

MEMORANDUM

TO: Council, SSC, and AP Members

FROM: Clarence G. Pautzke
Executive Director



ESTIMATED TIME
2 HOURS

DATE: January 26, 1998

SUBJECT: Bycatch Management

ACTION REQUIRED

- (b) Receive report from Vessel Bycatch Accounts (VBA) Committee; determine next steps.
- (c) Receive status report on analysis of bycatch amendments and provide further direction to staff.

BACKGROUND

(b) VBA Committee

In February 1997, the Council appointed an industry Committee to further develop a 'strawman' VBA program for consideration. A related task of the Committee was to identify, and resolve where possible, a variety of monitoring, enforcement, and legal issues surrounding VBA program development. In April, the Committee reported back to the Council with a preliminary list of alternatives, elements, and options, as well as a discussion of the monitoring, enforcement, and legal considerations. The Committee again met in August.

In September, the Council did not address this issue due to time constraints. However, the AP received a report from the Committee and provided the following advice:

"The AP recommends the Council have the committee continue its efforts. Further, the AP requests the Council have NOAA GC address the legal issues including enforceability, and have the committee examine the effects of the VBA program on the current observer program. Motion carries unanimously."

Based on this recommendation, the Committee met again in November to examine these issues. A summary of the proceedings from both meetings is attached as Item D-2(b)(1). A critical issue for implementing a VBA program, and other individual vessel monitoring programs, is monitoring via the observer program. The current observer program is a scientific program to determine total catch composition, whereas VBA is a compliance-based program. Some changes to the observer program may be required to achieve an effective VBA style of management. These changes likely involve observer sampling procedures including whole haul sampling for PSC's, re-evaluation of observer work priorities, fishery specific observer duties and other aspects of the observer program which are being re-evaluated to meet changing needs of the fishery and its management.

Chairman Steve Hughes will be available to report on the Committee's progress. At this meeting, the Council will provide further direction to the Committee and staff.

(c) Bycatch Amendments

In this past summer's annual call for proposals, we emphasized the need for additional bycatch management measures to comply with the provisions of the Magnuson-Stevens Act. At the September meeting, the Council initiated development of several of the proposals received. These include:

- a plan amendment to eliminate non-pelagic trawling for pollock in the BSAI, and to explore other options for the GOA.
- a plan amendment to further control bycatch of chinook salmon taken in BSAI trawl fisheries. The PSC limit of 48,000 chinook salmon could apply to the entire year (currently just through April 1), or be reduced to 36,000 salmon.
- create an individual checklist program, similar to harvest priority, where participating vessels would have access to special harvest amounts.
- create a halibut mortality avoidance program through trawl towing protocols and regulated deck sorting, and re-evaluate methods for estimating halibut mortality including development of regulations for quick release of halibut to reduce mortality.

The first two of these potential amendments will be developed for review by the Council in April 1998. The remaining proposals, along with ongoing efforts on the Vessel Bycatch Account (VBA) initiative, may require additional analytical time. Other selected amendments initiated by the Council include: (1) an analysis of the maximum retainable bycatch (MRB) of Pacific cod in the shallow water flatfish fishery in the GOA, and increasing the MRB of arrowtooth flounder in the GOA; and, (2) two ADF&G proposals, one to require full retention of demersal shelf rockfish (DSR) and the other to prohibit fishing on the Cape Edgecomb pinnacles.

Staff has prepared a short discussion paper on the bycatch proposals (Item D-2(c)(1)). The paper lays out the alternatives considered for analysis and other issues for Council consideration. The staff needs direction from the Council at this meeting on the scope of alternatives in order to provide the analysis for initial review in April.

VBA Committee DRAFT Summary of Proceedings, August 21-22, 1997

Members Present:

Steve Hughes (NRC/UCB, Chairman)
Bob Alverson (FVOA)
Chris Blackburn (AGDB)
dave fraser (F/V Muir Milach)
John Gauvin (Groundfish forum)

Shari Gross (HANA)
Carl Mercurieff (CBSFA)
Gary Painter/Tom Casey (AFCG)
Beth Stewart (AEB)
Paul MacGregor (for C. Cross)

The vessel bycatch accountability (VBA) committee met in Seattle on August 21-22. The objective of the meeting was to further flesh out details of a VBA program for Council consideration. The meeting began with introductions and a review of the draft agenda. The committee then discussed and approved the summary of the April meeting, and reviewed VBA issues that had been resolved. The following is a summary of discussions under each issue.

Objectives of VBA Program

A VBA program proposal is intended to be consistent with the revisions to the Magnuson-Stevens Act and addresses the prohibited species bycatch problem by meeting the following three objectives:

1. Decrease the bycatch of prohibited species.
2. Decrease the cost of controlling bycatch in part by increasing the ability of the groundfish fleet to take the groundfish TACs without exceeding the PSC limits.
3. Produce a more equitable distribution of bycatch costs.

Problem Statement and Objectives - The committee developed a draft problem statement based on a draft provided by the Council for review. The committees revised problem statement is as follows:

National concerns regarding impacts of bycatch are reflected in the new Magnuson-Stevens Act. The Magnuson-Stevens Act calls for the reduction and minimization of bycatch to the extent practicable (with specific guidance for the North Pacific in Section 313), while at the same time achieving OY. In order to address these national mandates, the Council will develop specific bycatch reduction measures, which may include programs to promote individual vessel accountability.

For several years, the Council has been frustrated in its attempts to increase the level of individual vessel responsibility for prohibited species bycatch and bycatch reduction. Requiring the overcapitalized fleet to operate within the current bycatch cap program not only has resulted in a race for fish for the directed fisheries, but also for the PSC species. This has resulted in the inability to achieve OY, increased rate of PSC catches, and resulted in

discards of all types. The problem with the current system is that the common PSC cap system fails to provide incentives for individuals to minimize bycatch and maximize catch per unit of available PSC bycatch. Under the status quo, individuals' fishing opportunities are not affected by their own relative use of PSCs, and this does not create strong incentives to minimize bycatch and maximize catch per unit of PSC bycatch.

A VBA program has been proposed to address this problem. Objectives of this program were outlined by the committee, as shown in the above box. Tom Casey noted that peer pressure was another option to a VBA program. Others on the committee disagreed because the industry has exerted increasing amounts of peer pressure and this has not modified the behavior of some companies.

VBA Species

Halibut (BSAI, GOA)
Crab (BSAI)

VBA Species - The committee agreed at its first meeting to include halibut and crab in a VBA program. VBA crab species for the BSAI would include halibut, Bristol Bay red king crab, Bering Sea Tanner crab (*C. bairdi*), and Bering Sea snow crab (*C. opilio*). Limits for crab would apply to the bycatch zones, and halibut would apply to the entire BSAI and GOA by FMP areas. The committee felt that salmon and

herring should be excluded from this program because the caps are small and currently the bycatch of these species is principally a random event over which fishermen have limited control.

Fisheries
All Trawl Fisheries (BSAI, GOA)
Longline ?? (BSAD)

VBA Fisheries - The committee agreed that a VBA program could apply to all trawl fisheries. An option of leaving out the midwater pollock fishery should be considered. It was noted that some groundfish longline vessel representatives had expressed an interest in a VBA program for their gear type. Several Bering Sea freezer longliner companies were present at this meeting and asked to be

included in a VBA program.

Fishery Specific VBAs
Option 1: VBAs not specific to target fishery
Option 2: VBAs target fishery specific.
Option 3: A portion of VBAs be target fishery specific for a period of time.

Fishery specific VBAs - The committee continued its discussion on how VBAs would be applied to groundfish fisheries. Two options were developed at the previous meeting. Option 1 would be to divide the total cap and allow vessel operators to determine best use of their VBA allocation. That is, their use would not be fishery specific. Option 2 would be divide the total cap by fishery cells (as we do now in the BSAI), and then lock the VBA allocations into specific target fisheries. That is, their use would be fishery specific. Committee members expressed different concerns and opinions about the benefits of these options. Some members felt that if VBAs are target specific (Option 2), many potential benefits of the program would be lost and the OY

objectives not met. Others felt that even with non-specific VBAs (Option 1), there will still be a race for fish species that are currently fully utilized and constrained by TAC (such as Atka mackerel and POP). There was concern that this could cause effort shifts among some fisheries, so an additional Option 3 was suggested. This option would require that a percentage of PSC must be used in the "cell" it was obtained, and percentage requirement could diminish over time. That is, their use of a declining proportion of the VBAs would be fishery specific.

Use of VBAs
individual vessels
pooled vessels
default pool

Use of VBAs - The committee continued its discussion of how a VBA program would be structured. VBAs can be used by individual vessels or pooled vessels. Vessel groups would need to submit a vessels group bycatch monitoring plan for NMFS approval. Non-participating vessels would be part of a default (open-access) pool, which would operate like the current system.

A concern was raised that many of the dirty fishers would choose to remain in the open access pool, and could act as "predatory vessels" by using up a disproportionate amount of PSC. It was suggested that impacts from these vessels would be reduced if the open access pool VBA was stratified by length category (e.g., <60', 60-125', >125').

Transfers of VBA
Among vessels within/across pools
Vessel-sale related transfers

Transferability - The committee discussed how VBAs would be transferred within a pool, among pools, and when a vessel gets sold. It was felt that transfers within a pool are essentially a redistribution, and would not require tracking. On the other hand, transfers among pools would require some type of registration system to track these transfers. NOAA GC had previously advised the committee that VBAs were not

property, and could not be sold or transferred for money. Questions remain regarding transfers, as VBAs may have value depending on the situation. For example, can VBA be transferred via barter as opposed to cash? It was noted that in the CDQ program, there will be a one time trade of PSC allowed to rationalize the program.

The committee recognized that annual VBA allocations could be to vessel owners and thus would not be vessel specific. Therefore, the sale of a vessel could occur with or without the transfer of either an annual VBA allocation or the catch history on which subsequent VBA allocations would be based. The status of VBA at the

time of sale would not change due to the sale. VBA that had been transferred to a voluntary pool of the default pool would remain in that pool subject to the same rules that apply to other VBA in that pool. For VBA that had been transferred to a voluntary pool, the pool's rules would determine if a vessel that had been sold could continue to participate in the pool. This means that the VBA allocation (or what's left) goes with the boat, unless previously surrendered to a pool.

The committee recognized the difficulty of separating the monetary value of the vessel from any value of the VBA allocation or VBA related catch history when either both are transferred with the sale of a vessel. The committee recognized the need to develop a system that would allow convenient tracking by NMFS RAM division.. One idea to deal with these transfers would be to tie the VBA to a federal fisheries permit. These permits are issued to vessel owners, and can't be transferred for money.

Retention of VBA Species

- Option 1: no retention allowed
- Option 2: careful release; then retention allowed.

Retention of VBA species - At its first meeting, the committee discussed the options of no retention and retention only after all attempts had been made at careful return to the sea within a set time period. Committee members did not want to initiate a VBA program to decrease bycatch, and then turn around and increase the mortality factor by increasing deck time. It was felt that a balance should be struck between accurate bycatch estimation and quick return to the sea.

Monitoring and Enforcement

- Option 1: status quo coverage, with extrapolation of data.
- Option 2: full observer coverage; every haul sampled.

Monitoring and Enforcement Issues - The committee continued discussions on monitoring and enforcement. It was felt that vessels unable to afford the required observer coverage will remain in a default pool. Monitoring of PSC catches in the default pool would be based on whatever sampling is done with extrapolation to all vessels within the default pool. NMFS would monitor the PSC taken by pools, individual vessels, and the default pool. An audit would occur when any pool or individual has used 75% of its VBA based on the NMFS *estimate*. A

PSC closure would also occur when an individual or pool used 100% of its VBA based on an *estimate* (not proven #). Such closures would be zone specific for BSAI crab, and GOA or BSAI-wide for halibut.

Martin Leofflad of the Observer Program noted several issues regarding the observer program. First, fleet behavior can change with an observer onboard (both good and bad). Second there may be sampling/estimation problems unless fully enumerated (counted), but this comes at a high cost. So we are left with sampling estimates or blend estimates. The third problem is sampling expectations versus reality. Fishermen in a rush to process the catch, yet they expect the observer to generate accurate catch estimates. Similarly, fishermen want to get halibut PSC back into the water to reduce mortality, yet are prevented from doing so until counted by an observer.

The committee reviewed monitoring requirements proposed for the expanded CDQ program, noting that this has received tacit approval from NOAA GC. Based on the proposed rule, vessels <60 feet would not require an observer, but would be required to retain all salmon and herring PSC for counting when landed and to report halibut and crab PSC. Vessels over 60 feet would require 1 observer on trawl, longline, or pot catcher vessels and 2 observers on catcher-processors and motherships. All hauls must be observed. Catcher vessels would be required to retain everything (all CDQ species plus herring and salmon) except halibut and crab. Catcher-processors and motherships will also be required to have certified scales for measuring total catch weight. The monitoring plan also specifies the maximum number of hauls per day and the maximum amount of time an observer can work. Four additional NMFS management personnel and 3 additional observer program personnel will be hired to monitor the CDQ program, at an estimated cost of \$700,000 per year. Enforcement would be after the fact. That is, penalties would be imposed on a CDQ group that exceeded one or more of its groundfish or PSC quotas but NMFS would not immediately remove a CDQ's group's vessels from the fishery once a quota is met. That would be the responsibility of each CDQ.

The level of observer coverage required for a VBA program has yet to be ascertained. Committee members felt that vessels operating under a VBA program would need to provide quality data, at least as good as the current system. The question remains: what level of observer coverage is required to make the system work? Would 100% coverage be required, or would 30% coverage be sufficient if vessels were in a pool? Based on observer coverage required for the CDQ program monitoring, observer costs may be prohibitive for many vessels (particularly the smaller ones). Costs for management, monitoring, and enforcement of a VBA program could be recovered via the IFQ/CDQ fee collection program (up to 3% of ex-vessel value) required under the Magnuson-Stevens Act.

Initial Allocation of VBAs

- Option 1: Based on catch history
- Option 2: Based on effort history
- Option 3: Based on vessel category

Initial Allocation of VBAs - The committee discussed three options for initial allocation of VBAs based on catch history, effort history, or vessel category. Alternatives discussed range from equal allocation among all vessels to rewarding those vessels with low bycatch rates. **The committee strongly recommends that the Council only consider catch or effort history prior to August 22, 1997.** The possibility of including future catch or effort into a VBA program could

cause great disruption next season.

Allocation based on catch history could be based on total catch of groundfish, retained catch of groundfish, retained catch of target species (with option of 5% minimum threshold), retained catch of target species not made into fishmeal, catch as discounted by PSC bycatch performance (applicable to all options), and catch discounted from weeks when the fleet had high bycatch rates. The idea of using retained catch, rather than total catch, is to not reward vessels for discarding. One possible problem for analyzing catch histories is that fish tickets may not be available for vessels delivering at sea.

Initial allocation based on effort history could be based on the number of fleet days or weeks in a directed TAC fishery (with no double crediting; i.e., one target fishery per week), vessel pro-rated effort share, or a vessel pro-rated PSC share. In order to keep from rewarding vessels with high bycatch rates, the allocation could be discounted by vessel /weeks above VIP standards. Dave Fraser provided an allocation scheme for VBAs based on the number of weeks of effort in a target fishery. Vessels would receive a pro-rated share of that fisheries PSC allocation based on this participation. It was suggested that scalars could be added to adjust for capacity (based on length, horsepower, tonnage).

Initial allocation of VBA could also be made based on vessel category. Such an allocation could be based on a system of vessel capacity ratings by gear type. Capacity rates could be generated from data (length, horsepower, tonnage) reported on federal fishery permits. Alternatively, an equal allocation of VBAs could be made to all vessels within a size class. Under either of these alternatives, it was suggested that an option be added to include gear and species endorsements (using target criteria and minimum catch thresholds).

The committee had some general discussions about eligibility; that is, who can apply for initial allocation. It was felt that two alternatives be considered: Option 1 is that any vessel with a groundfish limited entry licence could participate. Option 2 is that only vessels meeting some minimum landing requirements or participate within a qualifying time period could be eligible for VBA allocation. The committee decided to work out additional details of eligibility at its next meeting.

Annual Allocation of VBAs

- Target specific, with options
- Option 1: Based on rolling 3-year catch history.
- Option 2: Based on target species retained catch multiplied by the VIP rate.
- Option 3: Based on pro-rated share of PSC cap by target species.

Annual Allocation of VBAs - The committee discussed several options for annual allocation (allocations after the first year of the program). The options, as listed in the adjacent box, are all based on groundfish catch history. Option 1 would require a 1-year startup lag time. Hence, allocation in year 2 of the program would be the same as year 1, but

after that catch history during the program would begin to replace the year one allocation. For example, in year 3, two-thirds of the allocation would be based on the initial year allocation, and one-third on catch during year 1. And in year 5, the allocations would be based on the catch during years 1, 2, and 3 of the VBA program. Therefore, beginning in year 5, the year 1 allocation would not be used in determining the annual allocation. The remaining options are strictly based on what occurred in the previous year or the year before that.

Bycatch Reduction

- Option 1: Status quo
unused PSC = savings
- Option 2: Reduction by schedule
 - a) 10% per year for 5 yrs
 - b) biomass based schedule
- Option 3: Ratchet reduction system
based on annual savings
 - a) up to 10% per year
 - b) biomass based schedule

Bycatch Reduction - The committee had a lively discussion about bycatch reduction issues. The Magnuson-Stevens Act allows for a VBA system provided that it results in an actual reduction in regulatory discards. Some felt that this mandated a reduction schedule, whereas others felt that a VBA program would result in overall PSC savings without a mandated schedule (e.g., accumulation of "unused" PSC, particularly in situations where VBA transfers were limited). It was pointed out that reductions in bycatch is not a conservation issue, but a reallocation of the resource to other gear types. Nevertheless, most committee members agreed that VBA program could result in large PSC savings. One member suggested that the goal should be a 50% reduction in the current crab and halibut PSC limits. Several members stated that PSC reduction schedules should be established in accord

with the biomass of crab and halibut resources. Questions concerning whether the Act requires a reduction in bycatch of each PSC species or a reduction in all PSC species (in aggregate) and whether the reduction is from the levels of bycatch that occurred in the past or would occur in the future in the absence of a VBA program still need to be addressed.

Specific GOA Issues

- Halibut only; no crab caps.
- Economics of observer coverage.
- Mixed fisheries.
- Effort shifts to GOA from BSAI.
- Area and gear specific VBAs?
- Include State waters in program?

Specific GOA Issues - Chris Blackburn conveyed her concerns about applying a VBA program to Gulf of Alaska trawl fisheries. There are not crab caps in the GOA, so a program would apply only to halibut. Observer coverage is limited for trawlers in the GOA (many 30% boats), and due to their small size and marginal nature of some fisheries, a VBA program requiring 100% coverage may be prohibitive. Additionally, much of the GOA groundfish harvest is taken in mixed fisheries, and that is why halibut is currently allocated into deepwater targets (rex sole, dover sole, arrowtooth, rockfish) and shallow water targets (flathead sole, shallow water flatfish, pollock, P. cod. Atka

mackerel). Development of VBA allocation and use provisions should take this into account. Chris and others were concerned that vessels that had historically fished in the Bering Sea would fish in the GOA prior to fishing under a VBA program in the BSAI. A similar concern exists for the western/central GOA areas. An interesting possibility was raised about trawl vessels using their VBA allocation with another gear type. Also, would harvest in State waters apply to a VBA program?

- #### **Issues for Further Discussion**
- eligibility
 - due process
 - underages/overages
 - annual allocation of VBA

Issues Needing Further Discussion - There remains a number of issues for the committee to address, including due process, underages and overages of VBA by a individual or pool, and annual allocation of VBAs. Additionally, the committee intends to continue its discussions on all details of a VBA program.

The committee recognizes the need for input from General Counsel. That input includes responding to questions posed by the committee and staff and guidance in designing options that will increase the efficacy of a VBA program. Recall that in February 1997, the Council recommended that not staff time be obligated to VBA's until the legal concerns are addressed.

Committee members who strongly favor a VBA program and are frustrated with current bycatch management under the VIP program, remain realistically concerned about the cost of a good VBA program, NMFS ability to manage a VBA program, and NMFS funding and added manpower that will be required by NMFS to staff a VBA program. The committee feels strongly that NMFS should address these issues with the Council so that development of a VBA program may continue knowing that such a program can be administered. If not, we should all be advised of the limitations, and move forward accordingly.

Others in attendance at the VBA meetings were:

*Thorn Smith
Mike Szymanski
Brent Paine
John Hendershedt
Martin Loefflad
Joe Terry
Denise Fredett
Bob Trumble*

*Tom Casey
Joel Caughlin
Arni Thomson
Seth Macinko
Jon Iani
Rob Gunderson
Dave Witherell (staff)*

VBA Committee
DRAFT Summary of Proceedings, November 14, 1997

Members Present:

Steve Hughes (NRC/UCB, Chairman)
Jay Stinson (substitute, AGDB)
Dave Fraser (F/V Muir Milach)
John Gauvin (Groundfish Forum)

Shari Gross (HANA)
Carl Mercurieff (CBSFA)
Beth Stewart (AEB)
Craig Cross (ASP)

The vessel bycatch accountability (VBA) committee met again in Seattle on November 14 at the Nordby Conference Center. The objective of the meeting was to further flesh out details of a VBA program for Council consideration. Coffee and bagels were thoughtfully provided by United Catcher Boats. Following introductions and a review of the draft agenda, the committee began their discussions with a report from Lauren Smoker, NOAA General Counsel, and then reviewed VBA issues that had been resolved. The following is a summary of discussions under each issue.

DISCUSSION OF LEGAL ISSUES

Lauren Smoker walked the committee through the four priority legal questions posed to General Counsel in a letter from Clarence Pautzke dated 11/7/97. A summary of each issue is provided below.

Legal issues discussed at the November 1997 VBA committee meeting.

- What does "transferred for monetary consideration" mean?
- Is a VBA program subject to IFQ/CDQ cost recovery fees?
- Does pooling reduce the enforcement burden?
- What does "actual reduction in discards" mean?

"Transferred for monetary consideration" - - Section 313(g)(2) (page 104 of the red book) specifies that allocations of regulatory discards to individual vessels would be allowed provided that the allocations may not be transferred for *monetary* consideration. NOAA-GC interprets this to mean that trade or barter of VBAs is permissible under section 313(g)(2) but money (cash, currency or coinage) exchanges are prohibited. Congress did not use the phrase "sale, barter or trade" in section 313(g)(2) as it did in the statutory definition of "commercial fishing." Therefore, NOAA-GC determined that Congress meant what it said and only monetary exchanges are statutorily prohibited under 313(g)(2)(A)(i). NOAA-GC then stated that section 313(g)(2)(B) allows the Council to impose additional *regulatory* restrictions on the transferability of VBAs. Additional regulatory restrictions could include complete prohibitions on transfer or could allow trades only of other PSC, as opposed to other commodities. At a future meeting, the committee will need to determine what options, if any, to include to restrict transfers. Regulations requiring all parties involved in a transfer to sign a statement that the transfer was not for monetary consideration could be used to increase compliance. NOAA-GC noted that, for tax purposes, the IRS has its own rules concerning trade, barter and exchanges for money.

Cost recovery fees -- Section 304 (d) (p. 67 of red book) mandates the Secretary to collect a fee to recover actual costs directly related to the management and enforcement of any IFQ and CDQ program. This fee can be up to 3 percent of the ex-vessel value of fish harvested under such program. NOAA-GC indicated that the structure of the VBA program would determine if it would be subject to the IFQ and CDQ cost recovery fees. The committee concurred that a VBA program would be structured like an IFQ program and that cost-recovery fees should be collected.

The committee further discussed the basis and use of the fees. NOAA-GC stated that the fees could be based on the ex-vessel value of the groundfish catch (including or excluding discards), the value of the PSC, or some combination of both. Under the Research Plan, the Council recommended that ex-vessel value be based on retained catch due to the difficulty of valuing discarded groundfish and PSC. The committee agreed to three options, they are that the fees would be based on: (1) the ex-vessel value of the total groundfish catch (including discards), (2) the value of the PSC, or (3) some combination of both.

The committee also agreed that the fees from the VBA program should only be used in direct support of that program. NOAA-GC stated that the fees could be used to pay for additional observer coverage costs if those costs are directly related to the management and enforcement of the VBA program. Further review is required to ensure that all of the fees would be used in direct support of the program, as opposed to being used in part, for example, for NMFS Central Office administrative purposes. Regarding the use of fee money, the Limited Access Administration Fund is supposed to be used for purposes of (i) administering the central registry system; and (ii) administering and implementing [the Act] in which the fees were collected. The committee noted that critical elements of the analysis of a VBA program will include: (1) the budget needed by NMFS-AK to monitor, administer, and manage a VBA program; (2) the funds available to support that budget; and (3) the direct cost to the industry.

Pooling issues -- NOAA-GC stated that pooling would not reduce the enforcement burden. Pool members would still have all of the rights and protections afforded to them by law and an agreement to stop fishing when an agreed-to estimation procedure indicated the allocation was used does not extinguish those protections. Therefore, the right to a hearing and to question the government's data exists with or without pools. NOAA-GC also stated that it would be equally difficult to use an estimate to prevent a VBA pool of vessels or an individual VBA vessel from continuing to fish after it had been estimated that the pool or individual vessel had exhausted its VBA. A more accurate accounting of groundfish and bycatch removals would be necessary to bring an enforcement action against a pool or individual vessel. This means that enforcement would be after-the-fact, just as it is with IFQ and CDQ programs. Under the CDQ and IFQ programs, it is the individual vessel's responsibility to stop fishing when they reach their quota. They can disagree with the NMFS estimate and keep fishing but, if in the end they are eventually proved wrong, the penalties could be substantial. Most committee members acknowledged that VBA enforcement would be post season. Furthermore, NOAA-GC believes that the pool concept does not reduce the difficulties associated with using current data collection methods for collecting the types of data needed to effectively monitor bycatch and groundfish removals under a VBA program, especially under the fishery-specific VBA allocation options. Finally, the group discussed that NMFS would track bycatch of all individual vessels, but enforcement action may have to be taken against all vessels within a pool. More committee discussion is needed on this issue.

"Actual reduction in discards" -- Section 313(g) (page 104 of red book) allows allocations of regulatory discards to individual vessels as an incentive to reduce per vessel bycatch and bycatch rates in a fishery, provided that such measures will result in an *actual reduction* in regulatory discards in the fishery. NOAA-GC interprets this language to mean not only a bycatch rate reduction but also an actual net reduction in regulatory discards by # 's or lbs. The committee presumes this means a net reduction in aggregate discards (#'s or lbs.) compared to a baseline amount from one or more previous years. Further, NOAA-GC recommended that the committee focus on actual reductions in the VBA species. If crab and halibut are the VBA species, this would require a reduction in the aggregate (i.e., combined) total bycatch of halibut and crab. Several committee members disagreed, pointing out that, under some VBA options, regulatory discards of groundfish would decrease due to the elimination of PSC cap-induced fishery closures which trigger maximum allowable retainable bycatch amounts (MRBs). Based on this discussion, NOAA-GC agreed to further review its opinions on whether bycatch rate reductions must also include actual net reductions in discards and whether groundfish regulatory reductions can be included when calculating actual net reductions of regulatory discards and not just discards of those species (halibut and/or crab) for which VBAs have been issued. The committee also requested additional advice on whether reductions in bycatch mortality alone would meet the requirements of section 313(g).

DISCUSSION OF VBA PROGRAM OPTIONS

The committee also continued reviewing details and options for a VBA program. A summary of these discussions is provided below.

Monitoring and Enforcement: Bill Karp reviewed how a VBA program might be monitored by observers. The observer program is currently a scientific program to determine total catch composition, whereas VBA's and

VIP are compliance based programs. Bill believes this to be a critical issue and a VBA program would require a rearrangement of the current program into an individual vessel monitoring program. There are two issues here: authority for observers to determine compliance, and sampling intensity. Sampling powers may need to be increased such that a full census of the catch, rather than sampling, may be required. Bill indicated that, in order to provide data necessary to determine precise vessel-specific bycatch estimates, observers would need to sample large fractions of catches and this would likely require much more sampling effort than is currently available. Fleetwide, the confidence intervals about catch estimates are very narrow for those fisheries examined (pollock and yellowfin sole fisheries). The committee had a lively discussion about the sampling effort that would be required for individual vessel monitoring. Would it require more hauls sampled, more observers per vessel, bigger samples, scales, whole haul sampling of PSC's by the crew, etc..? And what would this cost? It was noted that compliance monitoring at sea is not required for the IFQ program, and committee members questioned why it should be required for a VBA program. The committee formed a subcommittee of Bill, Brent Paine, John Gauvin, and NOAA-GC to examine statistical needs of observer monitoring and report back to the committee at its next meeting. Changes in the observer program are likely and should be identified and considered in the VBA context. Additional work will be needed on this issue.

Initial Allocation: The committee believes that initial allocation should be gear specific. For example, only historical participation in the trawl fishery would be used in determining the initial allocation of VBAs for the trawl fisheries. Two options were identified for the use of VBAs: 1) they would remain gear specific (trawl VBAs could only be used in the trawl fisheries) and 2) they would not be gear specific after they are allocated (trawl VBAs could be used in a longline fishery if both fisheries are part of the VBA program). However some committee members thought that transfers of PSC between gear types should not be allowed at this time and that allowing transfer of trawl PSC to longline PSC may have merit but is too confusing to examine at this time.

Annual Allocation: NOAA-GC indicated that use of a rolling catch history for annual allocation of VBAs was acceptable. The committee agreed that options 2 and 3 for annual allocation developed at the last meeting could be consolidated into a single option for analysis. They both achieve the same end results but using different scalars. NOAA-GC stated that simple allocation rules will tend to decrease the appeals process.

Eligibility: Vessels would be deemed eligible to participate in a VBA program if they were moratorium and license limitation qualified. The committee further discussed adding an option of a minimum landing requirement, particularly if allocations were based on vessel size categories. The committee also began to consider how to answer the following question. If the annual VBA for a vessel is zero or very small, would the vessel be able to participate in the default pool or would the vessel be excluded from the fishery unless it became a member of a voluntary pool? The committee agreed that it may be necessary to establish a VBA threshold. Dave Fraser and Beth Stewart agreed to explore threshold options and report back to the committee.

Pilot program: The committee discussed the possibility of using a scaled down pilot program to assess the potential of and implementation issues for a comprehensive VBA program. The committee felt that the program could start with one PSC species (halibut), rather than start with one fishery (say, Pacific cod trawl fishery). There were concerns that a VBA program for one fishery would exacerbate vessel movements to and from different fisheries (cherry picking issue) and that the changes required for the observer program under a VBA program would be difficult to implement for only specific target fisheries.

Others in attendance at the VBA meetings were:

*Bill Karp
Mike Szymanski
Brent Paine
John Hendershedt*

*Jerry Brennen
Joe Terry
Bob Trumble
Seth Macinko*

*Jay Ginter
Lauren Smoker (NOAA-GC)
Dave Witherell (staff)*

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November 7, 1997

Ms. Lisa Lindeman
NOAA General Counsel
P.O. Box 21109
Juneau, AK 99802-1109

Dear Lisa:

Thank you for getting back to us on legal questions regarding a Vessel Bycatch Allowance (VBA) program. Based on our conversation yesterday, I have chosen a few questions that should receive top priority at this time, based on recommendations from David Witherell, NMFS economist Joe Terry, and VBA Committee chairman Steve Hughes.

"Transferred for monetary consideration" needs to be interpreted with respect to the internal workings of a voluntary vessel group or bycatch management partnership as well as for transfers not associated with a voluntary group (pool). Is a transfer in exchange for something other than money acceptable? For example, could halibut VBA be exchanged for crab VBA? Does the IRS, or other relevant authority, have a definition of "for monetary consideration" that makes it clear that barter is or is not included?

There is still confusion as to whether a VBA program could be subject to the IFQ/CDQ cost recovery fees, and if so, would the fees be based on the ex-vessel value of the groundfish, the regulatory discards covered by the program, or both; and if it is just on the value of the regulatory discards, can't it be argued successfully that the value of the regulatory discards is reflected by the value of the groundfish that they are used to catch?

The VBA proposal that was presented to the Council in February and the derivative of that proposal that was developed by the VBA Committee have two features that are intended to reduce the Enforcement and General Counsel burdens of such a program. First, a vessel owner who receives VBAs for a given year would be able either to use the VBAs in a voluntary VBA pool of one or more vessels or to use them in the default pool, where the latter would be managed as the current common and all inclusive pool is managed. Second, the nature of the right associated with VBAs is not to be able to fish until the VBAs have been taken but rather to be able to fish until a method agreed to by NMFS and the voluntary pool indicates that the VBAs have been taken. Associated with the second feature would be an automatic closure of the fishery to the vessels in the voluntary pool once that method indicates that the pool's VBAs have been taken. Are there any merits in these two features? Would the burden of proof threshold be less for a pool closure, as opposed to individual vessel closure?

The Act states that: *(ii) any such conservation and management measures will meet the requirements of subsection (h) and will result in an actual reduction in regulatory discards in the fishery.* Some clarification is required with respect to the "actual reduction" requirement. There are two issues here. First, could this requirement be met by a VBA program that decreased the regulatory discards of some species but increased that of others? If it could be, would the total regulatory discards measured in terms of total weight or numbers have

to decrease or could a monetary measure of total regulatory discards be used to account for differences in the importance of different species? Second, is the required reduction relative to what happened in a previous year or to what would happen without the VBA program? The Committee still questions whether this requirement could be met by a VBA program that reduces regulatory discard rates and allows more groundfish to be caught with the same amount of regulatory discards and, therefore, results in a reduction of regulatory discards for that level of groundfish catch?

Any additional information you can provide on other issues that have been raised would also be appreciated by the VBA Committee. Thanks again.

Sincerely,

A handwritten signature in cursive script that reads "Chris Oliver".

Chris Oliver
Deputy Director

Discussion Paper on Proposed Bycatch Amendments February 1998

The Magnuson-Stevens Act amendments emphasized the importance of bycatch effects on achieving sustainable fisheries. National Standard 9 mandates that conservation and management measures shall, to the extent practicable: (1) minimize bycatch; and (2) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch. In addition, Section 303 of the Act was amended to add bycatch reduction incentives as a discretionary provision of FMPs. This provision reads that any FMP may "include, consistent with the other provisions of this Act, conservation and management measures that provide harvest incentives for participants within each gear group to employ fishing practices that result in lower levels of bycatch or in lower levels of the mortality of bycatch."

Amendments to the Act also provide specific direction to the North Pacific Council regarding bycatch reduction (Section 313). Subpart (f) reads "In implementing section 303(a)(11) and this section, the North Pacific Council shall submit conservation and management measures to lower, on an annual basis for a period of not less than four years, the total amount of economic discards occurring in the fisheries under its jurisdiction". Additionally, subpart (g) provides for the Council to amend its FMPs to provide incentives to reduce bycatch and bycatch rates (page 104 of red book). Incentives can include a system of fines (up to \$25,000 per vessel per season), as well as allocations of regulatory discards to individual fishing vessels.

To comply with these provisions of the Act, the Council emphasized the need for additional bycatch management measures during the 1997 call for proposals. At the September meeting, the Council initiated development of several of the proposals received (see attached proposals). These included plan amendments to:

1. Prohibit non-pelagic trawling for pollock in the BSAI;
2. Further control bycatch of chinook salmon taken in BSAI trawl fisheries;
3. Create an individual checklist program, similar to harvest priority; and
4. Create a halibut mortality avoidance program, in combination with developing handling techniques for quick release and evaluating discard mortality estimates.

As staff begins to analyze these proposals, we have encountered several issues to be resolved by the Council before a full EA/RIR can be prepared. This discussion paper was prepared to provide information to the Council on these issues. It is hoped that the Council will be able to make initial review of proposal 1 and 2 in April 1998, with final action in June. Proposal number 3 and 4 may require additional time given their relative complexity and the number of issues that need resolving. Below is a summary of analyses underway, emphasizing areas for which that staff needs additional direction.

Prohibit non-pelagic trawling for pollock

(analyst: Witherell)

The Alaska Marine Conservation Council submitted a proposal to eliminate non-pelagic trawling for pollock in the BSAI and examine measures for reducing bycatch in the GOA pollock fishery. Although this action could be taken annually as part of the BSAI TAC specification process, this proposal is to make this a permanent rule.

Much of the information required for analysis of this proposal has already been summarized. Appendix D to the BSAI SAFE document provided information necessary to make an allocation of the BSAI pollock quota

among pelagic and bottom trawl gear types. Preliminary analysis of 1996 data indicated that a prohibition on non-pelagic trawling for BSAI pollock may reduce PSC bycatch by up to 70 mt of halibut, 15,200 bairdi crab, 19,400 opilio crab, 1,400 red king crab, and 530 chinook salmon. However, this regulation would be expected to increase herring (14 mt) and chum salmon (150 salmon) bycatch. Inclusion of the 1997 data into the analysis should improve these estimates.

The following alternatives and options to address the proposal are being analyzed.

Alternative 1: No Action. Allocation of pollock quota among pelagic and non-pelagic trawl gear types can be established for the next fishing year during the annual specification process.

Alternative 2: Prohibit the use on non-pelagic trawls in the BSAI pollock fishery. Only pelagic trawl gear as defined in regulations could be used by vessels when engaged in a directed pollock fishery. Bycatch of Prohibited Species would be reduced to reflect this gear prohibition.

Option 1: Reduce PSC limit for halibut only.

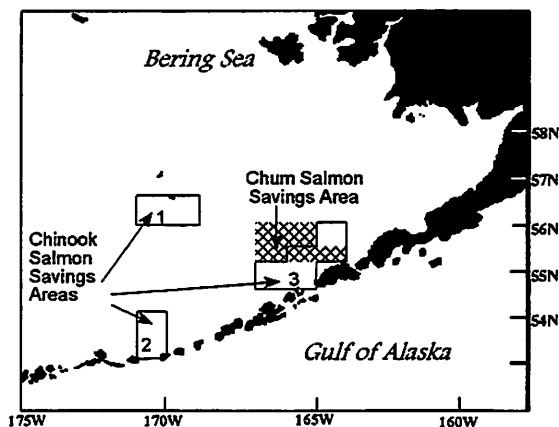
Option 1: Reduce PSC limit for halibut, red king crab, bairdi crab, and opilio crab.

One issue that needs to be addressed is how such a prohibition on non-pelagic trawling would dovetail with the requirements of the improved retention/improved utilization (IR/IU) regulations, which became effective in 1998. Under IR/IU all pollock must be retained, regardless of target or gear type, up to the maximum allowed under the directed fishing standards. The problem is that this creates a possible loophole for fishermen to circumvent the intent of the IR/IU. Under the current regulations, as long as the directed pollock fishery is open, vessels fishing with bottom trawls targeting cod (or some other species) would be required to retain 100% of their pollock catch. However, if bottom trawling for pollock is prohibited, then pollock would be on bycatch status for this gear type. Hence, vessels would only be required to retain pollock only up to 20% of the total of all combined species retained per fishing trip. Increased pollock discards could result from this regulation.

Controlling chinook salmon bycatch

(analysts: Ackley and Witherell)

In September 1997, the Yukon River Drainage Fisheries Association submitted a proposal to lower the chinook salmon bycatch limits that triggers a closure of the Chinook Salmon Savings Areas in the Bering Sea. The problem identified in the proposal is that the current bycatch trigger of 48,000 chinook salmon is inadequate and does not reduce chinook salmon bycatch. Additionally, bycatch of chinook salmon after April 15 does not apply towards the PSC limit that triggers a closure. To address these problems identified, staff has developed the following strawman alternatives for discussion:



Alternative 1: No Action. Trawling is prohibited in the Chinook Salmon Savings Areas through April 15 upon attainment of a bycatch limit of 48,000 chinook salmon in the BSAI.

Alternative 2: Include salmon taken after April 15 towards the bycatch limit of 48,000 chinook salmon. The Chinook Salmon Savings Areas would close upon attainment of the bycatch limit, whenever this would occur. Hence these areas could close, or remained closed, during the pollock 'B' season.

Alternative 3: Reduce the trigger level to 36,000 chinook salmon in the BSAI. Trawling would be prohibited in the Chinook Salmon Savings Areas through April 15 upon attainment of a bycatch limit of 36,000 chinook salmon in the BSAI.

Option 1 (applicable to Alternatives 2 and 3): Seasonally allocate the PSC limit, such that there are separate triggers for the pollock 'A' and 'B' season.

Option 2 (applicable to Alternatives 2 and 3): Begin accounting towards the PSC limit at the start of the 'B' season (currently September 1), with the amount carried over to the next pollock 'A' season.

The analysis will be based on observer data from 1995 and 1996 (1997 if available). GIS will be used to look at when and where the salmon were bycaught recently, and see if the old hot spots hold up, or if there are new hotspots which also might deserve attention. In order to look at the effects of extending the effective date for the current closure, we will look at cumulative salmon bycatch over time, estimate when a closure would be triggered, and contrast the salmon bycatch and catch coming out of the closed area after a closure would have been triggered, based on 1995 and 1996. The analysis will summarize the anticipated results based on two or three years of historical data, but will not attempt to estimate what happens to the foregone catch or the bycatch implications of pushing effort into other areas as the model does (although the model has its limitations in this case anyway - see below). We are not going to use the model for this exercise for two reasons:

1) It took NMFS staff literally months to synthesize the data into the form the model requires - for the 1993 and 1994, with several redo's as problems were encountered. Because the NMFS person who prepared that data has left the agency, and with the time constraints we are under, it would be impossible to update the model for the current analysis; and

2) The model works well given large changes in area closures and high contrasts in bycatch amounts. If the nine blocks were closed, the model would transfer the foregone catch to the rest of the Bering Sea, and it is doubtful that any impacts from the closure would be observed. The major benefit would be in possibly reduced chinook bycatch, but chinooks are caught outside of the blocks as well, so by pushing effort into adjacent blocks the model might not show any overall reductions in chinook bycatch anyway.

Individual Checklist Program

(analyst: Terry)

The Alaska Marine Conservation Council (AMCC) proposed an individual vessel checklist program (IVCP) that is intended to provide trawl vessel operators with an incentive to: (1) meet conditions that would tend to improve the estimates of total catch, including bycatch, for a vessel and (2) reduce their bycatch of groundfish and other living marine resources. The incentive would be access to a reserve season fishery for which up to 25% of a TAC and the attendant PSC allowances are reserved.

Each target fishery would become a two-permit fishery. All licensed vessels would be eligible to participate in the permit 1 fisheries. Only those vessels that comply with the checklist requirements for a specific target fishery would be able to participate in the permit 2 target fishery for the same species. The permit 2 fishery would occur

during a portion of the year that provides ample incentive to meet the checklist requirements. Checklist requirements for year 1 would include minimum observer coverage, maximum codend size, electronic reporting capability, accurate catch measurement via scales or full retention, and other requirements. Additional requirements for later years include a 15% reduction of PSC species bycatch relative to the PSC cap, or a 10 % reduction in PSC bycatch and a 15% reduction in bycatch of all other species.

A preliminary examination suggests that an IVCP would be relatively complex to institute and monitor. The attached paper describes the proposal in more detail and highlights numerous issues that need to be resolved before the proposal can be fully analyzed. Many of these issues could be addressed by AMCC with assistance from participants in the groundfish trawl fisheries and staff. Perhaps a committee approach is warranted.

Halibut Mortality Avoidance Program

(analyst: Terry)

The Groundfish Forum proposed a halibut mortality avoidance program (HMAP) that would be designed to allow and encourage interested groundfish trawl fishermen to follow a set of procedures designed to improve the estimates of halibut bycatch mortality and to increase substantially the survival of halibut that are taken as bycatch.

Rules for participating in an HMAP would include minimum observer coverage, sampling of every haul, maximum haul duration, median haul size, and deck sorting of halibut under supervision of an observer.

The attached paper describes the proposal in more detail and highlights numerous issues that need to be resolved before the proposal can be fully analyzed. Many of these issues could be addressed by Groundfish Forum with assistance from other participants in the groundfish trawl fisheries and staff. Perhaps a committee approach is warranted.

Halibut Discard Mortality Rate Evaluation and Reduction

The United Catcher Boats proposed that the method for estimating halibut discard mortality rates in the groundfish trawl fisheries be re-evaluated and improved and that regulations be established to ensure the quick release of halibut bycatch in the BSAI and GOA trawl fisheries. The first part of the proposal would place a high priority on research concerning the factors that determine halibut discard mortality rates and on using that research to improve the information collected by observers to estimate discard mortality rates in the BSAI and GOA trawl fisheries. That research can be done without any regulatory action by the Council and it would complement the evaluation of the halibut mortality avoidance program (HMAP) proposal. The Council may wish to address the priority for such research. The last part of the proposal is similar to the HMAP proposal in that it addresses methods and regulations that would ensure the quick release of halibut. Therefore, that part of the proposal can be addressed in conjunction with the evaluation and further development of the HMAP proposal.

D R A F T

INDIVIDUAL VESSEL CHECKLIST PROGRAM

OUTLINE, QUESTIONS AND ISSUES

January 28, 1998

The Alaska Marine Conservation Council (AMCC) proposed an individual vessel checklist program (IVCP) that is intended to provide trawl vessel operators with an incentive to: (1) meet conditions that would tend to improve the estimates of total catch, including bycatch, for a vessel and (2) reduce their bycatch of groundfish and other living marine resources. The incentive would be access to a reserve season fishery for which up to 25% of a TAC and the attendant PSC allowances are reserved. The proposal outlined below is based on the August 15, 1997 AMCC proposal and more recent correspondence from the AMCC to Council and NMFS staff.

Each target fishery would become a two-permit fishery. Any vessel that qualifies under other parts of the relevant Groundfish FMP would be eligible to participate in the permit 1 fisheries. Only those vessels that comply with the checklist requirements for a specific target fishery would be able to participate in the permit 2 target fishery for the same species. The permit 2 fishery would occur during a portion of the year that provides ample incentive to meet the checklist requirements. Recently, AMCC suggested the addition of a stand-down provision to prevent vessels that did not qualify for the permit 2 fishery from getting a head start in another fishery. A port inspection is required to confirm compliance with the checklist and to issue the permit for the reserve fishery. A fee, similar to the Research Plan fee, was suggested as an alternative mechanism for paying for the observer coverage required by checklist item 1.

Checklist Items for Year 1

1. Sufficient observer coverage to ensure that each tow is sampled.
2. Maximum codend size of 50 mt in the pollock fishery and 25 mt in other trawl fisheries.
3. Electronic reporting equipment onboard the vessel to allow daily transmission of observer data to NMFS.
4. Two-day advance notice to NMFS of intended participation in another fishery or management area during the reserve season fishery.
5. Scales and or other equipment necessary to measure accurately total catch and catch composition is onboard or alternatively for small catcher vessels, for which scales are not practicable, retention of all catch except PSC would be required until the catch is brought to shore and weighed.
6. A sampling method that is appropriate, given the physical and operational characteristics of the vessel in that fishery, and that is approved by NMFS is used.

Additional Checklist Items after Year 1

Three options were proposed.

1. A 15 percent reduction of all bycatch categories, including non-commercial species, compared to a specified base year. The reduction for PSCs would be measured against the current PSC limits.
2. At least a 10 percent reduction in halibut, crab, salmon, and herring bycatch and at least a 15 percent average reduction in the bycatch of all other species.
3. Other tangible checklist items that would be expected to decrease bycatch but that would not be specified in terms of achieving a specific reduction in bycatch. This could include gear or other operational requirements.

Issues to be Resolved

1. It will be necessary to apportion part of the TACs to each of the IVCP target fisheries before up to 25 percent of that apportionment can be reserved for the permit 2 fishery.
2. It will be necessary to determine if the apportionments will be for the target species or for all groundfish species taken in a specific target fishery. If non-target species are not included, there is an increased probability that maximum retained bycatch limits would be in place during the permit 2 fishery.
3. It will be necessary to determine how to apportion PSC allowances among target fisheries that currently share a PSC allowance.
4. It will be necessary to determine what percent of that PSC allowance apportionment will be reserved for the permit 2 fishery. Given that vessels in the permit 2 fishery are expected to have lower PSC bycatch rates, it probably is appropriate to reserve a smaller percentage of the PSC apportionments.
5. The use of additional observers to sample either all hauls or a larger part of the sampled hauls should be evaluated. The current proposal suggests that the former is better.
6. It is necessary to differentiate between the measuring equipment and methods for catch and catch composition and those for the disposition of catch. Better estimates of total catch and catch composition may not ensure good estimates of discards unless either all or none of the catch of a species is discarded.
7. It needs to be determined whether the codend size limit (checklist item 2) is in terms of the size of the gear or the size of the catch in each haul. If it is the former and if the objective is to prevent hauls that are too large, the gear size requirements will have to be designed to meet that objective. Experience with other gear size/configuration regulations has demonstrated the difficulty of designing gear regulations that meet their stated objectives. A restriction in terms of haul weight may be more effective given the other checklist requirements for accurate measurement. AMCC recently suggested that a limit on horsepower could be an alternative mechanism for limiting catch per haul. The effectiveness and specifics of this new alternative would have to be considered. But like a gear size/design requirement, it is a less direct and, therefore, potentially a less effective and more costly way of meeting the objective of limiting catch per haul.

8. The additional checklist items for year two and beyond will need to be much more specific. For example, answers are needed to the questions listed below. Most of the questions apply to options 1 and 2.
 - a. Is the 15 percent reduction for all or each bycatch category?
 - b. Is the reduction for year 2 measured in terms of a vessel's performance in year 2 of the IVCP compared to its performance or the fleet's performance in the base year?
 - c. Is an additional 15 percent reduction required each year?
 - d. How can the PSC reduction of a vessel be measured against the PSC allowance for a fishery?
 - e. Would the reduction be measured in terms of bycatch amounts or bycatch rates, would reductions in bycatch mortality rather than bycatch be counted, and would increased retention of bycatch as opposed to decreased bycatch be counted?
 - f. What would the additional checklist requirements be under option 3 for year 2 and beyond?
9. The base year used to calculate the bycatch reductions by vessel would need to be determined. If the reduction is in terms of a vessel's performance in the base year, the base year probably could not be prior to the first year a vessel met the year 1 checklist requirements. Before that, the estimates of bycatch by vessel probably would not be good enough to be used.
10. If the reduction is calculated using the vessel's base year bycatch, the vessels with the worst bycatch performance in the base year will have an advantage in meeting the 15 percent reduction requirement and, in fact, vessels would have an incentive to have worse bycatch performance in the base year.
11. If the base year is the first year a vessel meets the year 1 checklist requirements and if some vessels don't do so until after the first year of the IVCP, the base year will differ by vessel.
12. The administrative, legal and enforcement costs of determining which vessels meet the bycatch reduction requirements could be substantial.
13. The bycatch reduction requirement faces many of the problems of the harvest priority (HP) program proposed by the AMCC in 1994. Those problems and other issues concerning the HP proposal were the topic of a discussion paper, a working document and correspondence from Steve Pennoyer and General Counsel to the Council.
14. Because the permit 2 fishery is fishery specific, vessels that don't qualify for the permit 2 fishery will be on bycatch only status for that species after the permit 1 fishery closes. This would tend to increase regulatory discards and decrease the effectiveness of the IRU program.
15. There are important similarities and differences between the IVCP and the HMAP. Depending in part on the objectives of the Council, different combinations of these two programs would be appropriate.
16. The Economic Status of the Groundfish Fisheries off Alaska, which is part of the SAFE reports for the BSAI and GOA groundfish fisheries, provides the latest published summary of the catch and

discard of groundfish and the bycatch of prohibited species in the groundfish fisheries.

17. The recently suggested stand-down provision to prevent vessels that did not qualify for the permit 2 fishery from getting a head start in another fishery is in response to the problem of ensuring that access to the permit 2 fishery is sufficiently beneficial to encourage fishermen to meet the checklist requirements. Unfortunately, this solution raises the same due process issues that resulted in the "penalty box" proposal being replaced with the VIP and that resulted in the IVCP proposal including a separate permit for the reserve fishery.
18. AMCC suggested a fee, similar to the Research Plan fee, be levied on all vessels in the permit 1 fishery to cover the cost of the observer coverage required by checklist item 1. This would mean that all vessels greater than 60 feet in the permit 1 fishery would meet the higher observer coverage requirement. This would increase the observer cost for the permit 1 fishery but eliminate an important disincentive to attempt to meet the checklist requirements. The elimination of that disincentive probably would be more important for vessels less than 125 feet. The undesirable effects of this option include the following: 1) the added observer cost for the permit 1 fishery; 2) the expected inability to provide the required observer coverage with a fee of no more than 2 percent of the ex-vessel value of the fishery, and 3) the equity considerations that resulted in the termination of the Research Plan fees.
19. Rough estimates of the bycatch reductions that would result from an IVCP in each target fishery and the cost of achieving those reductions should be generated.
20. Methods to monitor compliance with the HMAP rules need to be developed.
21. The observer coverage levels, sampling equipment, and work area requirements must be determined for each vessel in the program.
22. It will be difficult to estimate the benefits and costs of a IVCP either to individual fishing vessels or to groups of fishing vessels.
23. Monitoring adherence to the IVCP will increase the workload of observers and could make for a more hostile working environment. Both could make it more difficult for the observers to perform their other duties.
24. Perhaps AMCC should address many of these issues before the Council gives further attention to the IVCP proposal. This could be done with assistance from participants in the groundfish trawl fisheries and Council/NMFS staff, perhaps using a committee approach.

D R A F T

HALIBUT MORTALITY AVOIDANCE PROGRAM

OUTLINE, ISSUES AND QUESTIONS

January 28, 1998

The Groundfish Forum proposed a halibut mortality avoidance program (HMAP) that would be designed to allow and encourage interested groundfish trawl fishermen to follow a set of procedures designed to improve the estimates of halibut bycatch mortality and to increase substantially the survival of halibut that are taken as bycatch.

HMAP Protocols (Rules)

1. Participation in the program by a fishing vessel would require the following on an ongoing basis:
 - a. the level of observer coverage deemed necessary to record accurately halibut bycatch and to monitor compliance with the HMAP protocol;
 - b. adherence to the HMAP protocol; and
 - c. demonstrated willingness to work cooperatively with the observers.
2. Each vessel will have the number of observers necessary to do the following:
 - a. sample every haul;
 - b. whole haul sample for halibut; and
 - c. meet the other observer responsibilities.
3. HMAP vessels would be exempt from the vessel incentive program (VIP).
4. The observers, with assistance by the vessel crew, will either sort halibut on deck prior to the catch being put below deck or will use another procedure that ensures adequate enumeration and rapid release of halibut.
5. Haul duration must not exceed the HMAP haul duration limit.
6. The HMAP limit for the median haul size or a more appropriate measure of the typical haul size of a vessel must not be exceeded.
7. Not more than 10% of the hauls of a vessel may exceed the HMAP haul size limit and the HMAP halibut discard mortality rate will not be applied to hauls that exceed that limit.
8. Codends must be spilled slowly into live tanks so that crew members, under the supervision of

observers, can remove halibut carefully before they enter the live tanks or another approved procedure that ensures adequate enumeration and the rapid release of halibut must be used.

9. Observers count the halibut and sample some for length and viability.
10. Halibut are released immediately after being counted and sampled.
11. Vessel crew must assist the observer in carrying halibut to the designated measuring area and in releasing halibut.
12. For a haul that is selected by the observer for species composition sampling, no other sorting of fish can begin until the primary procedure for enumerating and releasing halibut is complete and the observer is present where the other sorting occurs.
13. Methods to verify that these requirements are met will be established.
14. Observers will conduct whole haul samples for halibut but may use basket samples to estimate species composition and to estimate the PSC of species other than halibut. Observers, with the assistance of the crew, will use methods to estimate the amount of halibut that is not accounted for in the primary procedure to enumerate and rapidly release halibut.

Other Elements of the Program

1. After a predetermined trial period, the IPHC and NMFS will evaluate the success of the program and adjust the halibut discard mortality rate for the vessels fishing under the HMAP and the appropriate adjustment will be made in subsequent years.
2. If the program is determined to be successful, the groundfish FMPs could be amended to allow the Council and NMFS to provide separate halibut PSC allowances for trawl fishing under the HMAP and for other trawl fishing.

Issues to be Resolved

1. It may be difficult to prove that a vessel is not in compliance with the conditions necessary to remain in the program. This is because the compliance information would typically be based on estimates or other information provided by observers.
2. When on deck sorting is not the best procedure for enumerating and rapidly releasing halibut, another procedure must be approved.
3. It must be determined if the median haul size is the appropriate measure of the typical haul size of a vessel and if not a better statistic must be defined.
4. The limit for that statistic and the other HMAP limits must be specified. Data on haul size, duration and halibut viability will be used in setting those limits.
5. The median haul size limit (protocol item 6), or its replacement, and the haul size limit (protocol item

- 7) are intended to ensure that the haul sizes are small enough that whole haul sampling for halibut occurs, that it provides adequate estimates of halibut bycatch, and that it is completed within a time limit that will result in low discard mortality rates. Assistance will be required from the industry to determine if additional or alternative limits, such as a sort time limit, would be more effective in meeting these objectives.
6. Methods to monitor compliance with the HMAP rules need to be developed.
 7. The observer coverage levels, sampling equipment, and work area requirements must be determined for each vessel in the program.
 8. It will be difficult to estimate the benefits and costs of a HMAP either to individual fishing vessels or to groups of fishing vessels.
 9. Monitoring adherence to the HMAP rules will increase the workload of observers and could make for a more hostile working environment. Both could make it more difficult for the observers to perform their other duties.
 10. If separate PSC allowances are provided for vessels fishing under a HMAP and for other vessels, the process for determining the appropriate distribution must be determined and the need to have separate allowances for small vessels must be considered. Determining the number of separate allowances to have and determining the allowance for each group could be very contentious.
 11. The success of the program could be jeopardized if all of the major participants in a fishery do not participate in the HMAP. Therefore, it is important to provide an incentive that will ensure full participation.
 12. Will a HMAP improve or worsen the estimates of halibut bycatch mortality?
 13. To what extent is a HMAP expected to decrease halibut bycatch mortality?
 14. Part of a HMAP could be used in combination with a VBAP. This would include a separate estimate of the halibut discard mortality rate for the vessels that participate in the HMAP.
 15. For a given halibut bycatch mortality cap, a reduction in the halibut discard mortality rate would allow increases both in groundfish catch and in halibut bycatch. Alternatively, it would allow a reduction in halibut bycatch mortality and increases in groundfish catch and halibut bycatch. Given that it is bycatch mortality that precludes other uses of halibut and given that the M-S Act requires that both bycatch and bycatch mortality be reduced to the extent practicable, a program that reduces bycatch mortality while allowing an increase in bycatch is consistent with the Act if the program is overall beneficial to the Nation.
 16. The use of additional observers to sample either all hauls or a larger part of the sampled hauls should be evaluated. The current proposal suggests that the former is better.
 17. The vessels that do not participate in the HMAP would have shorter seasons in specific target fisheries if a disproportionate share of the halibut PSC allowances are allocated to the group that participate in the HMAP fisheries. This would extend the time that the directed fishing standards are in effect for the former vessels which in turn would tend to increase regulatory discards and decrease

the effectiveness of the IRU program for those vessels.

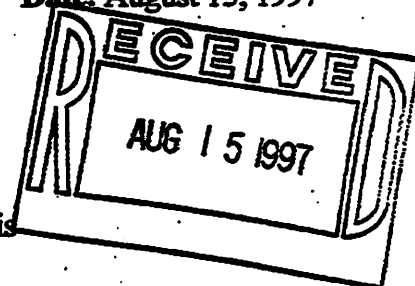
18. There are important similarities and differences between the IVCP and the HMAP. Depending in part on the objectives of the Council, different combinations of these two programs would be appropriate.
19. The differences among vessels to pay for the additional observer coverage and other additional costs to participate in the HMAP should be addressed.
20. Perhaps the Groundfish Forum should address many of these issues before the Council gives further attention to the IVCP proposal. This could be done with assistance from participants in the groundfish trawl fisheries and Council/NMFS staff.

**Fishery Management Plan Amendment Proposal
North Pacific Fishery Management Council**

Bycatch Avoidance

Name: Alaska Marine Conservation Council
Address: Box 101145, Anchorage, Alaska
Telephone: (907) 277-5357

Date: August 15, 1997



Fishery Management Plan: BSAI/GOA

Pelagic Only BSAI Pollock Fishery & GOA Analysis

Brief Statement of Proposal:

Convert to a pelagic-only pollock fishery in the Bering Sea defined by gear type and the operational definition of having fewer than 20 crab on board at any time while participating in the fishery. Both gear type and operational definition are required to address the principal issue in this instance. The matter at hand is *how gear is fished for pollock*, not simply what type of gear is used because pelagic gear can be used both on- and off-bottom.

In the 1998 groundfish specifications process, halibut bycatch previously allocated to the BSAI pollock fishery should be "zeroed-out" or eliminated. Pollock must be removed from the "pollock, Atka mackerel, other species" category in the allocations of halibut PSC so that its attendant halibut bycatch can be eliminated. Then, the Council must implement a regulatory amendment that prevents this halibut from being reallocated as bycatch to another groundfish fishery. For subsequent years, an amendment to the BSAI FMP must be adopted to create a pelagic-only (off-bottom) fishery for pollock. This last step will ensure sustained bycatch avoidance that would not be secured if this was left to the annual specifications process.

Implementing a BSAI pelagic-only pollock fishery may create some incentive for pollock fleet migration into the GOA. In recognition of this fact, disincentives to such migration are needed to accompany a BSAI pelagic-only pollock fishery.

A comparative analysis must be conducted of the GOA and BSAI pollock fisheries and fleets. Such an analysis will illuminate what can be done to minimize bycatch in the GOA and create a disincentive for pollock fleet migration from the BSAI. For example, if a GOA pelagic-only pollock fishery is not an appropriate method to minimize bycatch, a critical analysis may support alternative options such as new, different, or expanded time/area closures for the GOA pollock fleet.

Objectives of Proposal (What is the problem?):

Bycatch in the North Pacific groundfish fisheries remains unacceptably and unnecessarily high. The latest compiled public information (Pacific Associates, November, 1995) illustrates that in-

1994, the groundfish fleet caught and wasted nearly one billion pounds of fish as bycatch. These include fish that are the wrong size (juveniles), fish that are the wrong sex (males in a roe fishery) and fish that are the wrong species. In addition, there is an undetermined amount of sea life with no assigned commercial value that is discarded as bycatch. The effects of removing these species from their vital role in the ecosystem are poorly understood. Excessive bycatch is a problem from ecological, economic and cultural perspectives.

Need and Justification for Council Action: (Why can't the problem be resolved through other channels?)—

The Council must adopt bycatch avoidance programs to achieve more selective fishing practices within our fisheries. This action is needed to resolve ecological and socioeconomic problems presented by excessive bycatch in our fisheries, and also to implement the bycatch avoidance requirements of the Magnuson-Stevens Fishery Conservation and Management Act.

The pollock fishery is the biggest single-species food fish fishery in the world. It is conducted with a low bycatch *rate*. This relatively low rate, however, belies the millions of pounds of fish harvested as bycatch every year in this fishery. Currently, over 90 percent of this fishery is prosecuted with the use of *pelagic*, or off-bottom nets. This demonstrates that groundfish catch will not be sacrificed by mandating 100% of the BSAI pollock fishery use pelagic nets and fish these nets off-bottom. Data from 1994 and 1995 show substantial amounts of crab and halibut will be avoided by switching to nets fishing off-bottom. Data from 1995 also indicate an off-bottom BSAI pollock fishery would result in less bycatch of salmon and herring. Equally important will be increased avoidance of non-commercial benthic species captured in nets fished on-bottom, and discarded as bycatch.

The International Pacific Halibut Commission (IPHC) has endorsed this as one way of reducing overall halibut mortality in the groundfish fisheries. By removing the amount of halibut bycatch currently allocated to the BSAI pollock fishery, a step toward achieving increased avoidance of halibut bycatch will be taken.

Foreseeable Impacts of Proposal: (Who wins, who loses?)

Halibut, crab, and other bottom-dwelling marine life, currently destroyed as bycatch in this intensive, industrialized fishery, will benefit. Fishermen will be able to harvest the full quota of pollock fishing off-bottom. In addition to the potential problem of fleet migration into the GOA discussed previously, we recognize a potential loss for a sector of the industry that favors larger pollock for the head & gut market. Smaller nearshore vessels with less horsepower may not be able to effectively fish larger off-bottom nets.

Are there Alternative Solutions? If so, what are they and why do you consider your proposal the best way of solving the problem?

This is not a comprehensive long-term solution to the bycatch problem which must ultimately be adopted. However, this proposal is an effective element of an overall bycatch avoidance plan that can be implemented before the statutory deadline.



Signature:

See AMCC's presentation materials, June 1997 NPFMC meeting illustrating bycatch savings in 1994 and 1995 Bering Sea pollock fisheries. These will be available at the September NPFMC meeting in Seattle.

Supportive Data and Other Information:

3

**Fishery Management Plan Amendment Proposal
North Pacific Fishery Management Council**

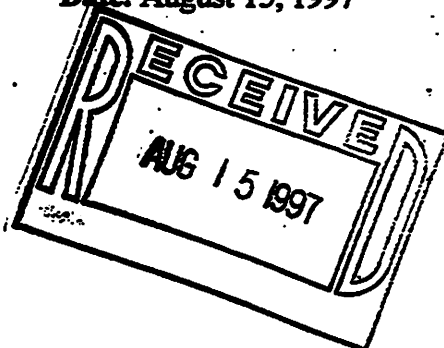
Bycatch Avoidance

Name: Alaska Marine Conservation Council
Address: Box 101145, Anchorage, Alaska
Telephone: (907) 277-5357

Date: August 15, 1997

Fishery Management Plan: BSAI/GOA

Individual Vessel Checklist Program



Brief Statement of Proposal:

Create an Individual Vessel Checklist Program (IVCP) where participating fishermen agree to abide by the requirements of a checklist (see attached sample proposal). By doing so in the initial year of the program, those fishermen who verify that all components of the checklist are provided by their vessel will be eligible to participate in a special harvest fishery. This fishery will be a portion of the groundfish TAC (up to 25% of the overall TAC) that is set aside for qualifying vessel participation. This program may be applied in any one fishery initially, then expanded to apply in other groundfish fisheries.

Making individual vessel bycatch data publicly available is an option that must be analyzed as a component of an IVCP. The Magnuson-Stevens Act has been changed regarding the confidentiality of such information. Section 402(b)(1)(E) states that -- "*...observer information collected in fisheries under the authority of the North Pacific Council may be released to the public as specified in a fishery management plan or regulation for weekly summary bycatch information identified by vessel, and for haul-specific bycatch information without vessel identification.*" Use of this provision will improve real-time bycatch enumeration and bycatch monitoring of individual vessels.

Objectives of Proposal (What is the problem?):

Bycatch in the North Pacific groundfish fisheries remains unacceptably and unnecessarily high. The latest compiled public information (Pacific Associates, November, 1995) illustrates that in 1994, the groundfish fleet caught and wasted nearly one billion pounds of fish as bycatch. These include fish that are the wrong size (juveniles), fish that are the wrong sex (males in a roe fishery) and fish that are the wrong species. In addition, there is an undetermined amount of sea life with no assigned commercial value that is discarded as bycatch. The effects of removing these species from their vital role in the ecosystem are poorly understood. Excessive bycatch is a problem from ecological, economic and cultural perspectives.

Need and Justification for Council Action: (Why can't the problem be resolved through other channels?)--

The Council must adopt bycatch avoidance programs to achieve more selective fishing practices within our fisheries. This action is needed to resolve ecological and socioeconomic problems presented by excessive bycatch in our fisheries, and also to implement the bycatch avoidance requirements of the Magnuson-Stevens Act.

This proposal provides tools to help satisfy certain aspects of the new bycatch enumeration requirements of the Magnuson-Stevens Act as well as improved ability to facilitate real-time monitoring of bycatch avoidance on an individual vessel basis.

Foreseeable Impacts of Proposal: (Who wins, who loses?)

Improvements in our fisheries which lead to more responsive fisheries management, greater accuracy in accounting for fish caught and discarded, marked decrease in bycatch and waste—all make everyone a winner. The specific fishery choosing this option will benefit as individual fishermen are rewarded for fishing as clean as possible.

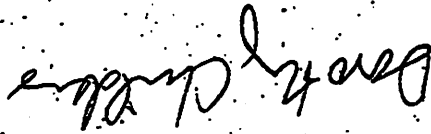
Are there Alternative Solutions? If so, what are they and why do you consider your proposal the best way of solving the problem?

This proposal, if applied universally, is a step closer to a comprehensive long-term solution than other measures which may be approved prior to the statutory deadline. The IVCP is also compatible with the existing IR/IV plan, and could easily be combined with either a more complete Harvest Priority or Individual Bycatch Quota plan.

Supportive Data and Other Information:

See attached sample IVCP.

Signature:



Alaska Marine Conservation Council

P.O. Box 101145 Anchorage Alaska 99510
voice (907) 277-5357; fax (907) 277-5975; email: amcc@alaska.net

August 15, 1997

Proposed Individual Checklist Program for Real-Time Bycatch Enumeration, Avoidance & Management

The selected target fishery will become a two-permit fishery:

Permit 1: available to all those wishing to participate in the normally ascribed seasons of any agreed upon target fishery.

Permit 2: Participation in a reserve season available to all those vessels complying with checklist items 1 - 6 (see below). The reserve season will offer up to 25 percent of the TAC for the fishery and the attendant PSC apportions of the caps. The reserve season should be conducted in a portion of the year that provides ample incentive to participate (i.e. consideration of weather, market timing, price for product, etc.).

The two permit system approach in this fishery renders those who voluntarily agree to the six items on the checklist eligible for participation in a set-aside reserve fishery. *The first year is geared to address total catch/bycatch enumeration.* Adhering to this voluntary checklist, a vessel will have on board those tools for fishery managers to more readily, accurately, and adequately manage a particular fishery. *The second year is geared to achieve bycatch avoidance.*

Year One:

The fishery becomes a fishery requiring two permits. All vessels entering the fishery initially obtain a federal permit. Those vessels complying with the checklist (meaning the boat is outfitted with appropriate equipment and personnel) obtain a second permit, which allows them access to a reserve fishery. A port inspection to confirm compliance with the checklist and *to issue the second permit before departure to the fishing grounds* is required.

Checklist Items:

1. 100 percent coverage: every tow must be sampled, which will likely require more than one observer.
2. Maximum codend size of 25 tons.
3. Electronic reporting equipment onboard the vessel to allow daily transmission of catch/bycatch data to NMFS management.
4. Vessel operators will give a two-day advance notice to NMFS for intended participation in another fishery and location after beginning the Permit 2 fishery. This will both help to provide better management tools to NMFS and discourage a vessel from simply switching target fishery if there a particularly "dirty" tow.
5. Scales or other such measuring equipment are in place on the vessel to accurately measure total catch and composition (thereby rendering accurate measure of what is caught, retained, and thrown overboard).

6. An agreed upon method for sampling is adapted to the vessel's deck: NMFS staff, a representative of the observer program, and the fishermen will work together to devise the best sampling methods appropriate to the vessel's deck configuration and particular fishery.

Year Two:

Once the initial compliance with the checklist is attained, the tools for monitoring future bycatch avoidance are in place. In year two, *criteria for qualification to participate in the reserve fishery must expand to insure meaningful bycatch avoidance*. The following are two options to be considered for reserve fishery qualification in subsequent years:

A 15 percent reduction of all bycatch categories, including non-commercial species to be measured against an agreed upon reference year. The 15 percent reduction in PSC's would be measured against current PSC caps.

A 10 percent (or more) reduction in halibut, crab, salmon, and herring, and a 15 percent (or more) average reduction in bycatch of all other species.

FISHERY MANAGEMENT PLAN AMENDMENT PROPOSAL

North Pacific Fishery Management Council

Name of Proposer: Groundfish Forum

Date: August 15, 1997

Address: 4215 21st Ave West Suite 201, Seattle, WA 98199

Telephone: (206) 301-9504

Fishery Management Plan: BS/AI Groundfish

Brief Statement of Proposal: Halibut Mortality Avoidance Program (HMAP) through towing

protocols and regulated deck sorting

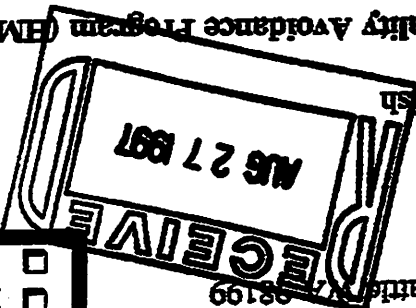
The Council and NMFS, in conjunction with the trawl industry and the IPHC, would create a system where interested groundfish companies could follow a set of procedures to greatly reduce halibut mortality in trawl fisheries. Participation in this program would be limited to those companies willing to carry the level of observer coverage deemed necessary to accurately record halibut catches and follow procedures to rapidly return halibut to the sea. Participation would be allowed on a selective basis and evidence of non-compliance with the required protocols or a demonstrated inability to work with observers would make a participant ineligible for continued participation in the program.

Elements of the program are as follows:

1. Vessels in the program must take the necessary number of observers and all hauls must be observed. Vessels in the program are not subject to the VIP program. In the absence of a requirement for VIP sampling, vessel crews and observers will sort halibut on deck instead of dumping unsorted hauls into live tanks below deck prior to any sorting.
2. Vessels must limit tow duration, maintain catches at or below an average catch per tow limit (average over a day), and only codends under a specified tomlage can be used.
3. Codends must be spilled slowly into live tanks so crew members, under the supervision of observers, can carefully remove halibut before they enter live tanks. Observers then count and measure halibut lengths for conversion to weight equivalents and halibut are immediately released off stern ramp.

Deck crew must assist observers in carrying halibut (in an approved manner) to a designated area where measuring occurs. Crew must also assist in release of halibut.

4. No sorting of catch in live tanks can begin until deck sorting of halibut is complete and the observer on duty is present in the factory. Verification of this may require installation of an indicator light device on deck that verifies that belts in the factory are not moving. Other such devices for verification may be required.
5. Observers carry out basket sampling for species composition and PSC estimations for species other than halibut.



Please check applicable box(es)

- IFQ Program
- Bycatch Reduction
- BSAI Groundfish FMP
- GOA Groundfish FMP
- BSAI Crab FMP
- Scallop FMP

6. After a pre-determined trial period, the success of the HMAP program will be evaluated and the NMFS/Council/IPHC will adjust halibut mortality for fishing under the program. According to evidence from the Grid Sorting analysis and Dr. Ellen Pitkitch's (draft) research, halibut mortality could be as low as 20-30% in a well-conceived and implemented program.
7. After the program is deemed to be successful, the Council can allocate halibut bycatch limits between the group of vessels in the HMAP program and vessels that, for whatever reason, elect not to participate or are ineligible for the HMAP because of non-compliance with the prescribed protocols.

Objectives of Proposal: (What is the problem?)

Each year, unnecessary halibut mortality occurs in trawl fisheries due to current procedures that are used on most trawl vessels. These procedures are, in large part, due to requirements for VIP sampling. In addition, long tows aimed at maximizing catch per tow cause higher halibut mortality. Many boats could aim at maximizing the flow of fish through the factory over time by using shorter tows and smaller codends. For some trawlers, smaller tows may not significantly reduce production and there is an added benefit of allowing for a reduction in halibut mortality.

Requirements for VIP sampling contribute to halibut mortality on trawl vessels because, under the current regime, no sorting can occur until fish are lowered into a live tank. VIP sampling requirements mandate that fish placed in live tanks can only be removed when they exit the tanks on conveyor belts where basket sampling occurs. This increases mortality greatly.

It is commonly believed that the trawl industry can currently employ deck sorting on unobserved tows if they desire to do so. This is impractical, however, for the following reasons. Under the present regime, an observer may elect to sample any tow based on the random sampling protocol of the Observer Program. The vessel skipper does not know in advance whether a tow will be sampled. This makes it impractical for the crew to deck sort unsampled tows because the flow of work on the deck would thus be largely dependent on the observer's determination (at the last minute) as to whether the tow will be sampled. Because assistance from additional crew members is needed to efficiently deck sort halibut, this would entail tasking some workers (from the factory or elsewhere) to be available at a moment's notice, depending on the direction of the observer.

Deck sorting unsampled tows would only be practical if the crew knew in advance whether the observer intended to sample the tow. Yet advance knowledge is not provided to the skipper because NMFS believes it would bias the skipper's decision of where to fish. One additional reason why deck sorting of unsampled tows does not occur is that it creates potential for misunderstandings and possible accusations of illegal pre-sorting activities. These misunderstandings could result from a miscommunication over whether a haul was going to be sampled or not. Most skippers and vessel owners avoid any additional potential for misunderstandings and the potential consequences associated with it.

Under the current regime halibut catches are estimated by basket samples. Due to the large size of most halibut compared to target species, basket sampling is biased and likely introduces considerable inaccuracy on a tow by tow or individual vessel basis, as demonstrated by the (draft) Pitkitch report.

The proposed system would greatly increase accuracy because the halibut catch estimate would be based on a "whole-haul" count and all tows would be sampled.

Need and Justification for Council Action: (Why can't the problem be resolved through other channels)

- The Council must balance OY objectives against the Magnuson-Stevens mandate to reduce bycatch. The industry can come forward with solutions it feels will accomplish both objectives effectively. HMAP is such a system and it cannot be implemented by industry alone, or legally established on a voluntary or ad hoc basis.

Foreseeable Impacts of Proposal: (Who wins, who loses?)

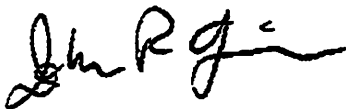
Halibut bycatches will be more accurately enumerated, halibut mortality will be reduced and this means less halibut is required to fund the groundfish fisheries while allowing greater catches of groundfish. The resource, halibut fishermen, and the groundfish fishery will benefit.

Are there Alternative Solutions? If so, what are they and why do you consider your proposal the best way of solving the problem?

The industry has implemented efforts to avoid halibut bycatch such as Sea State with some success. It could be that the greatest potential for additional improvement comes from reducing the bycatch mortality of halibut as well as continuing to improve avoidance efforts. This proposal provides an opportunity for committed members of the industry to reformulate fishing strategies and incorporate incentives to reduce halibut mortality into their operations. The only other system under consideration to create such incentives is VBAs. HMAP may be more expeditious and easier to implement than VBAs. HMAP does not involve the implicit allocation decisions that VBAs may involve. HMAP could certainly be instituted as a stand alone program or in conjunction with VBAs.

Supportive Data & Other Information: What data are available and where can they be found? Supporting materials for the Grid Sorting proposal, including at-sea study. Dr. Ellen Pitkitch's recent study (draft document) on handling as a factor in halibut mortality. Results from Groundfish Forum's EFP pollock catch reduction experiment where deck sorting was successfully conducted.

Signature:



FISHERY MANAGEMENT PLAN AMENDMENT PROPOSAL
North Pacific Fishery Management Council

Please check applicable box(es):

- IFQ Program
- Bycatch Reduction
- BSAI Groundfish FMP
- GOA Groundfish FMP
- BSAI Crab FMP
- Scallop FMP

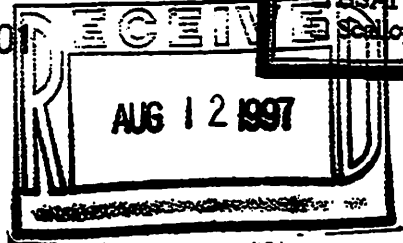
Name of Proposer: Date: 8/12/97

YUKON RIVER DRAINAGE FISHERIES ASSOCIATION

Address:
 733 W. 4TH AVE. #881 ANCHORAGE, AK 99501

Telephone:
 1-800-328-9437

Fishery Management Plan:



BSAI GROUND FISH
Brief Statement of Proposal:

LOWER THE CHINOOK BYCATCH TRIGGER OF 48,000 FISH TO 36,000 OR LESS WITH AN OVERALL A SEASON PSC LIMIT OF 48,000.

ESTABLISH CHINOOK BYCATCH TRIGGER CLOSURES AND SAVINGS AREA FOR THE B SEASON AS WELL AS A B SEASON PSC LIMIT OF X,000 FISH.

Objectives of Proposal: (What is the problem?)

CURRENT 48,000 KING BYCATCH TRIGGER IS SO HIGH AS TO BE MEANINGLESS. HIGH 1996 BYCATCH OF KINGS IN SEPT. & OCT. MUST NOT BE REPEATED.

OVERALL PSC CAPS/LIMITS ARE ALSO NECESSARY

Need and Justification for Council Action: (Why can't the problem be resolved through other channels?)

SALMON RESEARCH FOUNDATION IS DISSOLVING FOR VARIOUS REASONS. NO OTHER MECHANISMS AVAILABLE TO REDUCE BYCATCH

Foreseeable Impacts of Proposal: (Who wins, who loses?)

COMMERCIAL, SUBSISTENCE AND RECREATIONAL USERS OF CHINOOK STOCKS AS WELL AS ADF&G MANAGERS AND US/CANADA YUKON TREATY PROCESS WILL BENEFIT. TRAWL INDUSTRY WILL HAVE TO ADJUST ITS FISHING PRACTICES.

Are there Alternative Solutions? If so, what are they and why do you consider your proposal the best way of solving the problem?

NONE FORESEEN, HOWEVER WE ARE WILLING TO WORK WITH TRAWL INDUSTRY (AS WE DID AS PART OF S.R. FOUNDATION) TO CRAFT A PROPOSAL THAT WILL LOWER CHINOOK BYCATCH BUT STILL ENABLE INDUSTRY TO CATCH THEIR TARGET SPECIES.

Supportive Data & Other Information: What data are available and where can they be found?

NMFS/AKR: BSAI FISHERY STATISTICS, BYCATCH BY TARGET FISHERY

Signature: **AND WEEK**

DAN SENEAL-ALBRECHT, EXECUTIVE DIRECTOR

FISHERY MANAGEMENT PLAN AMENDMENT PROPOSAL
North Pacific Fishery Management Council

Please check applicable box(es):

- | | |
|---|--|
| <input type="checkbox"/> IFQ Program | <input checked="" type="checkbox"/> GOA Groundfish FMP |
| <input checked="" type="checkbox"/> Bycatch Reduction | <input type="checkbox"/> BSAI Crab FMP |
| <input checked="" type="checkbox"/> BSAI Groundfish | <input type="checkbox"/> FMP Scallop FMP |

Name of Proposer:

United Catcher Boats

Date:

August 15, 1997

Address:

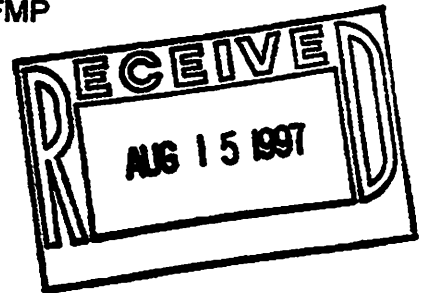
1711 W. Nickerson, Suite B, Seattle, WA 98119

Telephone:

206/282-2599

Fishery Management Plan:

Bering Sea and Gulf of Alaska Groundfish FMPs



Brief Statement of Proposal:

1. Re-evaluate the methods in estimating the mortality of discarded trawl caught halibut;
2. Establish regulations for handling techniques for quick release of trawl-caught halibut; and,
3. Develop clear instructions and guidelines for on-board observers to employ in determining halibut PSC mortality in the Bering Sea trawl fisheries.

Objectives of Proposal: (What is the problem?)

1. The problem is that present methods for estimating halibut mortality in the Bering Sea trawl fisheries are erroneous and result in halibut mortality being over-estimated. The best scientific information suggests that the current mortality rates assigned to the BSAI and GOA trawl fisheries are not accurate.

Secondly, present regulations that require halibut to remain on-board a vessel prior to observer action results in higher mortality. The objectives of this proposal are to develop methods of accurately estimating mortality of trawl-caught halibut and then to accurately assign mortality rates to the fleet. This will greatly contribute to the sustainability of the halibut resource by reducing halibut mortality in the trawl fisheries as well as assign accurate mortality rates of PSC halibut in the Bering Sea trawl fisheries.

2. Re-analyze the Grid Sorting Amendment. Current regulations require halibut to go down into the bins below deck so observers can account for halibut taken in the trawl fisheries. The result is higher mortality rates and more dead halibut. Halibut mortality with grid sorting is significantly less due to the fish returning to the water as quickly as possible.

Need and Justification for Council Action: (Why can't the problem be resolved through other channels?)

PSC mortality rates are currently established by the NMFS Regional Director with input from the Council. The IPHC generally provides their advise to the RD in the setting of halibut mortality rates in the Bering Sea trawl fisheries. The need for such an action is found in the current inaccurate accounting procedures and also present NMFS requirements of retaining halibut until enumerated by an observer.

Foreseeable Impacts of Proposal: (Who wins, who loses?)

A reduction in halibut mortality is a savings to the trawl fleet and the directed setline fleet due to a reduction in halibut taken in the trawl fisheries. More halibut will be available to the setline fishery because mortality estimates of discarded halibut are a factor in determining the guideline harvests of the directed fishery. This also allows for the trawl fishery to harvest greater amounts of its directed catch. The halibut resource benefits because of greater accuracy of fishing mortality.

Are there Alternative Solutions? If so, what are they and why do you consider your proposal the best way of solving the problem?

No.

Supportive Data & Other Information: What data are available and where can they be found?

Practical Applications of Fishing and Handling Techniques in Estimating the Mortality of Discarded Trawl-Caught Halibut, By Dr. Pikitch et al, University of Washington Fisheries Research Institute; for the Alaska Fisheries Development Foundation; February 25, 1997

EA/RIR Analysis of Grid Sorting Proposal, NPFMC, 1995

Various IPHC documents

Signature:

