


MEMORANDUM

TO: Council, AP and SSC Members

FROM: Clarence G. Pautzke 
Executive Director

DATE: November 30, 1989

SUBJECT: Gulf of Alaska Groundfish Fishery Management Plan

ACTION REQUIRED

Consider halibut bycatch management for 1990 within the 2,750 mt limit established by Amendment 18.

BACKGROUND

Last June the Council approved Amendment 18 to the Gulf groundfish plan, replacing the halibut PSC framework with strict PSC caps of 2,000 mt for bottom trawl fisheries and 750 mt for fixed gear for 1990. The Secretary of Commerce approved this change on November 1.

In September NMFS suggested that the Council rescind the fixed PSC caps for 1990 and return to the PSC framework with a regulatory amendment to set 2000 mt trawl and 750 mt fixed gear limits in the framework. The Council chose not to. However, the Council did act to augment the halibut PSC for 1989 with special bycatch rate and observer restrictions on the extended flatfish fishery around Kodiak. This option was available to the Council because the PSC framework was still effective. This action somewhat mitigated the impacts of the earlier groundfish closure.

Industry will likely face groundfish closures again in 1990 because of halibut bycatch. Anticipating these closures, the Council may wish to further consider PSC management for 1990 within the Amendment 18 limits in terms of (A) setting final TACs, and (B) considering management options to maximize the amount of groundfish quotas harvested within the PSC limits.

A. Setting final groundfish TACs for 1990.

At this meeting the Council has two options for considering the Amendment 18 PSC caps when setting groundfish TACs for 1990:

1. Set TACs based on a presumed set of halibut bycatch and mortality rates so that the 2,750 mt caps are not exceeded if these TACs are fully taken, or
2. Set TACs based on DAP (and JVP) needs; allow the Regional Director to keep track of halibut mortality during the season and close the bottom trawl and fixed gear fisheries when their respective PSC caps are attained.

Under the first option, the Council would probably have to limit TACs for certain groundfish species because of anticipated halibut bycatch problems in those fisheries.

In order to set TACs based on bycatch concerns, the Council needs to set bycatch and mortality rates in the Gulf bycatch prediction model. The Plan Team reviewed available data on halibut bycatch and presented an analysis of these data in the final SAFE report. The bycatch and mortality rate data summaries from the SAFE are included in your notebooks as item D-2(c)(1). One comment from the public on these rates was received and is included as item D-2(c)(2). The Council could use these rates in predicting the possible levels of halibut mortality from alternative groundfish quotas for 1990.

If the second option is chosen, as it was for 1989, the Council would not constrain TACs at this time because of anticipated bycatch concerns, but would instead request NMFS to monitor halibut bycatch and mortality through the year and close fisheries when the caps are attained. The team assumes that NMFS will monitor halibut bycatch using the new observer program. The team noted it is willing to convene if necessary this winter to provide estimates of early-season bycatch rates should there be insufficient observer data.

B. Maximizing groundfish harvest opportunities within the Halibut PSCs.

In September the Council asked NMFS to explore ways that the halibut PSC caps could be managed in 1990 to maximize harvest of the groundfish TACs. As it now stands, only pelagic trawling will be allowed after the 2,000 mt halibut mortality cap is reached by bottom trawlers. NMFS also must close all pot and longline fisheries when the fixed gear cap of 750 mt is reached. A request from industry to allocate the 750 mt between pot gear and hook and line gear is under item D-2(c)(3). Such a separation would have been authorized by the PSC framework, but not by Amendment 18.

In D-2(c)(4), NMFS recommends for 1990 that the Council take two emergency actions:

1. Implement on or about January 1, a seasonal apportionment of halibut trawl and fixed PSCs as follows:
 - 40% in 1st quarter
 - 20% in 2nd quarter
 - 40% for rest of year

Fishing for a gear type would stop during a quarter when its PSC was attained. Presumably, any excess PSC would rollover to the next quarter. This emergency rule would expire after 180 days, on or about June 30, 1990. It would be followed by a second emergency rule as described below.

2. Implement on or about July 2, the following provisions:
 - (a) Divide each gear's remaining 40% halibut PSC, immediately releasing one half to the groundfish fishery, and saving the remainder in a reserve for the gear type. Presumably any rollovers from earlier quarters would be released immediately.

- (b) The reserve would be available at the end only to vessels that agree to carry observers. Vessels fishing the reserve would be constrained by a NMFS-determined bycatch rate, accounted on a weekly basis. A vessel exceeding the rate would be expelled from the reserve fishery.
- (c) The halibut bycatch mortality caps of 2,000 mt for trawl and 750 mt for fixed gear would not be exceeded.

This second emergency rule would expire at the end of 1990.

Assumed rates for estimating halibut bycatch in the 1990 Gulf of Alaska groundfish fisheries, by gear group, as presented in the 1990 Gulf of Alaska SAFE report.

	Bottom Trawl - All Areas		Midwater Trawl	
	Deep Water Flatfish	Other Bottom Trawl	Western	Central/East.
DAP/JVP	2.5% - 2.8%	2.7% - 8.8%	.01-.02%	.01-.06%

	Pacific cod Longline		Sablefish Longline
	Western	Central/Eastern	Western/Central/Eastern
DAP/JVP	5.23-22.0%	9.15 - 22.0%	3.6 - 38.3%

The Plan Team believes that the actual bycatch rates for 1990 will be within the above ranges. For planning purposes only, the Team notes that the following rates may be used by the Council during the December 1989 meeting to project potential halibut mortality from alternative groundfish TACs.

Bottom trawl

Deep water flatfish	2.5 %
Other	3.5 %

Midwater trawl 0.01%

Longline

Sablefish	8.0 %
Pacific cod	10.0 %

Seasonal halibut bycatch rates in the Gulf of Alaska bottom trawl fisheries for 1987-1989 from the Alaska Department of Fish and Game domestic observer program (from the 1990 Gulf of Alaska SAFE report).

Target Species	Bycatch Rate (%)	
	January-June	July-December
Pollock	0.5	6.8
Pacific cod	0.3	23.7
Deep water flatfish	2.5	2.8
Shallow water flatfish	*	4.9

* Rate not calculated due to confidentiality restrictions.

Gear share assumptions and midwater pollock distribution in the Gulf of Alaska for 1990, as presented in the 1990 Gulf of Alaska SAFE report.

Target Species	Gear Shares (%)		
	Bottom Trawl	Midwater Trawl	Longline
Pollock	11	89	0
Pacific cod	92	1	7
Flatfish	99	0	1
Sablefish	14	0	86
Rockfish	95	0	5

Midwater Pollock Distribution:

Western Regulatory Area: 18%

Central Regulatory Area: 82%

Current and suggested 1990 halibut mortality rate assumptions from the Gulf of Alaska 1990 SAFE report.

	Current	Suggested
Bottom Trawl		
DAP	50%	50% *
JVP	100%	100%
Longline		
DAP	25%	13% for observed ** 25% for unobserved **
Pot	---	***

* The team recommends that future halibut bycatch management in the Gulf of Alaska may utilize a different mortality rate estimate for the catcher/processor segment of the Gulf fleet. At the present time, however, the 50% rate which is derived from the shorebased sector of the fleet should apply to all Gulf trawl fisheries for 1990.

** A lower rate of mortality on observed fishing trips is justified since longline fishermen are believed to treat halibut more carefully when observed.

*** Little information is available from which to recommend a halibut mortality rate for pot gear. The team does not have a recommendation for 1990 and notes that very little groundfish fishing effort utilizes pot gear. However, the team also notes a need to collect potfishing bycatch rate information in the 1990 observer program efforts. The team also notes that the Council has recommended a regulatory amendment to the Gulf groundfish FMP that prohibits the use of pot gear not rigged to minimize halibut bycatch.

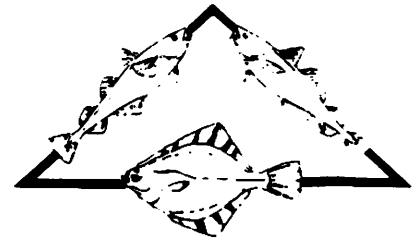
Source: International Pacific Halibut Commission preliminary analyses of halibut discard mortality.

Appendix 4.

Alaska Groundfish Data Bank

NOV 14 1989

November 10, 1989



COMMENTS ON GULF OF ALASKA SAFE DOCUMENT

I. PROPOSED HALIBUT MORTALITY AND BYCATCH RATES

A. Mortality Rate

We object strongly to the proposed increase from 50% to 65% of the assumed mortality rate of halibut taken in the Gulf of Alaska bottom trawl fisheries by shorebased vessels.

1. The assumptions made to derive the 65% rate do not stand up under scrutiny and the available data does not warrant a revision of the mortality rates.
2. The proposed mortality rate change, under the 2,000 MT mortality cap, will decrease the amount of groundfish available to the bottom trawl industry by 23%, but change the 1988 exploitable halibut biomass by only .98%.

Each of these issues is explained in the following sections.

1. Data Base and Assumptions for 65% Rate

a. Background

The proposed 65% mortality rate was derived using a halibut mortality study done aboard trawlers off Canada in 1975 and data on the time on deck presented by ADF&G from 1987-1989 observer data from shorebased vessels fishing the Central Gulf of Alaska.

The comparison between the Canadian and ADF&G data sets was made under the assumption, shown through the tagging work done in Canada, that the amount of time a halibut was left on deck before return to the sea was a major factor in discard mortality. We agree with this finding.

The Canadian data, based on tag returns, offers post-release mortality rates by each of five initial condition factors and time on deck for halibut >80 cm and halibut <80 cm.

The study concluded that the mortality estimate for the halibut <80 cm was incorrect due to incorrect values for non-reporting of tags and losses other than fishing and suggested that the true post-release mortality rate for halibut <80 cm was close to that estimated for halibut >80 cm.

The final estimate of post-release halibut mortality for halibut taken as bycatch in trawls off Canada was 50%. This figure has subsequently been used for the Alaskan shorebased bottom trawl industry.

b. Comparison of ADF&G and Canadian Data

The ADF&G data for percentage of the halibut on deck by time interval is not stratified by initial condition factor.

Dead halibut comprised 19.9% of the halibut taken as bycatch in the Canadian study, but only 6.6% of the halibut taken as bycatch in the ADF&G study.

Handling and injury information is available from the ADF&G study, but not the Canadian study.

c. Assumptions Made to Calculate the 65% mortality rate

1. The difference in the percentage of dead halibut in the Canadian and ADF&G studies (19.9% vs. 6.6%) was not accounted for. It was assumed, since the combined percentage of halibut "negatively impacted" and dead in the ADF&G study was close to the "dead" percentage in the Canadian study, that the difference in the percentage dead was not relevant.

However, the "negatively impacted" percentage in the ADF&G study included every impact from minor injuries through rough handling to actual pewing. The IPHC in its September 5, 1989, paper *Analysis of Halibut Bycatch Condition Data for Discard Mortality Rate Estimation* states that the actual effect of rough handling is unknown.

We do not feel there is any justification for assuming that the difference in the percentage of dead halibut in the two studies can be disregarded.

2. It was assumed that the distribution of the release condition for halibut observed by ADF&G (excellent, good, fair, poor and dead) was the same as that observed in the Canadian study.

This assumption is invalid in regard to the dead category as discussed above.

In regard to the other categories (Excellent, Good, Fair and Poor), no direct comparison can be made, but we note that only 34% of the halibut observed in the ADF&G study were either dead or negatively impacted, while in the Canadian study the fair, poor and dead categories comprised 73.1% of the observed halibut.

This means that 66% of the halibut observed in the ADF&G study sustained no negative impact, while only 27.87% of the halibut observed in the Canadian study were considered in Excellent or Good condition.

Therefore, we feel the assumption that the distribution of release condition is similar in the ADF&G and Canadian studies is an unjustified assumption.

d. Inclusion of the Small Halibut Mortality Rates

The high end of the mortality range (72%) given in the IPHC analysis is derived by applying the Canadian study's mortality rates for halibut <80 cm to those halibut <80 cm observed by ADF&G as bycatch in the bottom trawl fishery.

Since the IPHC did not feel that the mortality rates for halibut <80 cm indicated by the Canadian study were valid, we feel it most inappropriate to apply them to the ADF&G data.

The low end of the range given in the IPHC analysis (55%) is derived using the same method applied to the original Canadian study. The difference between 50% and 55% is due to the longer time halibut remained on deck in the ADF&G observations.

e. The calculations

I duplicated the IPHC low-end of the range analysis (though in a slightly cruder method due to more limited data) and arrived at a range of estimated post-release mortality 56-76%, quite close to the range obtained by the IPHC (55-72%) in their more rigorous analysis.

I then adjusted the distribution by condition to reflect that only 6.6% of the observed halibut in the ADF&G study were dead. The halibut between the ADF&G 6.6% dead figure and the Canadian 19.9% dead figure were proportionately distributed among the other time/condition cells.

The result was a range of 51 to 72%. Since my less rigorous approach results in a slightly higher low end figure and higher high end figure than the IPHC calculations, this seems quite comparable to the results obtained from the Canadian study. I made the calculations for comparison -- I reject the high end method as invalid.

It would appear that the longer time on deck seen in the ADF&G data is compensated for the lower initial observed mortality.

Since it also appears that the percent of halibut in the Excellent and Good categories in the Canadian study (26.9%) was substantially less than the percent of halibut in the ADF&G study which were not "negatively impacted" (86%), the actual post-release mortality of halibut taken by Central Gulf of Alaska shorebased trawlers may be less than 50%.

2. Conclusions

1. The calculation of the high end of the range using the estimate of mortality of small halibut based on tag returns was not considered valid by the IPHC in the original Canadian study and should not be considered valid today.
2. The assumptions made to compare the Canadian and ADF&G data sets do not take into account the substantial differences

between the two data sets in the percentage of dead halibut or the apparent difference in the percentage of "Excellent and Good" condition halibut in the Canadian study and percentage of halibut sustaining no negative impacts in the ADF&G study.

3. There is an apparent trade off in factors affecting post release halibut mortality in the ADF&G and Canadian studies.

ADF&G Study

Canadian Study

Longer Time on Deck

Higher initial mortality

Better overall initial condition

Higher percentage fish over 80 cm

Adjusting the estimated post-release mortality rate does not appear warranted by the data. The IPHC analysis does not take into account the factors observed by ADF&G which would reduce the estimated halibut mortality, only those which would increase the estimated halibut mortality.

The historic 50% figure should be used until an adequate tagging study can be done to justify a change in the rate.

3. Affect of Altering the Assumed Mortality Rate

Raising the assumed halibut mortality rate from 50% to 65%, assuming the mortality cap remains at 2000 MT, would decrease the allowable total halibut bycatch for the trawl fleet from 4,000 MT to 3,076 MT.

This decreases the amount of groundfish the bottom trawl fleet can harvest by 23%.

Table 1 - Estimated potential groundfish harvest in MT with different assumed halibut bycatch rates and mortality estimates under a 2,000 MT halibut mortality cap.

Bycatch Rate	MT Groundfish Available to the Trawl Fleet		MT Lost	% Lost
	65% Mortality Rate	50%		
.025	123,076	180,000	36,924	23.1
.045	88,376	88,889	20,513	23.1

For the halibut stocks, a removal of 4,000 MT with a mortality rate of 50% equates to 2,000 MT mortality. At a mortality rate of 65%, the total mortality is 2,800 MT or 800 additional MT. When adjusted to adult equivalents (using 1.58), 800 MT represents .98% of the estimated 1988 exploitable halibut biomass.

Adjusting the halibut mortality rate to 65% reduces the potential bottom trawl groundfish catch by 23% but would add only .98% to the 1988 exploitable halibut biomass. This is not a rational trade off, particularly considering the inaccuracies in the derivation of the 65% rate.

Again, we can find no justification for raising the assumed halibut mortality rate from 50% to 65%, or any other number. In fact the data might be analyzed to indicate that a lowering of the assumed mortality may be order.

Until an appropriate study can be done of halibut mortality rates aboard Alaskan bottom trawl vessels, the current 50% mortality rate appears to be the most justifiable rate.

B. HALIBUT BYCATCH RATES

1. SAFE Document Rates

In September we were able to obtain from ADF&G the most complete breakdown of observed halibut bycatch rates in the Central Gulf of Alaska we have ever had. The data is broken out by semi-annual time periods and, when possible, by species for the years 1987, 1988 and 1989.

We have made an extensive review of these reports which is included as a supplement to these comments. Our conclusion is that the data is completely inadequate to use to project any rates pre-season.

We recommend that

1. the Gulf of Alaska halibut bycatch be estimated inseason using inseason observer data;
2. that the calculations be made by area, by time period (preferably monthly) by species to the degree allowable by the observer coverage.
3. We further recommend that the use of total tonnage per landing be examined as a potential method for estimating bycatch rather than the current method. This method is detailed in the accompanying paper.
4. If the species by species method is used, we urge that a method be employed to assure that the fishing pattern of the observed vessels is similar to that of the unobserved vessels. This too is detailed in the accompanying paper.
5. Priority should be given to collecting data from the Eastern and Western Gulf and from the target rockfish fishery.

(Our suggestions for management in 1990 are detailed in a separate section.)

In brief, we find the following problems with the observer data:

1. There is no data outside the Central Gulf.
2. There is no data on rockfish.
3. The distribution of the observer data by semi-annual time period and by species does not represent the distribution of the catch by semi-annual time period or species.
4. Aggregating the data over time periods compounds the problems with the data and is mathematically totally unjustified.
5. Bycatch rates appear to differ by as much as 100% between the January-June and July-December time periods.

Because the sample size is small where it exists and absent for many cells, any bias drastically effects the aggregate rate.

The table below summarizes the observed bycatch rate and percentage of the total catch delivered which was actually

observed by time period and species for bottom trawl fisheries. All information is for the Central Gulf of Alaska.

Table 1 - *Bycatch rates (landed tonnage observed as percent of total landings) by species, by semi-annual time period, by year. "None" means no data is available.*

Time	Percent Halibut Observed (%Total MT landed Observed)			
	Pacific cod	Pollock	Flounder	Rockfish
1987				
Ja-Jn	.28 (4.48)	None	None	None
Jul-Dec	5.15 (2.81)	6.84 (.55)	None	None
1988				
Ja-Jn	2.81 (2.35)	None	None	None
Jul-Dec	None	7.06 (2.42)	6.1 (18.68)	None
1989				
Ja-Jn	2.18 (1.67)	.48 (3.47)	2.32 (9.49)	None
Jul-Dec	32.87 (1.35)	None	None	None

In each time period there were observer trips made for which no species was broken out, either because the trip had no dominant species or there were too few trips on that species to release the data without violating confidentiality. Bycatch rates for this "other" category calculated as ranging from 2.18-9.02%.

Comparing the rates in Table 1 above with the rates published in the SAFE document which aggregate the rates over the three years 1987, 1988 and 1989, the biases are obvious.

Table 2 - *SAFE document aggregate halibut bycatch rates for Central Gulf of Alaska bottom trawl fishery and comments on biases.*

Species	SAFE Rate	Comments
Pollock	5.3	Dominated by 1987 and 1988 fall rates which are much higher than the 1989 spring rate. No spring observations for 1987 and 1988. (Range .48 - 7.06%)
Pacific cod	5.1	Aggregate rate badly biased by unusual Jul-August high rate. (Range .28 - 32.87%).
Flounder	3.1%	Obvious difference in Jan-Jun and Jul-Dec rates. Partially influenced by shift to deep water flounder.

Further, when the percentage of the total landings and percent of each species landings in relation to total landings by time period is examined, it is obvious that the observer data is not representative by time or contribution to the total catch for any species.

We want to note that this has been a voluntary program and has been further constrained by special grants to cover the flounder fishery. Within the restraints of the program ADF&G made every effort to obtain representative coverage.

However, the use of the SAFE document rates cannot be justified, considering the lack of proportional coverage by species, time period or annual period.

We will be involved with the Plan Team and SSC in reviewing the proposed rates.

2. Management for 1990

The objective of the Council and the industry, I believe, is the same: obtaining maximum groundfish landings within the 2,000 MT cap. For 1990 I do not believe management regulations can be implemented which will successfully reach this goal by direct intervention.

Management can, however, establish a regime which allows industry the best opportunity for self-regulation and also collects the data which will hopefully lead to successful intervention.

THE MOST IMPORTANT REGULATION WHICH CAN BE DONE FOR 1990 IS QUARTERLY RELEASE OF THE HALIBUT PSC AS FOLLOWS:

FIRST QUARTER	40%
SECOND QUARTER	20%
THIRD QUARTER	20%
FOURTH QUARTER	20%

UNUSED HALIBUT PSC OR OVERAGES SHOULD BE ROLLED OVER INTO THE FOLLOWING QUARTER.

We suggest front loading the quarterly allocation to encourage fishing during the times when halibut bycatch is lowest.

This, combined with timely reporting of the inseason observed bycatch rates and estimated total halibut bycatch, will prevent a premature closure of the Gulf of Alaska to bottom trawling, allow industry to track its progress and adjust its fishing strategy.

It is obvious that industry can stretch its halibut cap furthest by taking pollock with midwater gear, fishing Pacific cod hardest during the spring aggregations and staying on deep water flounder during the summer. Scratch fishing results in high halibut bycatch.

However, to attempt to put these observed correlations between halibut bycatch and fishing strategy into regulatory form ignores the other influences on profitable fishing such as market demands and processing availability. Any future regulations along these lines should come at the request of the bottom trawl industry.

3. Incentive Programs

There is no doubt that the entire industry is supportive of an incentive program. However, due to the complexities outlined in the accompany paper, a successful, well thought-out, legally acceptable and administratively feasible program does not seem possible for 1990.

The NMFS version of the Eagle incentive program -- which virtually eliminated most vessels from the fall deep water sole fishery -- is an example what happens when good intentions are implemented without proper time for industry comment or resolution of problems.

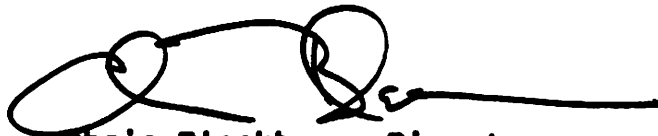
The problem most often referred to is "stopping the dirty guy." in cases of gross negligence, such as those which created the 35% July-August halibut bycatch rate in the Pacific cod fishery, I believe the directed fishing definition might be amended to allow the closure of a fishery with a grossly high halibut bycatch rate or elimination from that fishery of vessels which have been grossly negligent.

I want to emphasize that I am only suggesting this approach be examined and that it be used only to stop gross negligence, not in cases of a few bad tows or a vessel a few percentage points higher than average.

This is not a concept which can be developed for action in December, but it might be developed for industry review in January and action in March. Since the winter bycatch rates are lowest, this suggestion, if feasible and acceptable to industry, could be in place before the period of high bycatches.

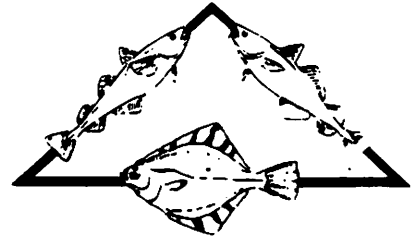
We thank you for considering our comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Chris Blackburn', with a long horizontal line extending to the right.

Chris Blackburn, Director
Alaska Groundfish Data Bank

November 10, 1989



**COMMENTS ON GULF OF ALASKA
SAFE DOCUMENT**

II. PROPOSED TACs

A. General

In the Gulf of Alaska the setting of TACs for the groundfish species has been used, until 1989, as another method of controlling halibut bycatch.

We oppose this misuse of TACs. ADF&G currently has a small observer program which has provided substantial data to the Council on halibut bycatch and the larger mandatory program proposed by the council promises to be in effect.

There is no incentive when the TACs are set low based on a probably erroneous preseason bycatch estimate. It is proper to warn the industry what the probable total bottom trawl catch may be under different bycatch scenarios.

B. Pollock

1. Exploratory Quota

We support the Plan Team's recommendation for a 10,000 MT exploratory quota (outside the ABC) Jan. 15 - Apr. 15 east of 151°30". Egg and larvae survey work by the USSR in 1984 noted substantial concentrations of eggs and larvae off the Kenai Peninsula. Many vessels, including ADF&G's Resolution in 1989, traveling between Kodiak and Prince William Sound have reported crossing what appeared to be a large aggregation of Pollock.

This area has not been surveyed as part of the spring hydroacoustic work.

An exploratory quota will allow for exploration of this area and offer data useful for further biomass estimates and survey planning.

2. Pollock TAC

Management

In view of the uncertainties of the stock, the SSC and Plan Team's comments about the problems of the "shrinking data base" (catches are no longer spread out over time and area), the concern over taking the entire quota during the roe season and allowing a roe fishery to take place without being managed as a roe fishery, we strongly recommend that the 1990 TAC be released in quarterly in equal portions.

Quarterly releases will serve to spread out effort in both time and area, remove the intense pressure on the spawning stocks seen in 1989 and improve the data base.

TAC

We believe the ABC and TAC for Central/Western Gulf of Alaska pollock should be set at 58,000 MT, with a limit of 8,250 MT in Shelikof as recommended by the SSC and AP.

The 1989 Shelikof hydroacoustic survey indicated that the Shelikof Strait spawning biomass was about the same as in 1988. Further, the minimal work done on the East side of Kodiak as the spawning biomasses broke up found the pollock aggregations the local fleet relied on in 1988 and 1989.

ADF&G's summer trawl survey for crab also indicated no overall change in the pollock population between 1988 and 1989.

We also note that all the various models and sets of assumptions indicate no real change in the total biomass between 1988 and 1989. Therefore, no substantial change in the quota between 1989 and 1990 seems warranted.

The 1988 TAC ended up at 72,000 MT. Since all data and model sources indicate no substantive difference in the biomass between 1988 and 1989, the 1990 TAC should be similar to the 1989 TAC and the 58,000 MT recommended quota is conservative.

Recruitment

Both survey data and industry observations have noted the absence of small fish (age 3?) in the 1989 catches and deliveries, though the very small fish (age 1?) seem abundant on the east side.

The Shelikof Strait survey indicates a low age 2 population.

There is no doubt that if the recruitment failures continue, the pollock stock will decline; just as a series of extremely recruitments pushed the biomass up to unprecedented levels in the late 1970s and early 1980s.

This fluctuation by a degree of magnitude is indicated in the historic data which found around 50,000 MT of pollock in the Gulf in 1960 and several million MTs in the early 1980s.

If pollock were long lived with a low natural mortality, a very conservative management strategy would be indicated.

However, with a natural mortality estimated at 40% per year, "banking fish" does not seem practical; though a reduction in the exploitation rate from the high of 35% to the 10-15% range is prudent if not exactly justifiable (justification is difficult in view of the NMFS testimony before the council in September that taking the entire quota out of the female stock would not affect the yield -- this would be an effective exploitation rate of 20% on the females).

The yield model generated a quota range of 10,000 to 65,000 MT. The data was based on Shelikof Strait which is no longer the major fishing area and the data may not be relevant to the current fishery.

Nonetheless, the recommended 58,000 MT TAC is below the high end of the yield model based on Shelikof Strait data.

BORDERS.

ITS COMMON KNOWLEDGE WITHIN THIS INDUSTRY THAT THERE ARE REALLY NO LARGE POLLOCK RESOURCES IN THE DONUT HOLE. TO BE PERFECTLY HONEST, I FEEL THE FOREIGN FLEETS WOULD STARVE TO DEATH IF FORCED TO FISH EXCLUSIVELY WITHIN DONUT HOLE BOUNDARIES. THE REASON THEY DON'T, OF COURSE, IS BECAUSE THEY ENGAGE IN COVERT OPERATIONS INSIDE THE EEZ, STEALING MILLIONS OF POUNDS OF POLLOCK -- POLLOCK WHICH LEGALLY BELONGS TO AMERICA.

IN ORDER FOR THIS "SAFE" REPORT TO LIVE UP TO ITS NAME, WE MUST SHIFT OUR FOCUS FROM ALLOCATING DECREASING AMOUNTS OF AN ALREADY VIOLATED POLLOCK RESOURCE, AND PROTECT OUR BOUNDARIES FROM FURTHER TRESPASSING BY FOREIGN FLEETS.

I URGE YOU TODAY, AS YOU MAKE IMPORTANT DECISIONS CONCERNING RESOURCE ALLOCATION, TO MAKE AN EVEN MORE IMPORTANT DECISION: TO ISSUE AN EMERGENCY REQUEST FOR INCREASED COAST GUARD AUTHORITY ON THE EEZ BORDERS.

Transshipment Data - 1986 - Donut Area

Product Type	Finished Product	Round Weight
Fillets, skin on; two per fish	62,754 MT x .33 = 30%	207,088 MT
Fillets, (Butterfly) w/skin	1,376 MT x .33 = 30%	4,541 MT
Fillets, Skinless: two per fish	27,652 MT x .48 = 21%	132,729 MT
Gutted, only	7,164 MT x .143 = 70%	10,245 MT
Headed and Gutted	190,130 MT x .182 = 55%	346,037 MT
Other products	1,592 MT x .476 = 21%	7,578 MT
Roe, Separated from fish	15,761 MT x .100 = 100%	15,761 MT
Flounders, diagonal cut	38,516 MT x .182 = 55%	70,099 MT
Tucza, head, guts tail belly rem'd	16,027 MT x .455 = 22%	72,923 MT
Whole fish	191,890 MT x .100 = 100%	191,890 MT
Others - less than 1000MT	1,900 MT x .33 = 30%	6.270 MT
Surimi: Minced fish product	564,366 MT x .476 = 21%	2,686,382 MT
Fish Meal: from carcass of Total*	53,727 MT x = 2%	-----
Fish Meal: from whole fish	82,677 MT x .588 = 17%	486,141 MT
	1,255,532 MT	4,237,684 MT
USA Domestic	30,240 MT x .476 = 21%	144,000 MT
	1,285,772 MT	4,381,684 MT
Donut Area (Reported)	248,212 MT	992,848 MT
	1,533,984 MT	5,374,532 MT
Foreign Fishing Vessel (one trip a year)	150,000 MT x .476 = 21%	714,000 MT
	1,683,984 MT	6,088,532 MT

(Footnote: Fish Meal Total = 136,404 MT
 From whole fish 82,677 MT
 from carcass 53,727 MT)

1% = x 100.00
2% = x 50.00
3% = x 33.33
* 4% = x 25.00
5% = x 20.00
10% = x 10.00
15% = x 6.67
16% = x 6.25
* 17% = x 5.88
18% = x 5.56
19% = x 5.26
20% = x 5.00
* 21% = x 4.76 <u>Surimi also fillet without skin</u>
22% = x 4.55
23% = x 4.35
24% = x 4.17
* 25% = x 4.00 <u>Surimi & meal</u>
* 30% = x 3.33 <u>Fillet with skin/two per fish</u>
35% = x 2.85
40% = x 2.50
45% = x 2.22
50% = x 2.00
* 55% = x 1.82 <u>Headed & Gutted</u>
60% = x 1.67
65% = x 1.54
70% = x 1.43 <u>Gutted only</u>
75% = x 1.33
80% = x 1.25
85% = x 1.18
90% = x 1.11
100% = x 1.00 <u>Whole fish</u>

the yield -- this would be an effective exploitation rate of 20% on the females).

The yield model generated a quota range of 10,000 to 85,000 MT. The data was based on Shelikof Strait which is no longer the major fishing area and the data may not be relevant to the current fishery.

Nonetheless, the recommended 58,000 MT TAC is below the high end of the yield model based on Shelikof Strait data.

The yield model uses a constant exploitation rate; in reality, if there is not better recruitment in the next year or two, the biomass will drop to the point a fishery is unlikely.

Survey work planned for 1990 along with the exploratory fishery will answer the question of whether the stocks have declined overall or simply redistributed and whether the lack of recruitment is localized or Gulf wide.

C. Deep Water Flounder

We support setting separate TACs for deep and shallow water flounder, both for better stock management and more accurate halibut bycatch estimates.

We also support the Council's recommended TACs.

Thank you for considering our comments.



Chris Blackburn, Director
Alaska Groundfish Data Bank

NEPTUNE TRAP & TRIGGER CO.

P.O. Box 17417
Seattle, WA 98107
206-789-3790

NOV 21 1989

ACTION	ROUTE TO	INITIAL
	Exec. Dir.	
	Deputy Dir.	
	Admin. Off.	
	Ext. Aff.	
	Finance	
	Gen. Inv.	
	Legal Coun.	
	Off. of Cong. & Public Affairs	
	Rec. Mgmt.	
	Sec. / Asst.	
	Training	
	Director's Sec'y	

November 16, 1989

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

Dear Mr. Pautzke,

As you are aware from previous correspondence, my firm manufactures a device called the Cod Trigger that is used to convert crab pots into pots that can fish for Pacific cod. This method of fishing can be very "clean" with minimal bycatch of halibut or crab if the pot is rigged properly. A limited observer study conducted by A.D.F. & G. confirmed this very low bycatch.

Since pot gear is defined as "fixed gear", this fishing method would be included with the longline fishery in regards to the PSC bycatch cap of 750 metric tons proposed for the Gulf in 1990. The pot fishery for Pacific cod could conceivably be shut down if the longline fleet reaches the bycatch cap even though the pot fishery would not be responsible. I would like to request consideration of some means to address this issue at the upcoming Council meeting.

One method of doing this would be to exclude pot fishing for Pacific cod from provisions of the bycatch cap for fixed gear. Another method that could be considered is a relatively small bycatch amount set aside for the pot fishery of perhaps 100 metric tons. It is very unlikely that this bycatch cap would ever be reached, but it would allow this clean fishery to continue fishing if the fixed gear bycatch cap was reached by the longline fleet. The remaining option would be to set aside perhaps 100 metric tons of the 750 tons allocated to the fixed gear group for the pot fishery. I would like these options considered, in addition to any others that could allow this clean fishing method to continue operating. If it is too late to modify the 750 metric ton bycatch cap for 1990, I would like the Council to consider an Emergency Rule during the year that would allow the pot fishery for Pacific cod to continue if the fixed gear bycatch cap is reached by the longliners. I would also like to urge the Council to keep this developing fishery in mind when allocating bycatch quotas in the future so that this clean fishing method can be allowed to develop.

On a related note, I have proposed a bycatch project for the Pacific cod pot fishery to the Alaska Fisheries Development Foundation. This would document the minimal bycatch of prohibited species when pot gear is used with the proper modifications. Initial interest in such a project seems to be very positive and I would hope that we could conduct this project during the spring of 1990. The data generated would be made available to the Council to assist in making their management decisions concerning bycatch.

I will not be able to attend the Council meeting but am available at the above number if there are any questions.

Sincerely

Ed Wyman
Ed Wyman, Pres.

**FISH, CRAB, LOBSTER & CUSTOM TRIGGERS
SPECIALTY BAIT PRODUCTS**



UNITED STATES DEPARTMENT OF COMMERCE
 National Oceanic and Atmospheric Administration
 National Marine Fisheries Service
 P.O. Box 21683
 Juneau, Alaska 99602-1683

November 28, 1989

Clarence Pautzke, Executive Director
 North Pacific Fishery Management Council
 605 West 4th Avenue
 Anchorage, AK 99501

RE: Recommendations for 1990 management of GOA halibut bycatch

Dear Clarence;

At its September meeting, the Council declined to recall that part of Amendment 18 to the Gulf of Alaska groundfish FMP that establishes 1990 Pacific halibut PSC limits for trawl and longline gear, thereby limiting PSC management flexibility for next year (please refer to my September 15, 1989, letter to you, attached). As a result, the Council must rely on my inseason authority to manage halibut bycatch and its attendant impact on the groundfish fisheries. The intent of this letter is to recommend to the Council possible management strategies for managing Pacific halibut bycatch in the Gulf of Alaska groundfish fisheries during 1990. These strategies are intended to maximize the opportunity to harvest the groundfish OY.

Unless fishing constraints are implemented early in the 1990 fishing year, the halibut PSC (2,000 mt in the trawl fisheries and 750 mt in the groundfish longline fisheries) will likely be reached prematurely, preempting further groundfish fishing in the Gulf for the remainder of the year. Furthermore, bycatch management actions implemented under Amendment 18 may increase the probability of early closures of the groundfish fisheries. These actions include: (1) a mandatory domestic observer program that will generate more accurate estimates of halibut bycatch, (2) separate halibut PSC limits for trawl and fixed gear types, (3) the establishment of 1990 PSC limits in the FMP that can not be exceeded, and (4) the curtailing of inseason management authority for 1990 that provided means for reducing the impact of halibut bycatch restrictions on the groundfish fisheries.

The Council may wish to recommend two emergency rules in 1990, given NMFS' inability to predict how the groundfish fisheries will operate under the new measures implemented by Amendment 18, and our obligation to maximize groundfish harvest under established PSC levels. The first emergency rule should be implemented on January 1, or soon thereafter, and would provide



Further, vessels fishing into the halibut PSC "reserve" would be constrained by acceptable bycatch rates developed by NMS. These rates would be determined during the first half of the fishing year, in consultation with the Council, based on domestic observer data gathered in 1990 and prior years. Available observer data would be examined to determine the best available information on which to develop acceptable bycatch rates for individual target fisheries. The failure of a vessel to meet a predetermined bycatch rate would result in the closure of the Gulf to further groundfish fishing by that vessel for the remainder of 1990. The PSC management scheme envisioned for the second half of 1990 in the Gulf would be very similar to that implemented in November of this year, except that the total 1990 bycatch mortality would not exceed the limits established by the Council under Amendment 18.

To maximize the groundfish harvest during the latter part of the year, a second emergency rule could be implemented to control halibut bycatch and prevent imminent closure of either the trawl or longline fisheries. This second rulemaking should be implemented by July 1990, and would (1) restrict the additional amount of halibut PSC available to the groundfish fisheries to 20 percent of the trawl and fixed gear halibut PSC limits, and (2) place the remaining 20 percent of each PSC limit into a "reserve" for each gear type. Once the allocated PSC was taken by vessels using either gear type, the "reserve" would be available to only those vessels that carry an observer. All other vessels using that gear type would be prohibited from further groundfish fishing in the Gulf through the remainder of the year.

We suggest that 40 percent of the PSC limits established for trawl and longline fisheries be released the first quarter of 1990, with an additional 20 percent released the second quarter. If the available PSC for a gear type is taken prior to the end of the first quarter, all fishing with that gear type would be prohibited until additional amounts of halibut are made available during the second quarter of the year. Because this emergency rule would expire within six months after it was implemented, the remaining portions of the PSC limits allocated to the trawl and fixed gear types, or 40 percent for each, would allow further groundfish fishing after mid-year until the PSC limits are reached.

for the seasonal apportionment of the 1990 halibut PSC limits. This action would prevent the groundfish fisheries from taking the entire PSC early in the year, thereby extending the opportunity for groundfish harvest over a longer period of time.

NO. 33 1989 15:15 11/11/78 - 11/11/80 332-7131

The above suggestions for halibut bycatch management should be viewed as interim measures to control bycatch during the period sufficient observer data are being gathered for a longer term approach to bycatch management in the Gulf of Alaska. Adequate data on bycatch rates by individual groundfish fisheries will allow NMFS and the Council to explore the practicality of vessel incentive programs to reduce bycatch and provide the opportunity for year-round harvest of groundfish.

Sincerely,

Steve
Steven Pennoyer
Director, Alaska Region

Enclosure



UNITED STATES DEPARTMENT OF COMMERCE
 National Oceanic and Atmospheric Administration
 National Marine Fisheries Service
 P.O. Box 21668
 Juneau, Alaska 99802-1668



September 15, 1988

Clarence G. Pautzke, Executive Director
 North Pacific Fishery Management Council
 605 West 4th Avenue
 Anchorage, Alaska 99501

RE: Status report on bycatch planning

Dear Clarence:

Over the past year, the Council has received five separate incentive proposals for prohibited species bycatch management: (1) a summary of the Council's Bycatch Committee's proposal for Bering Sea groundfish fisheries submitted at the September, 1988 Council meeting; (2) the Bycatch Committee's proposal for the Gulf of Alaska, dated December, 1988; (3) an international Pacific Halibut Commission staff proposal for halibut bycatch management dated June 12, 1989; (4) the NMF's, Alaska Region proposal for alternative Bering Sea/Aleutian Islands bycatch management schemes, submitted at the June 1989 Council meeting; and (5) a Bering Sea bycatch management proposal developed by a Seattle-based industry work group and also presented to the Council at its June meeting.

Many of these proposals reflect a desire for future bycatch management schemes that include incentives to voluntarily reduce prohibited species bycatch rates. Incentive programs could be accomplished in numerous ways, but the proposals received to date would necessitate the monitoring of individual vessels or operations with up to 100 percent observer coverage. This level of monitoring would be required to provide NMF's with the information necessary to reward those vessels or operations which, through modifications of gear or fishing technique, have reduced prohibited species catch (PSC) rates, and sanction those operations with unacceptable rates. Such monitoring on a broad basis may present logistical, legal, and industry relations problems.

The development of a long term incentive program for PSC management should be sufficiently comprehensive to address the Gulf of Alaska and Bering Sea groundfish fisheries. Council development of such a program will need to address a number of fundamental issues, not the least of which are (1) whether sufficient observer information exists on which to base an incentive approach to domestic bycatch management; and (2) whether the number of available observers, or the physical limitations of vessels to take observers, creates an intractable situation if those vessels are preempted from access to the groundfish resource.

I believe that future bycatch management should strive towards the development of incentive programs that reduce bycatch of all species to the minimum amount necessary to harvest the total allowable catch of groundfish. Domestic bycatch data collected during 1990 in the as yet "untested" comprehensive observer program may not provide the information necessary for the development and implementation of a comprehensive vessel incentive program by 1991. The Council may have to pursue more short term management strategies to address bycatch issues for 1990 and 1991 in the Gulf of Alaska and the Bering Sea until information from the proposed domestic observer program provides an adequate data base on which to gauge the need for and practicality of various vessel incentive programs.

Bycatch management considered by the Council for 1990 or 1991 should, however, strive to compliment long term bycatch management goals by (1) providing more management flexibility to adjust PSC limits and/or time-area closures and (2) allowing for the development of small-scale "pilot incentive programs" from which information may be gathered on the practicality of possible long term solutions to bycatch problems.

Gulf of Alaska

The Gulf of Alaska was closed to bottom trawling for groundfish effective September 2, 1989, on the basis that the 2,000 metric tons of Pacific halibut mortality PSC was reached on that date. Some fishery participants voluntarily carried observers in anticipation that they could demonstrate their avoidance of halibut and therefore be allowed further access to the groundfish resource once estimated bycatch levels reached the 2,000 mt limit. Current regulations at §672.20(f)(2)(iv) make provisions for certain vessels to continue fishing beyond the halibut PSC limit, but a specific plan on which to base a decision to allow certain participants who demonstrated an ability to avoid or limit halibut bycatch to continue bottom trawling was not in place at the beginning of the year and available to all vessels. Although current regulations would enable us to develop such a plan to exceed PSC limits for 1990, the proposed rule for Amendment 18 would not.

Amendment 18 reflects the Council's June 1989 decision to adopt an industry request to amend the Gulf FMP and implementing regulations for 1990 by temporarily suspending the flexibility in halibut PSC management in favor of specific halibut PSC amounts for trawl gear (2,000 mt) and longline gear (750 mt). Implementation of Amendment 18 would preclude options for allowing certain participants to continue fishing once halibut PSC limits are reached in 1990.

If the Council desires more flexibility in the management of halibut bycatch in the Gulf during 1990, it must recall that part

of Amendment 18 which addresses halibut management in the Gulf of Alaska. This action would continue halibut PSC management as provided in existing regulations. The Council could then reaffirm its decision to establish separate annual trawl and longline halibut PSC limits at its September meeting and reaffirm the 1990 halibut PSC limits proposed under Amendment 18 at its December meeting. These changes could be implemented by regulatory amendment in time for the 1990 fishing year or soon thereafter.

Further, a notice of proposed management standards and criteria for qualification for continued fishing by some participants when specified PSC limits have been reached would have to be published in the FEDERAL REGISTER at the beginning of the 1990 fishing year. Council guidance on the development of such standards and criteria should be received at the Council's September meeting to allow for Regional development and publication of participation standards by the beginning of the 1990 fishing year. The notice should, at a minimum, state what bycatch rates and levels of observer coverage would be considered adequate for the Regional Director to determine whether certain vessels ought to be allowed to resume fishing after PSC limits have been reached.

Bering Sea and Aleutian Islands Area

Amendment 12a to the Bering Sea groundfish FMP became effective September 3, 1989. At that time, the total incidental take of red king crab in the joint venture and domestic fisheries necessitated the closure of Zone 1 to those directed bottom trawl fisheries determined under the amendment to have a significant bycatch of crabs. Amendment 12a will expire at the end of 1990. The Council, therefore, will need to consider bycatch management regimes during the upcoming Council amendment cycle to succeed Amendment 12a.

Improved observer data will begin to provide the Council with the information it needs to develop a comprehensive, long term approach to bycatch management that provides incentives to individual vessels to minimize prohibited species bycatch in the domestic groundfish fisheries. An interim approach to bycatch management is needed, however, during the period adequate domestic observer information is being collected and we consider various methodologies for implementing broad incentive programs, including the frameworking of applicable rates or limits.

A feasible short term option for Bering Sea bycatch management would be Council adoption of a modified version of Amendment 12a through 1991. Examples of modifications to PSC management under Amendment 12a that could be considered consistent with the goal of developing a longer term approach to bycatch management include (1) basing of bycatch zone closures on

gear types, rather than directed fisheries, which would facilitate enforcement; (2) allowing certain gear types in closed areas provided the vessels have 100 percent observer coverage and fish at acceptable bycatch rates; (3) including the longline fisheries in bycatch accountability and closure actions; (4) frameworking the annual establishment of PSC amounts by basing them on a specified percentage of stock abundance; (5) frameworking the designation of time/area closures to reflect changes in prohibited species distribution; and (6) testing incentive programs on a limited area or time specific basis.

Sincerely,

(SGD) JAMES W. BROOKS

JP
Steven, Pennoyer
Director, Alaska Region

ANNUAL POLLOCK CATCH IS ACTUALLY IN EXCESS OF 5.2 MILLION
ENCROACHMENT IS FACTORED IN TO THE HARVESTING EQUATION, THE
SOME PEOPLE IN THIS ROOM WHO WILL CONTEND THAT IF FOREIGN
POLLOCK OVER THE CURRENT TAC OF 1.2 MILLION TONS. THERE ARE
FOREIGN FLEETS HAVE TAKEN AN ESTIMATED 2 MILLION TONS OF
US TO MANAGING WHAT'S LEFT AFTER JAPANESE, KOREAN AND OTHER
PSC, IN REALITY IS A DAMAGE ASSESSMENT REPORT. IT RELEGATES
SUPPORT RECOMMENDED APPORTIONMENTS TO DAP AND GROUND FISH
THIS SO-CALLED "SAFE" REPORT, WHILE OSTENSIBLY DESIGNED TO
POACHING WITHIN THE EEZ, THIS CREATES A CLASSIC PARADOX.
MORTEN ON A FISHERY ALREADY DECIMATED BY FOREIGN FLEETS
REPORT FOR POLLOCK IN THE GOA IS MERELY CONDUCTING A POST-
LET ME CLARIFY, REVIEWING THE CURRENT STOCK ASSESSMENT
WHICH HURT EVERYONE INVOLVED IN THE FISHERY.
TO ALLOCATIONS, INSTEAD OF THE MICRO-MANAGEMENT TECHNIQUES
WE URGE THE COUNCIL TO ADOPT A MACRO-MANAGEMENT APPROACH
DEBATE OVER APPORTIONMENTS.
OBVIOUS POINT ONLY BECAUSE IT'S BECOME OBFUSCATED IN PRIOR
BEFORE THE COUNCIL TODAY, AND I'M MAKING THIS SEEMINGLY
GROUND FISH RESOURCE. CONSERVATION IS THE PREEMINENT ISSUE
RECOMMENDATIONS AIMED AT CONSERVING THIS COUNTRY'S PRECIOUS
UNEQUIVOCALLY ON RECORD IN SUPPORT OF COUNCIL POLICIES AND
MOST HERE KNOW BY NOW THAT OUR COMPANY IS CLEARLY AND
AND I SERVE AS PRESIDENT OF EMERALD SEAFOODS.
MR. CHAIRMAN, MEMBERS OF THE COUNCIL, MY NAME IS ~~ERIC~~

Eric Silberstein

TONS. AND, FRIGHTENINGLY, EVEN THAT FIGURE MAY BE LOW.

TO SUPPORT MY CASE, I OFFER THE COUNCIL THE ATTACHED EXHIBIT WHICH WAS PROVIDED BY ONE OF OUR COLLEAGUES. IN THE INTEREST OF TIME, I WON'T TRY TO WALK THROUGH THE DATA, WHICH I SUSPECT YOU'VE SEEN BEFORE. HOWEVER, FOR THOSE WHO HAVEN'T, THE INFORMATION WAS EXTRAPOLATED FROM 1986 DONUT HOLE TRANS-SHIPMENT REPORTS.

THE CONCLUSION ONE CAN EASILY DRAW FROM THIS DATA IS THAT WE ARE ALREADY EXCEEDING THE TAC. SOME OF YOU MAY DISCOUNT THIS FINDING BECAUSE OF THE METHODOLOGY, AND I'LL READILY ADMIT I'M NOT A SCIENTIST. BUT THE EVIDENCE OF FOREIGN ENCROACHMENT IS PLAINLY THERE. IT MUST BE FACTORED IN TO ANY FISHERIES MANAGEMENT EQUATION. THE DEGREE TO WHICH IT'S FACTORED, OF COURSE, IS THE QUESTION. HOWEVER, I SUBMIT WE CANNOT ERR IF WE TAKE A VERY CONSERVATIVE STANCE, REFLECTING THE OBVIOUS " LACK OF EMPIRICAL DATA " CONCERNING THE SIZE OF THE POLLOCK RESOURCE.

BY INCLUDING DONUT HOLE TRANS-SHIPMENT DATA IN COMPUTING TAC AND COROLLARY APPORTIONMENTS, THE COUNCIL CAN THEN DEVELOP THE TYPE OF MACRO-MANAGEMENT POLICIES THIS FISHERY SO DESPERATELY NEEDS. THAT CAN ONLY BE ACHIEVED, HOWEVER, BY CONTROLLING DONUT HOLE OPERATIONS.

SIMPLY DEMURRING TO EXAMINE THE IMPACT OF POACHING BY FOREIGN FLEETS BECAUSE OF INTERNATIONAL POLITICAL SENSITIVITIES IS UNACCEPTABLE. A NATIONAL TREASURE IS AT STAKE. WE MUST PROTECT IT, AND ONE OF THE STEPS WE NEED TO TAKE IS INCREASED SURVEILLANCE OPERATIONS ON THE EEZ