.25	4680
1993	POP	2123	1696	79.89	427
1992	SR/RE	1685	89	5.28	1596
1993	SR/RE	1340	147	10.97	1193
1992	O. ROCK	4652	1254	26.96	1254
1993	O. ROCK	7572	2391	31.58	5181
1992	PS ROCK	1646	34	2.07	1612
1993	PS ROCK	2926	247	8.44	2679
1992	ALL ROCK	13708	2422	17.67	11286
1993	ALL ROCK	13961	4481	32.10	9480

TABLE 20: CATCHER-PROCESSOR TOTAL ROCKFISH CATCH BY GULF AREA
THROUGH QUARTER 3 - 1992 AND 1993

YEAR	AREA	MT CATCH	MT DISCARD	%DISC	MT RETAINED
1992	WESTERN	2449	1039	42.43	1410
1993	WESTERN	2039	704	34.53	1335
1992	CENTRAL	7559	1071	14.17	6488
1993	CENTRAL	8611	2317	26.91	6294
1992	EASTERN	3700	312	8.43	3388
1993	EASTERN	3311	1460	44.10	1851

TABLE 21: FACTORY TRAWL ROCKFISH TARGET CATCH AND HALIBUT
BYCATCH
QUARTERS 1 AND 2 COMBINED - 1992 AND 1993

ZONE	YEAR	QTR	MT TGT	MT HAL	%HAL	MT MOR
610	1992	1+2	1202	34	2.79	22
610	1993	1+2	0	0	0.00	0
620	1992	1+2	2341	61	2.61	40
620	1993	1+2	610	50	8.22	30
630	1992	1+2	934	47	5.07	31
630	1993	1+2	703	30	4.28	18
640	1992	1+2	1932	222	11.48	144
640	1993	1+2	0	0	0.00	0
650	1992	1+2	5502	23	4.64	15
650	1993	1+2	0	0	0.00	0
ALL	1992	1+2	6912	387	5.60	251
ALL	1993	1+2	1312	80	6.11	48

QUARTER 3 - 1992 AND 1993

ZONE	YEAR	QTR	MT TGT	MT HAL	%HAL	MT MORT
610	1992	3	606	2	0.30	1
610	1993	3	2041	19	0.91	11
620	1992	3	983	20	2.03	13
620	1993	3	904	15	1.65	9
630	1992	3	5917	181	3.06	118
630	1993	3	8677	307	3.53	184
640	1992	3	2208	24	1.08	15
640	1993	3	2641	48	1.81	29
650	1992	3	696	25	3.59	16
650	1993	3	994	0	0.03	0
ALL	1992	3	10409	256	2.42	164
ALL	1993	3	15257	388	2.54	233

QUARTERS 1, 2 AND 3 COMBINED - TOTALS ONLY - 1992 AND 1993

ZONE	YEAR	QTR	MT TGT	MT HAL	%HAL	MT MORT
ALL	1992	1+2+3	17321	639	3.69	415
ALL	1993	1+2+3	15256	388	2.54	233

VI. SHORTRAKER/ROUGHEYE, TRAWL SABLEFISH AND THORNYHEADS

Shorthead/roughey, trawl sablefish and thornyhead rockfish (also called idiots) are all taken by longline and trawl gear, are all valuable species and all have small quotas relative to the other deep water species with which they are taken. And all are management problems.

A. SHORTRAKER/ROUGHEYE

Bycatch only for trawlers, open for longliners. In the Eastern Gulf roughly half the shorthead/roughey catch was taken by trawlers and half by longliners in 1992 and 1993.

In the Central Gulf, which has the highest shorthead/roughey quota, most of the catch was taken by trawls in 1992 and in 1993 longliners took about 20% of the catch.

In the Western Gulf trawlers took slightly more than half the catch in 1992 and longliners slightly more than half in 1993.

In 1992, at the end of third quarter shorthead/roughey was PSC in the Eastern Gulf and bycatch only in the Central and Western Gulf. In 1993, at the end of third quarter, shorthead/roughey was on PSC status in all three areas.

CENTRAL GULF SHORTRAKER/ROUGHEYE CONCERNS

Having shorthead roughey on PSC status precludes retaining any shorthead/roughey bycatch taken in the third quarter bottom trawl fishery and increases discards.

Catch was about the same in 1993 as in 1992, and split between shorebased and catcher-processors about the same: 23% shorebased and 77% catcher-processor. However, the quota was slightly less in 1993 than in 1992 which resulted in the catch exceeding the quota.

The amount of shorthead/roughey which can be retained is limited by total retained amount of deep water flatfish species and rockfish taken. Because factory trawlers target both rockfish and deep flatfish this mode is able to retain a higher tonnage of shorthead/roughey than shorebased which targets only deep flatfish. The retention limit for shorthead/roughey is 15% of deep water flats, sablefish and other rockfish onboard.

Shorebased operations average 10 to 20% of their legally retainable amount of shorthead/roughey while factory trawlers average 30 to 60% of their legally retainable amount. The difference is probably because shorebased retention is calculated on a trip by trip basis while factory trawl retention is calculated at the end of each week; this allows shorebased catcher boats around three days to adjust their catch composition and factory trawlers seven days.

B. CENTRAL GULF TRAWL SABLEFISH CONCERNS

Like shorthead/roughey, trawl sablefish is bycatch only for trawlers - 15% against rockfish and deep water flatfish.

In 1992 there was still sablefish quota available for 4th quarter. In 1993 sablefish was PSC at the end of third quarter.

Usually both shorebased and factory trawl operations take 40 to 60% of their legally allowable sablefish. However, in third quarter 1993 factory trawlers appear to have taken about 100% of their legally allowable amount of sablefish. Factory trawl retained trawl sablefish catch was 579 MT in 1992 and 1024 MT in 1993; factory trawl sablefish discard rate doubled between 1992 and 1993.

C. THORNYHEADS

The thornyhead quota is Gulfwide; 70% trawl and 30% longline in 1992 and equally split between trawl and longline in 1993. Of the 709 MT taken by trawls, shorebased trawl catch was estimated at around 200 MT according to an informal conversation with NMFS. This is about what would be expected based on the legally retainable bycatch amount.

Between 1992 and 1993 the thornyhead quota dropped from 1798 MT to 1062 MT. As of September 5, thornyhead catch was only 45 MT from the overfishing definition and the Central Gulf trawl fleet was concerned that thornyheads might reach the overfishing definition and preclude a 4th quarter deep flat fishery.

Further, it appears that in the future thornyheads may drive the Gulf longline sablefish fishery as well as the trawl rockfish and deep flat fisheries. A longliner may not be able to use all his sablefish ITQ if he attempts to fish later in the year and thornyheads hit the overfishing definition before he's caught his ITQs.

DATA CAVEATS AND EXPLANATIONS

All data is taken from the NMFS Bulletin Board inseason data runs for 1992 and 1993.

BLENDS

In 1993 NMFS used blends to estimate discards in the trawl fisheries. Because of the blend, the Gulfwide total trawl target catch in the target fishery report is less than the total trawl catch in the catch reports. AGDB has avoided comparing numbers from the target fishery/halibut bycatch reports with numbers from the catch reports.

The use of blends in 1993 also means some of the increase in estimated discards between 1992 and 1993 may be due to the use of the blend in 1993. Trends that occur in both 1992 and 1993 AGDB believes are dependable; however, numerical or percentage differences in discards between modes and quarters should be calculated from 1993 data rather than 1992 data.

FUDGE FACTORS

In 1993 NMFS added "fudge factors" into the catch data base to compensate for late reports, errors, etc. The catch generated by the fudge factors works its way out over time.

COMBINING QUARTERS 1 AND 2

There was only about a week break in fishing between quarters 1 and 2 in 1992 and 1993; this was not long enough to allow the 1993 fudge factors to work out of the first quarter catch data base or for correction of errors in the first quarter halibut bycatch data. All data used is taken from the last week before the next quarter began to pick up as many of the retroactive corrections as possible.

SEPARATING FIXED GEAR AND TRAWL

The halibut bycatch data is for trawl only. The catch and discard data is separated by mode, but not by gear type, in the NMFS data, so fixed gear catch is included in all catch and discard data shown.

AGDB compared trawl and fixed gear catch for each species/area and deleted all longline blackcod and Eastern Gulf Pacific cod and Other species catch from the data used for this report.

The only species/area we feel may be biased by the existence of longline data in the catch/discard numbers in 1992 and 1993 is Pacific cod in the Central and Western Gulf. In both areas the longline catch is small compared to the overall catch and longline catch/discard is part of both the shorebased and catcher-processor data.

In 1993 a little over 1,000 MT of arrowtooth flounder was take by longliners in the Central Gulf. Depending how this catch is distributed between the shorebased and catcher-processor modes it could decrease the discard rate by as much as 2% for shorebased trawls or 1% for factory trawlers. This is insignificant.

Where fixed gear data is included in the data the terms shorebased operations and catcher processor operations are used. Where the data is specific to trawl gear, the terms shorebased trawl and factory trawler are used.

APPENDIX I

In the following tables all catch and discard figures exclude pollock. Halibut bycatch mortality includes any halibut bycatch taken in the pollock target fisheries. Catch and discard includes some longline catch and discard -- the amount, however, is insignificant. Species where the longline catch exceeded 60% of the total catch have been excluded.

1992 GULF OF ALASKA
ESTIMATED TRAWL CATCH, DISCARDS AND HALIBUT MORTALITY
BY MODE AND QUARTER

TABLE A1: 1992 - SHOREBASED (excluding pollock)

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
1+2	TOTAL	57738	1698	2.94	56040	527
	%QTR TOT	51.37	11.29		57.56	39.84
	%YR TOT	39.45	7.16		45.69	26.78
3	TOTAL	4757	491	10.32	4266	24
	%QTR TOT	26.79	10.98		32.11	8.67
	%YR TOT	3.25	2.07		3.48	1.22
4	TOTAL	5504	367	6.67	5137	256
	%QTR TOT	33.97	8.74		42.80	69.65
	%YR TOT	3.76	1.55		4.19	13.03
ALL	TOTAL	67999	2556	3.76	65443	807
	%YR TOT	46.46	10.78		53.36	41.03

TABLE A2: 1992 - FACTORY TRAWL (excluding pollock)

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
1+2	TOTAL	44798	12640	28.22	32158	737
	%QTR TOT	39.85	84.03		33.03	55.69
	%YR TOT	30.61	53.30		26.22	37.43
3	TOTAL	13002	3981	30.62	9021	253
	%QTR TOT	73.21	89.02		67.89	91.33
	%YR TOT	8.88	16.79		7.35	12.85
4	TOTAL	10661	3813	35.77	6848	87
	%QTR TOT	65.80	90.81		57.05	23.51
	%YR TOT	7.28	16.08		5.58	4.40
ALL	TOTAL	68461	20434	29.85	48027	1076
	%YR TOT	46.77	86.17		39.16	54.68

TABLE A3: 1992 - MOTHERSHIP (excluding pollock)

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
1+2	TOTAL	9869	705	7.14	9164	59
	%QTR TOT	8.78	4.69		9.41	4.47
	%YR TOT	6.74	2.97		7.47	3.01
3	TOTAL	0	0	0.00	0	0
	%QTR TOT	0.00	0.00		0.00	0.00
	%YR TOT	0.00	0.00		0.00	0.00
4	TOTAL	37	19	51.35	18	25
	%QTR TOT	0.23	0.45		0.15	6.84
	%YR TOT	0.03	0.08		0.01	1.28
ALL	TOTAL	9906	724	7.31	9182	84
	%YR TOT	6.77	3.05		7.49	4.29

TABLE A4: 1992 - ALL MODES (excluding pollock)

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
1+2	TOTAL	112405	15043	13.38	97362	1323
	%QTR TOT	100.00	100.00		100.00	100.00
	%YR TOT	76.80	63.44		79.38	67.21
3	TOTAL	17759	4472	25.18	13287	277
	%QTR TOT	100.00	100.00		100.00	100.00
	%YR TOT	12.13	18.86		10.83	14.07
4	TOTAL	16202	4199	25.92	12003	368
	%QTR TOT	100.00	100.00		100.00	100.00
	%YR TOT	11.07	17.71		9.79	18.71
ALL	TOTAL	146366	23714	16.20	122652	1968
	%YR TOT	100.00	100.00		100.00	100.00

**1993 GULF OF ALASKA
ESTIMATED TRAWL CATCH, DISCARDS AND HALIBUT MORTALITY
BY MODE AND QUARTER**

TABLE A5: 1993 - SHOREBASED (excluding pollock)

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
1+2	TOTAL	53138	6985	13.15	46153	629
	%QTR TOT	63.72	34.54		73.07	55.44
	%YR TOT	47.60	22.87		37.63	38.32
3	TOTAL	7569	2449	32.36	5120	182
	%QTR TOT	26.79	23.74		28.54	35.90
	%YR TOT	6.78	8.02		6.31	11.09
ALL	TOTAL	60707	9434	15.54	51273	811
	%YR TOT	54.37	30.89		41.80	49.40

TABLE A6: 1993 - FACTORY TRAWL (excluding pollock)

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
1+2	TOTAL	29293	13204	45.08	16089	496
	%QTR TOT	35.13	65.29		25.47	43.74
	%YR TOT	26.24	43.24		19.84	30.23
3	TOTAL	20606	7791	37.81	12815	325
	%QTR TOT	72.92	75.52		71.43	64.05
	%YR TOT	18.46	25.51		15.80	19.78
ALL	TOTAL	49899	20995	42.07	28904	821.02
	%YR TOT	44.69	68.75		35.64	50.01

TABLE A7: 1993 - MOTHERSHIP (excluding pollock)

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
1+2	TOTAL	958	35	3.65	923	9
	%QTR TOT	1.15	0.17		1.46	0.82
	%YR TOT	0.86	0.11		1.14	0.57
3	TOTAL	82	76	0.00	6	0
	%QTR TOT	0.29	0.74		0.03	0.06
	%YR TOT	0.07	0.25		0.01	0.02
ALL	TOTAL	1040	111	10.67	929	10
	%YR TOT	0.93	0.36		1.15	0.58

TABLE A8: 1993 - ALL MODES (excluding pollock)

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
1+2	TOTAL	83389	20224	24.25	63165	1135
	%QTR TOT	100.00	100.00		100.00	100.00
	%YR TOT	74.69	66.22		77.88	69.12
3	TOTAL	28257	10316	36.51	17941	507
	%QTR TOT	100.00	100.00		100.00	100.00
	%YR TOT	25.31	33.78		22.12	30.88
ALL	TOTAL	111646	30540	27.35	81106	1642
	%YR TOT	100.00	100.00		100.00	100.00

**CATCHER BOAT YEAR END CATCH, DISCARD AND HALIBUT MORTALITY
ESTIMATED FOR TRAWL FISHERIES - 1992 AND 1993**

**TABLE A9: CATCHER BOAT TOTALS (SHOREBASED & MOTHERSHIP COMBINED)
YEAR END 1992 (excluding pollock)**

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
ALL	TOTAL	77905	3280	4.21	74625	891.85
	%YR TOT	53.23	13.83		60.84	45.32

**TABLE A10: CATCHER PROCESSOR TOTALS
YEAR END 1992 (excluding pollock)**

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
ALL	TOTAL	68461	20434	29.85	48027	1076.15
	%YR TOT	46.77	86.17		39.16	54.68

**TABLE A11: CATCHER BOAT TOTAL (SHOREBASED & MOTHERSHIP COMBINED)
YEAR END 1993 (excluding pollock)**

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
ALL	TOTAL	61747	9545	15.46	52202	820.59
	%YR TOT	55.31	31.25		64.36	49.99

**TABLE A12: CATCHER PROCESSOR TOTALS
YEAR END 1993 (excluding pollock)**

QTR		MT CATCH	MT DISCARD	%DISCARD	MT RETAINED	MT HAL MORTALITY
ALL	TOTAL	49899	20995	42.07	28904	821.02
	%YR TOT	44.69	68.75		35.64	50.01

TABLE A13: ESTIMATED INCREASE IN RETAINED CATCH AND EXVESSEL VALUE
AT SELECTED DISCARD RATES

MT CAT	MT RETAINED AT DISCARD RATES SHOWN			
	10%DISC	25%DISC	60%DISC	75%DISC
20000	18000	15000	8000	5000
EXV \$ @.12/LB	4752000	3960000	2112000	1320000

TABLE A14: INCREASE IN AVAILABLE CATCH AT SELECTED HALIBUT BYCATCH
RATES

MT HAL	MT CATCH AVAILABLE AT SELECTED HALIBUT BYCATCH RATES				
	.03	.04	.05	.06	.07
1300	43333	32500	26000	21667	18571

APPENDIX II

REVIEW OF 1992 AND 1993 PIN NUMBER DATA

The 1992 and 1993 pin number data was reviewed to determine the fishing patterns of vessels. Pin number data is undebriefed data and changes may occur in later data, but AGDB feels the overall trends will not be affected by any potential errors in the data.

For vessels with 100% observer coverage, the pin number data gives a complete record of where each vessel fished each week and the target fishery for each week. For 30% vessels the data only can be used as an indication. Vessels less than 60 feet do not show up in the pin number data.

Because of time constraints the review has been cursory. Only the summary data for vessels fishing rockfish and flatfish is presented here.

I. VESSELS WHICH FISHED ROCKFISH AND/OR FLATFISH IN THE GULF AND ALSO FISHED THE BERING SEA

QUARTERS 1 AND 2 - 100% VESSELS

In both 1992 and 1993 Bering Sea 100% observed vessels entered the Gulf to fish flatfish and rockfish in two waves during February-March.

WAVE 1: ROCK SOLE REFUGEES

The first wave of nine vessels in 1992 and ten vessels in 1993 came into the Gulf around the end of February when Zone 1 closed to rocksole fishing in the Bering Sea.

The 10 "rock sole" vessels in 1993 spent a total of 31 vessel weeks in the Gulf before the second quarter halibut closure.

Target fisheries fished by the "rock sole refugees" in the Gulf in 1993 included all targets except pollock, despite the fact that Pacific cod and Rockfish were not open for target fishing. Nineteen of the 31 vessel weeks the target was flatfish.

1992 targets and vessel weeks were the similar to those seen in 1993.

WAVE 2: ATKA MACKEREL REFUGEES

The second wave of 9 vessels in 1992 and 7 vessels in 1993 arrived in the Gulf in March after the Atka Mackerel fishery closed in the Bering Sea/Aleutians.

In 1993 the seven Atka Mackerel Refugees spent 14 vessel weeks in the Gulf. Deep water Flats was the target in 5 of those weeks, arrowtooth flounder the target in 4 weeks, Pacific cod in 3 of the weeks and Other Species in 2 of the 14 weeks.

As well as the 17 100% observed vessels there were also 11 30% observed vessels which fished flatfish or rockfish in the Gulf and also fished the Bering Sea. Most of the 30% vessels fished Pacific cod and/or pollock in the Bering Sea and then came to the Gulf for flatfish.

QUARTER 3 - 100% VESSELS

In July 1993 eleven 100% observed vessels came into the Gulf from the Bering Sea when the third quarter halibut apportionment was released. All ten of the eleven vessels targeted rockfish and spent 3 to 5 weeks in the Gulf.

The effort was similar in 1992.

**VESSELS WHICH FISHED ROCKFISH AND FLATFISH IN THE BERING SEA,
BUT NOT IN THE GULF - 100% OBSERVED - 1993**

Thirteen 100% observed vessels remained in the Bering Sea after the rocksole and Atka Mackerel fisheries closed. Targets in the Bering Sea through August 14, 1993 were Pacific cod, rockfish and yellowfin sole.

**VESSELS WHICH FISHED ROCKFISH AND/OR FLATFISH IN THE GULF, BUT DID
NOT FISH THE BERING SEA - 1993**

Twenty-two vessels, all but one 30% observed, had observer coverage only in the Gulf the first three quarters of 1993. Flatfish were the target for all twenty-two vessels. None of the vessels shows a rockfish target during the first three months of 1993.

II. POLLOCK AND PACIFIC COD IN BRIEF - 1993**POLLOCK**

Fifteen vessels moved from the Bering Sea to the Gulf in 1993 to fish pollock. Most of these vessels fished the June and July Gulf pollock openings. The majority of the effort is believed to have fished the Western Gulf.

There were no vessels which fished pollock in the Gulf and then moved to the Bering Sea through August 14. However, some Gulf vessels did enter the Bering Sea for the first time to fish B season pollock, but the data was not available in time to include in this review.

PACIFIC COD

Most of the Pacific cod effort which fished both the Gulf and the Bering Sea was 30% vessels. Fourteen vessels appear to have started in the Bering Sea on pollock or Pacific cod, moved to the Gulf for Pacific cod in March and then back to the Bering Sea. Five "Gulf" vessels show observer coverage for Pacific cod in the Bering Sea after the Gulf Pacific cod fishery closed.

KODIAK REDUCTION, INC.

911 GIBSON COVE ROAD

KODIAK, ALASKA 99615

TELEPHONE (907) 486-3171

TO: RICK LAUBER, CHAIRMAN

RE: MEAL PLANT OPERATION IN KODIAK, ALASKA

DATE: SEPTEMBER 18, 1993

EXPLANATION OF THE OPERATION OF THE KODIAK REDUCTION, INC.
FISH MEAL PLANT IN KODIAK, ALASKA WITH SPECIAL REFERENCE
TO HANDLING OF WHOLE FISH UNSUITABLE FOR PROCESING

SUBMITTED FOR THE RECORD DURING THE PUBLIC COMMENT PERIOD ON THE
PROPOSAL TO IMPLEMENT EXCLUSIVE REGISTRATION BETWEEN THE GULF OF
ALASKA AND BERING SEA

My name is Dan James and I am the general manager of Kodiak Reduction, Inc.'s fish meal plant in Kodiak, Alaska. The plant's function, mandated by federal and state grants used to upgrade the plant for the processing of groundfish, is to handle all the fish waste generated by Kodiak's ten processing plants.

The plant's capacity is inadequate to handle all the waste generated. At a meeting of the members of Kodiak's seafood processing community on February 14, 1992, I was directed to use all whole fish discarded by the processing plants for meal and, if any dumping at sea was necessary, to send only frames, guts, etc., but not whole fish out to sea on the barge.

The members felt strongly that dumping whole fish at sea was a bad policy. Operationally, meal made from whole fish contains more protein than meal made from fish waste; whole fish generally contains less water than the fish waste we receive, so less energy is required to dry the meal.

At the time the "all whole fish will be made into meal" policy was implemented, many of the plants already were using separate containers for their whole fish discards and their processing waste and the whole fish was coming to the meal plant. The plants which had not yet segregated their whole fish discards from their processing waste changed their operations so that their whole fish were segregated.

The most commonly used method to segregate whole fish from processing waste is tote them and load them separately into the fish waste collection trucks.

The trucks pick up or deliver the whole fish discards or the processed fish waste in separate trips. All whole fish are

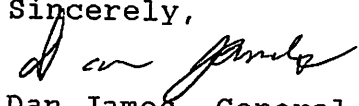
brought to the plant. If the plant is unable to handle all the waste, the processed fish waste is barged out to sea for dumping in the EPA approved dumping zone.

Kodiak's fish processing plants are uniquely situated to take advantage of the economics of scale available by using a communal fish meal plant, rather than each plant installing its own fish meal plant.

Kodiak's processors have formed a second fish meal company, Kodiak Fishmeal Company, to build a larger, state of the art fish meal plant which will be able to handle 800 short tons per day of fish waste. This will quadruple our current fish rendering capacity.

Thank you for including my comments as part of the record.

Sincerely,



Dan James, General Manager
Kodiak Reduction, Inc.

September 24, 1993

Trawl Industry Group: Paul MacGregor, Chris Blackburn, John Henderschedt, Dave Benson

Blackburn: We've spent most of this week trying to resolve the problems that we brought to you in June with use of halibut bycatch in the Gulf of Alaska, which included high arrowtooth bycatch, using up halibut caps, whoever got there first and could run through the most fish fastest preempting other users and a situation that was threatening to get out of control as well as problems with overfishing of thornyheads, Pacific ocean perch, and all the affected parties have been negotiating all week and have come out with an agreement. Paul, would you like to present the agreement?

MacGregor: Mr. Chairman, sorry, we had several other members of the group that we'd hoped to have up there but I can't find them. I think this came up a little earlier than they'd been expecting. As a preamble, I'd just like to start off by saying that this issue that we're addressing here, had originally been addressed or identified in connection with the exclusive registration proposal, but the further we got into looking at the problems that were at the heart of the Kodiak fishermen's concerns, it became pretty clear that the issue was not a exclusive registration issue, but really a halibut management issue and as a consequence we have tried to address the problem that Chris had identified last July in the context of halibut management and halibut management ins at the core of the proposal that we're going to present to you this morning and what we've done is develop a suite of measure that would hopefully address the problem that had been identified of one group or one set of fishermen using a disproportionate share of halibut PSC in the Gulf of Alaska at the expense of another group of fishermen. As a consequence we have prepared this suite of measures and they're set forth on this paper that has been circulated to you. The first and central part of this proposal really involves separating what we refer to the deepwater complex from the shallow water complex of fish in the Gulf of Alaska and apportioning to each its own share of the halibut PSC and what we would contemplate would be that that apportionment would be an annual specification process just as you go through in the Bering Sea for management of halibut there, and this will require a regulatory amendment, it's not a measure that's available to you right now, but it's one that we believe is worthy of development and we would request that you endorse the suggestion that the staff develop a regulatory amendment that would implement this apportionment of the halibut PSC between those two complexes. We've also suggested a actual number in so far as the halibut tonnage that would go into each of these complexes on a quarterly basis and that's set forth on the schedule in this paper as well.

Blackburn: I might note that was done by going through the '92 and '93 data and looking at the actual percentage of halibut used by the shallow complex and the deep complex, so it's firmly rooted in the historic use.

MacGregor: The additional elements of the package are set forth in the bottom of the paper. As I said, the halibut allocation would be dealt with on an annual basis. Any overages or shortfalls in the apportionments will be carried over from one quarter to the next within the category.

The second part of our proposal has to do with the use of arrowtooth flounder as what we refer to as "ballast." There has been a concern that under the current directed fishing definitions and the that the bycatch regulations work in the Gulf of Alaska that it's possible for vessels to go up and load up on a large amount of arrowtooth flounder as their target fishery and then use that amount of arrowtooth flounder as an offset on the bycatch allowance that they can have of other species and the concern was that people are abusing that practice and using arrowtooth really for accounting purposes as a way of catching bycatch species in amounts larger than they should and so our proposal

here would be to amend the directed fishing definition in a way that you could not count your bycatch allowances against arrowtooth flounder and that would enable people to still go out and target on arrowtooth if they wanted to, if they had a market, or an opportunity to develop that as a commercial species, but you wouldn't be able to count it for calculating the amount of bycatch of other species you could have on board.

The third part of our proposal would involve an amendment, a regulatory amendment that would prohibit the counting of bycatch species you have on board as part of the calculation of how much other bycatch species you can have. This is a problem that NMFS has recognized and as I understand it is addressing in their regulatory package that they've prepared and submitted to you already and that you'll be looking at later, so we're really endorsing that proposal that NMFS has already put before you.

The next element of our proposal has to do with an adjustment of the VIP rate in the Gulf of Alaska and the current rate is 5% which triggers a VIP violation and we're recommending that that be reduced to 4%. It's an incremental lowering, but the idea is to put a little more pressure on the vessels there to fish more cleanly on their target fishing.

Those are the items that are going to require action or endorsement by the Council. In addition, there are a couple of measures in the Bering Sea that we think would help alleviate the problems in the Gulf of Alaska and whether we deal with those here as part of the Gulf specs, or whether we deal with them in connection with the Bering Sea specs, we can tell you what they are.

In the first instance, we would like to have the rockfish fishery in the Bering Sea begin earlier in the year than it has, than it did in 1993. And, that's really simply a function of taking some of the halibut PSC apportioned to the rockfish categories in the Bering Sea and putting it in the first quarter, rather than starting the second quarter as we did this year. That was an industry recommendation for 1993, because that's how we wanted to schedule our rockfish fishery. It seems, though, that if we start the rockfish fishery in the first quarter rather than the second quarter, that will give vessels in the Bering Sea an opportunity to fish on other species after rock sole is completed and there won't be so many vessels moving down into the Gulf of Alaska looking for things to do in the first quarter.

The second part of the Bering Sea adjustments would require a regulatory amendment, and that would schedule the other flatfish fishery earlier in the year than it currently is. The current schedule for other flatfish in the Bering Sea is an artifact, if you will, of the joint venture fishery, and we had the domestic fishery, the DAP fishermen, had asked the Council to schedule the other flatfishery later in the year for joint ventures so they could have first shot at the halibut PSC allotment. Now that there's no JV fishery left and it's all DAP fishermen fishing out of the halibut apportionment, there's no need to delay that fishery for that purpose any more. If you move the other flatfish fishery to an earlier part of the year, then there will be an opportunity for people to fish on another species in the Bering Sea without coming down into the Gulf in the last part of the first quarter.

And, those are the elements of the proposal. I don't know if Chris or John have anything to add to it, but it's sort of a suite of proposals designed to tighten up halibut management in the Gulf and avoid some of these problems that were identified in the problem statement that Chris introduced last July.

Blackburn: I just want to point out that fishermen from the shorebase sector of the Gulf are there and major companies that participate in the Gulf, we spent a lot of time with data, we went over PIN number runs that we had done by vessel to identify the time periods when the worst problems were

occurring; I think we've done the best job we can to have wise use, to cut down the overages that happening on POP, thornyhead. We were able to identify where some of these problems were occurring, things like being able to keep bycatch against bycatch and I'll end there.

MacGregor: I'd like to say, too, that we had the involvement of NMFS staff on a number of occasions and they were very helpful and spent a lot of time with us in helping to identify measures that are available to you immediately and those that are going to take some regulatory measure to implement and we'd like to thank them for their participation.

Lauber: Could you, Paul, go over the arrowtooth situation, how it's pulled out and how. . .explain that a little more to me; I didn't quite understand how it worked.

MacGregor: I'll let John explain that because he's a little more familiar with that fishery than I am.

Henderschedt: The problem that this is meant to address is the present opportunity for fishermen to catch a lot of arrowtooth flounder with no real intent to sell that fish but rather to simply retain more valuable species against that arrowtooth flounder as bycatch. I'd like to point out that putting this restriction on arrowtooth flounder will not in any way necessitate discards; and the reason I say that is that arrowtooth flounder will be caught in a complex and so unless all the other deepwater flatfish have reached their TACs, there would be no reason to discard, let's say rex sole or dover sole or other species. So, I'd like to point out that this restriction would not promote discard nearly as much as it might seem at first glance.

Blackburn: I think, John, maybe I should clarify in plain English with an example. Many of the species in the Gulf are bycatch only to stretch them out; you can keep 15% black cod against rockfish and deep flatfish. You can keep 20% cod against everything else you've got in your load. It is possible, in the Gulf, to basically fish bycatch-only species using a little arrowtooth for balance and then using bycatch species, sablefish, shortraker rougheye, thornyheads and codfish, which is bycatch most of the year, to support your POP, say, and then you can turn around and use your POP, sablefish and that other group to support your thornyheads. It gets very bizarre and allows a lot of intensive targeting on species that are bycatch only for the reason that one does not one intensive targeting, you only want to be able to retain what you naturally catch.

Mace: Paul, so, let's be sure I'm clear on this. Is this proposal in addition to continuing the exclusive registration issue on pollock and cod, or does that fold that into it?

MacGregor: No, this really has nothing to do with the pollock and cod proposal. The problem statement and the issues involved in the pollock and cod controversy don't involve the offshore fleet. We don't fish for pollock and cod and so what we tried to do is identify the problem that's specific to our operations and deal with that. You still have on the agenda, I believe, the other problem.

Behnken: I have a question about the measure 6, I think it is, to open the rockfish fishery during the first quarter POP fishery and just wonder if you have any concerns about, I know this year we've hit overfishing in parts of the Bering Sea and I wondered if you have any concerns about that triggering closures of other fisheries if we open that earlier?

MacGregor: Linda, we paid a lot of attention to that; it's a good question. We had a problem this past year because the overfishing definition was approached in other rockfish. That was really a function, though, of the directed fishery on POP exceeding the TAC, not only the directed fishing portion of it, but the whole TAC, and so I think that we will be paying very close attention to that

in December in making recommendations to you about how you specify the directed fishing apportionment versus the bycatch needs.

Pereyra: First, I'd like to compliment you all, this is a great piece of work, very well done. A couple questions. First, you say the arrowtooth is ballast; what happens to the ballast? Is it taken back out and dumped, or what?

Blackburn: You only have to have it on board for that week to account for your PSCs for the week. I have no idea, I don't think anybody does, I don't even think we even want to speculate, Wally. The rules say at the end of the week you must balance, that's all they say.

Pereyra: Great rule. The other question is about the PSCs themselves. You have nothing in the fourth quarter. Do you want this frameworked so that at some point in time, a year down the road when the fishery matures a little more, that you might want to have it reapportioned? Is that the idea?

Henderschedt: If you look under the total column in that table, you can see that there is 400 tons of halibut allocated to the bottom trawl fisheries in the Gulf of Alaska, however, we have no idea whether the majority of available groundfish will be in one or the other complex, so we simply haven't specified any allocation other than to the fourth quarter in general.

Blackburn: Like this fourth quarter, deep flats is going to be closed until they get the 100% observer coverage because of thornyheads is so near overfishing, so with those uncertainties at this point, it seems foolish to apportion. Now, if our plan works we will not be meeting these overfishing problems and losing . . .muffled. . .but. . .

Pereyra: One last question, involves the Bering Sea. These measures are designed to address the Gulf and one of the issues you're looking at is starting the flatfish earlier in the Bering Sea and yellowfin sole and the POP. Have you taken a look at how changing the Bering Sea regulations as part of this suite might impact either positively or negatively the attainment of the OYs on those species, because we do have bycatch problems in the Bering Sea that shut those fisheries down.

MacGregor: There again, we did look at that issue and we had some pretty good expertise working with us, and John and Dave Benson from Arctic Alaska were both intimately involved. Our assessment based on the data we had before us, this could be accomplished without running into the problems you've identified, Wally. This is going to require a regulatory amendment to implement and an analysis will have to be done and I imagine that that's one of the issues that'll be explored in connection with it. At least at the present time we think this is a viable alternative and we're encouraging you to endorse an analysis and hopefully adoption of that regulatory amendment in December, but we need to look at those issues.

Pereyra: Now in the Bering Sea if for some reason, for example if we conclude that the salmon bycatch would be increased inappropriately, something of that nature, and decide not to make those changes in the Bering Sea, would that negate this suite of proposals you have for the Gulf or should we still go forward with these in the Gulf?

MacGregor: No, at least from my perspective, I would think you would go forward with as many of these things as you can implement. Obviously the core part of this has to do with the apportionment of PSCs. These other measures are designed to alleviate some of the pressure on people looking for things to do in the early part of the year in the Bering Sea, not finding anything and then coming

down into the Gulf.

Krygier: I'm very encouraged with this type of industry consensus. I believe that you really hit the nail on the head in addressing some problems that have been outstanding for a long time and I know from the way that you've addressed the arrowtooth problem, in particular, is going to go a long way in resolving some of the problems we have with a few individuals who try to concentrate on maximizing bycatch and do a lot of sorting and a lot of discards so there's a lot of deadloss on a lot of species, so I believe this is a very positive move.

Lauber: Any other questions? Thank you very much. That concludes the public comment section of the Gulf of Alaska groundfish specifications.

Pautzke: Mr. Chairman, the action required by the Council is you need to approve your SAFE documents to go out for public review between now and the December meeting when you'll make a final decision and that includes passing off on some preliminary specifications of ABC, TAC and apportionments for the 1994 fisheries. Also, I think we probably need to hear from the National Marine Fisheries Service as far as which one of these elements here of this latest proposal, which one of those elements, if you wanted to have those in place for 1994, which ones would actually require a regulatory amendment to get the ball rolling on it, and which ones could just be part of the specifications process. In other words, how do we facilitate getting these things in place for 1994, as early as possible.

[motions made and passed to approve SAFE document for public review and the preliminary ABCs, TACs, etc.]

Pennoyer: Mr. Chairman, the other question asked by Mr. Pautzke, appropriately, was how we would treat this proposal in lieu of exclusive registration area for species other than pollock and cod, and the bulk of this is going to require a regulatory amendment. You have two choices, I suppose. You could either ask us to prepare the analysis and a reg amendment to come back to you in December for your approval that would then go back to the Secretary for the reg amendment process; in that case you're probably looking at, absent an emergency rule of some kind, implementation in May, perhaps, perhaps June. You could instruct us to do the regulatory amendment analysis for this package in the interim and have the public comment taken care of through the Secretarial process, including comment by the Council in December on a motion that's already in progress. That would probably mean you would cut a couple of months off the process and we might be talking about March or April, perhaps, having it in place. But . . .not all requires reg amendment, the VIP rates are part of the process in December and the comment on the allocation of halibut by quarter in the Bering Sea to permit rockfish fisheries is something you could do in December; as was mentioned, part of this on the bycatch-only species, not retaining. . .is a reg amendment but it's already in the directed fishing standard discussion you're going to take up, so that's kind of your choices on what you can do. You do have to do a reg amendment to specify these new species complexes that we're going to allocate halibut to and probably the reg amendment would contain the ability to, by spec process each year, determine the amounts that are going to go into those different categories by quarter, but it will require a regulatory amendment.

Lauber: Could you state, if someone wanted to make a motion on the short form, the shortest version, how it should be worded?

Pennoyer: I would probably move that the staff be instructed to start the regulatory amendment development and submittal to the Secretary to accomplish these items with the public review process

and comment and further Council review to occur during that period.

Lauber: Do I hear a motion to that effect?

Dyson: I so move.

Motion carried without discussion or objection.

Questions after the fact:

Behnken: This plan in front of us lays out what the specific metric tons of PSC apportionment would be. It would be my understanding that if we lower those PSC allocations to the trawl fisheries that those would just be lowered proportionally? We're not locking in numbers here?

Pennoyer: Yes, I assume we could do that, sure. That's the way the spec process will work at some point anyway, so yes, I assume that's true. You're saying if you lower the overall halibut for the Gulf, these would be adjusted accordingly?

Behnken: Right, I would expect the regulatory amendment would include room for doing that, is that right?

Pennoyer: The regulatory amendment would include room for adjusting annually, and I would presume we would tie this as we did it to the normal process in the Gulf, which has so far established a cap and then you would reduce proportionally, but probably. . .I guess the answer is yes, I'm thinking about that because the spec process provides for changing these numbers, even the 2,000 ton cap, by annual specification, and how you divide that up, I'd say yes right now.

Lauber: Anything further on this agenda item?

[end of this agenda item discussion]