


MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver 
Executive Director

ESTIMATED TIME 10 HOURS

DATE: June 6, 2003

SUBJECT: IR/IU and related amendments

ACTION REQUIRED

- (a) Discuss relationship/timing of assorted IR/IU amendments, including response to Secretarial action on Amendment 75 (to delay flatfish IR/IU until June 2004)
- (b) Final action on Trailing Amendment C (groundfish minimum retention standard)
- (c) Review alternatives and options for Trailing Amendment A (multi-species co-ops for the H&G CP sector and species allocations)

BACKGROUND

Disapproval of Amendment 75 and relationship/timing of assorted amendments

In October 2002 the Council voted to delay implementation of 100% retention requirements (IR/IU) for flatfish in the BSAI, originally scheduled for January 2003 implementation, in order to pursue alternative means of reducing bycatch/discards of flatfish and other groundfish. That action, Amendment 75, would have delayed implementation for flatfish IR/IU until June 2004, but that action was only "partially approved", effectively removing from the books any IR/IU requirements for flatfish in the BSAI (see letter from NMFS under Item C-5(a)). Full flatfish IR/IU still applies in the GOA; however, exemptions approved under Amendment D essentially exempt every sector from these requirements (though Amendment D does contain an annual review mechanism to evaluate the 5% threshold and possibly change the list of fisheries which are/are not exempt).

Meanwhile the Council is pursuing two additional amendments (A and C) which could, if approved, be replacements for full flatfish IR/IU in the BSAI, thereby making the June 04 implementation date moot (and Amendment D in the BSAI), at least for those sectors which would be subject to Amendment C, which would establish an overall minimum groundfish retention standard. Implementation of Amendment C, if approved in June, *may* be possible by June of 04, depending on the specific action taken. However, Amendment A, which would establish multi-species cooperatives for the H&G CP sector, is viewed as integral to that sector's ability to live within the requirements of Amendment C, and the timeline for Amendment A does not allow for implementation by June of 04. Amendment A could be reviewed in October 03, have final action in December 03 (optimistically), and could possibly be implemented by 2005, assuming co-op provisions apply only to the H&G CP sector. Amendment A was expanded in April 03 by the Council to

include sector splits of all BSAI groundfish and PSC species. If co-ops are expected to be implemented for all sectors via Amendment A, in addition to just the H&G CP sector, the timelines for analysis and Council action will be delayed, and implementation by 2005 is likely overly optimistic.

In determining an appropriate course of action, there are several questions which arise, including: (1) Will Amendment C be applied to all sectors, or just the H&G CP sector? (2) If just applied to the H&G CP sector, does that adequately address the bycatch/discard issue for flatfish? (3) Will the Council wish to resubmit Amendment 75? (4) Can the H&G CP sector comply with Amendment C for some period of time while Amendment A (the co-op) is being further developed and implemented? (5) What is the Council's intent with regard to Amendment A and the sector splits; i.e., are co-ops for all sectors assumed under Amendment A, or just sector splits and a co-op for the H&G CP sector only? (6) What are the implications of the disapproval of the June 04 implementation date for Amendment 75? (7) What is the status of Amendment D, given disapproval of Amendment 75? (8) Do we maintain full flatfish IR/TU in the GOA if it is eliminated in the BSAI?

Action on Amendment C

Related to the questions above, the Council's action on Amendment C at this meeting would, at least partially, inform action on related Amendments. The basic alternatives are to establish a minimum groundfish retention standard, which could be applied to all sectors (at differential thresholds) or just to the H&G CP sector, for example. There are additional options to adjust the way in which Maximum Retainable Allowances for pollock and flatfish species are calculated, which would reduce bycatch/discards in and of itself (though discard savings realized via the MRA adjustment may be primarily in further reductions of pollock discards, rather than flatfish, depending on MRA adjustments for flatfish as well). Adjustments to the MRA calculation could be approved for expedited implementation, or in conjunction with approval of an overall GRS. The analysis for Amendment C was mailed to you in May. That analysis and the specific alternatives will be reviewed by staff. The Executive Summary is attached as Item C-5(b). The Council's Enforcement Committee met earlier this week and will provide comments relative to monitoring and enforcement aspects of Amendment C.

Action on Amendment A

In April the Council reviewed a discussion paper and decision tree for proposed Amendment A (co-op for the H&G CP sector), and expanded Amendment A to include species allocations for BSAI groundfish among all sectors. At that time you indicated your intent to revisit Amendment A at this meeting, and possibly refine the alternatives and options as well as provide clarification to staff on certain components of those alternatives and options. A discussion paper and revised alternative structure prepared by staff (and contractor assistance), along with some initial data runs, are included under Item C-5(c) and will be presented at this time.

For reference, the Council's April actions on IR/TU are summarized under Item C-5(d). Public comments received are under C-5 Supplemental.



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

AGENDA C-5(a)
JUNE 2003

May 29, 2003

David Benton
Chairman
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, Alaska 99501-02252

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N.P.F.M.C.

Dear Chairman Benton:

We have partially approved Amendment 75 to the Fishery Management Plan for the Groundfish Fishery of the Bering Sea and Aleutian Islands Area (Amendment 75 to the FMP). In October 2002, the Council adopted Amendment 75 to the FMP to delay from January 1, 2003, until June 1, 2004, the effective date of the Improved Retention/Improved Utilization (IR/IU) Program requirements for rock sole and yellowfin sole in the Bering Sea and Aleutian Islands Management Area (BSAI). Amendment 75 to the FMP would have extended the delay of imposing the IR/IU requirements on rock sole and yellowfin sole catches that originally was adopted by the Council and approved by the Secretary as part of Amendment 49 to the FMP. The delay of flatfish IR/IU requirements effected by Amendment 49 to the FMP ended on January 1, 2003.

The approved part of Amendment 75 to the FMP is the delay of imposing the IR/IU requirements on catches of rock sole and yellowfin sole in the BSAI. The part of Amendment 75 not approved is the date of June 1, 2004, on which this delay would have ended. The practical effect of partially approving Amendment 75 to the FMP is that the proposed FMP text is modified by removing reference to rock sole and yellowfin sole as IR/IU species in section 13.9.1 of the FMP (see attachment) and in the regulations at 50 CFR 679.27(b)(3) and (b)(4). This action will delay indefinitely the flatfish IR/IU program, but will not affect the continued effectiveness of IR/IU requirements on catches of pollock and Pacific cod.

Full approval of Amendment 75 to the FMP would be inconsistent with National Standards 7 and 9 described in section 301 of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). National Standard 7 requires that conservation and management measures shall, where practicable, minimize costs. National standard 9 requires that such measures shall, to the extent practicable, minimize bycatch. By using the term "practicable," Congress did not intend for the Council to impose costs on fishermen that could not be reasonably met. The administrative record indicates that imposing the IR/IU requirements on catches of rock sole and yellowfin sole could cause some fishermen to go out of business, but does not show conservation and management benefits that outweigh those costs. Such costs, therefore, are unreasonable and impracticable.



Under the Administrative Procedure Act (APA), a rational connection must exist between the facts found and the choice made. Without such a connection, the choice made and implemented could be deemed arbitrary and capricious. The administrative record for the proposed action includes information showing that the significant adverse economic effects of implementing IR/TU requirements on the catches of rock sole and yellowfin sole justify the continued delay of these requirements. The administrative record does not include information or analysis, however, that justifies or explains how or why imposing these requirements in June 2004, would not result in the same adverse economic effects predicted in 2003 or that these effects will be outweighed by overall benefits.

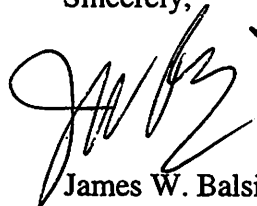
Under section 304(a)(4) of the MSA, if the Secretary partially disapproves a fishery management plan amendment, the Council may submit a revised amendment to the Secretary for review. The Council may submit a revised Amendment 75 for Secretarial review with an explanation and analysis showing how the benefits of the flatfish IR/TU program outweigh the economic costs to the industry.

If the Council chooses not to submit a revised Amendment 75 under section 304(a) of the MSA, the Council could revise its action under proposed Amendment 76 to include pertinent elements of the BSAI flatfish IR/TU program and associated effective dates. Again, this process would require the Council to develop an adequate record on how the benefits of full retention of yellowfin sole and rock sole in specified fisheries outweigh the costs to industry of doing so.

The Council also could choose to not pursue application of IR/TU requirements to catches of rock sole and yellowfin sole and instead focus on further development of a groundfish retention standard or maximum retainable amount adjustments to reduce overall groundfish discard amounts. This approach would have the advantage of providing additional time to determine how all the potential elements of the Council's discard reduction program could be integrated, including the concept of rationalizing the non-American Fisheries Act fishing sectors in the BSAI through sector allocations and economic incentives.

I continue to be aware of and support the Council's objective for maintaining effective incentives for reducing discards in the flatfish fisheries. We remain committed to working with the Council to identify viable approaches to achieving those objectives.

Sincerely,



James W. Balsiger
Administrator, Alaska Region

Attachment

Attachment

REVISIONS TO BSAI FMP FOR PARTIAL APPROVAL OF AMENDMENT 75 TO THE
FISHERY MANAGEMENT PLAN FOR THE GROUNDFISH FISHERY OF THE BERING
AND ALEUTIAN ISLANDS AREA

Section 13.9.1 of the *Fishery Management Plan for the Groundfish Fishery of the Bering Sea and Aleutian Islands Area* is revised to read as follows:

13.9.1 Minimum retention requirements

All vessels participating in the groundfish fisheries of the BSAI are required to retain all catch of all IR/IU species (pollock and Pacific cod beginning January 1, 1998), ~~and rock sole and yellowfin sole beginning June 1, 2004~~ when directed fishing for those species are open, regardless of gear type employed and target fishery. When directed fishing for an IR/IU species is prohibited, retention of that species is required only up to any maximum retainable bycatch amount in effect for that species, and these retention requirements are superseded if retention of an IR/IU species is prohibited by other regulations.

No discarding of whole fish of these species is allowed, either prior to or subsequent to that species being brought on board the vessel. At-sea discarding of any processed product from any IR/IU species is also prohibited, unless required by other regulations.

**Environmental Assessment/
Regulatory Impact Review/
Initial Regulatory Flexibility Analysis**

**for Amendment 79
to the Fishery Management Plan for
Groundfish in the Bering Sea and Aleutian Islands**

**Minimum Groundfish Retention Standards
(IR/IU Trailing Amendment C)**

**Executive Summary of
Public Review Draft**

Prepared for the North Pacific Fishery Management Council

May 20, 2003



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Executive Summary

This analysis examines a groundfish retention standard (GRS) as an alternative to the IR/TU regulation for flatfish scheduled to be implemented in the BSAI beginning June 1, 2004. This analysis concludes that:

- GRS regulations would require NMFS certified scales and 200 percent observer coverage on vessels under the program. While many of the vessels considered for this regulation already have certified scales, others would have to purchase and installed them at an estimated cost of \$75,000. Additional expenditures would be required to maintain the scales and pay for increased observer coverage (up to \$70,000 per year).
- Enforcing a GRS at a level above 80%, without an increase in the Maximum Retainable Allowance (MRA) for pollock, would result in stricter retention standards than IR/TU regulations for yellowfin and rock sole and the potential for negative economic impacts. For example, an 85% GRS, without an increase in the MRA would result in the HT-CP sector being required to retain 15,000 mt more groundfish than they would under the IR/TU flatfish regulation. With the additional scale and observer costs, a high percentage GRS program is expected to create negative economic consequences compared to the status quo.
- Implementation of a GRS at a level below 80%, with an increase in the MRA, could result in higher levels of retention than would be expected under the IR/TU flatfish regulations. Because some of the additional retention would be pollock for which a market exists, it is expected that additional retention by the fleet would be less of an economic burden than under IR/TU. However, the additional cost of scales and observers means the GRS may have negative economic consequences compared to the status quo.
- The MRA level and the period over which the retention rate is calculated are important factors in determining the economic effects of a GRS on certain sectors. Higher MRAs and longer time intervals (e.g. seasonal, yearly) are likely to result in higher retention rates—up to 5.1 percent higher with a 50 percent MRA monitored at the end of the year.
- Because retention rates in the groundfish fisheries are vary during the year, there may be some advantage to instituting different GRSs during different times of the year. Multiple GRS could encourage consistent effort towards improving retention instead of concentrating all improvements in one part of the year.

The two alternatives under consideration are:

Alternative 1: Status Quo/No Action

This alternative would allow the existing IR/TU regulations for flatfish in the BSAI to be implemented beginning June 1, 2004. The IR/TU regulations would require that all rock sole and yellowfin sole in the BSAI be retained and that processors create products that yield at least 15 percent from each fish harvested.

In April, 2003, the NPFMC approved exemptions to the IR/TU regulations for flatfish in what has been called Amendment D. As a result of the exemption only the fisheries for non-AFA Trawl CP fisheries Rock sole, Flathead Sole, Yellowfin Sole and Pacific cod will be regulated by IR/TU flatfish regulations.

Alternative 2: Establish a Minimum Groundfish Retention Standard (GRS)

This alternative would add a minimum Groundfish Retention Standard (GRS) for all groundfish fisheries (excluding pollock target fisheries) to the Goals and Objectives section of the BSAI Groundfish FMP. In addition, a regulation establishing a GRS would be promulgated and enforced on certain vessels and sectors in the groundfish fleet. The GRS regulation would not supercede the 100

percent retention standard already set for pollock and Pacific cod under existing IR/IU regulations. In addition to establishing a GRS, the regulation would require that processors create products that yield at least 15 percent from each fish harvested. A GRS regulation would consist of the following components:

- Component 1.** Establishes the GRS percentage.
- Component 2.** Specifies the vessels required to comply with the GRS.
- Component 3.** Sets the period over which the retention rate is calculated.
- Component 4.** Defines the seasonality of the GRS.
- Component 5.** Determines at which level of aggregation the GRS is applied.
- Component 6.** Considers revision of the maximum retainable bycatch allowance (MRA) for pollock.
- Component 7.** Determines how total catch is measured under GRS regulations (GRS is defined as the percentage of total groundfish catch retained).
- Component 8.** Determines how retained catch is measured.

For purposes of this analysis, two bookend sub-alternatives were developed by varying the values of these components. These sub-alternative are:

Alternative 2.1: Less Restrictive Measure

This alternative establishes a GRS of 70 percent. The standard applies to non-AFA trawl catcher processors that are 125 ft and greater LOA as a fleet. Compliance with the GRS is determined at the end of the fishing year. Pollock MRAs are relaxed to 35 percent for all non-AFA trawl catcher processors, including vessels less than 125 ft, and compliance to pollock MRAs are monitored and enforced on each vessel at the end of each offload period. Certified scales and 200 percent observer coverage are used to measure and verify total catch. Alternative scale monitoring plans approved by NOAA Fisheries could be substituted for 200 percent coverage. Retained catch is calculated using NMFS Standard PRRs.

Alternative 2.2: More Restrictive Measure

This alternative establishes a GRS of 85 percent for January through May, The GRS increases to 90 percent during the remainder of the year. The GRS applies to all catcher processors that are 125 ft and greater LOA as individual vessels. Catcher processors less than 125 ft. are exempt if their weekly production is less than 600 mt. Current pollock MRA standards are maintained. Compliance to the GRS is monitored and enforced at the end of each week for each area and gear fished. Certified scales and 200 percent observer coverage are used to measure and verify total catch. Retained catch is calculated using existing NOAA Fisheries standard PRRs. No alternative scale monitoring plans or retained catch measurement plans are considered.

Comparison of Alternatives

It is instructive to note the overall retention rates that would be implied with Alternative 1 (the status quo) and compare those to rates proposed under Alternative 2. Table E-1 shows the hypothetical situation assuming all rock sole and yellowfin sole (IR/IU Flatfish) were retained by all sectors from 1995-2001. As seen in the table, the HT-CP sector had 36.3 mt of IR/IU Flatfish discards in 2000. Those discards accounted for 12.3 percent of the sectors total catch. If the HT-CP had retained all of the IR/IU Flatfish, the sector's overall retention rate would have increased to 81.5 percent. This table then provides an additional perspective regarding the GRS. For example setting the GRS at 80 percent would be nearly equivalent to requiring 100 percent retention of IR/IU Flatfish. Additionally, it can be inferred that the economic impacts of an 80 percent GRS would be approximately equivalent to imposing 100 percent retention of IR/IU flatfish. Setting the GRS at less than 80 percent would provide some relief for the HT-CPs relative to IR/IU regulations slated to be imposed in June, 2004.

Table E-1. Retention Percentages if 100 Percent Retention of IR/IU Flatfish were Required

Target Fishery And Sector	1995	1996	1997	1998	1999	2000	2001
Surimi & Fillet Trawl Catcher Processors							
RSOL & YSOL Discards (1,000 mt)	12.1	13.9	16.4	6.0	1.8	2.6	0.7
Percent of Total Groundfish	1.4	1.8	2.3	0.9	0.4	0.5	0.1
Retention Percent if Retained	91.8	94.1	93.4	97.8	98.7	98.5	99.2
Head & Gut Trawl Catcher Processors							
RSOL & YSOL Discards (1,000 mt)	41.5	34.1	47.6	32.9	31.3	36.3	15.0
Percent of Total Groundfish	13.7	10.4	13.5	12.1	11.7	12.3	5.6
Retention Percent if Retained	72.4	72.0	77.0	82.5	78.4	81.5	80.8
Pot Catcher Processors							
RSOL & YSOL Discards (1,000 mt)	0.0	0.1	0.0	0.1	0.0	0.1	0.0
Percent of Total Groundfish	0.2	0.8	0.7	2.0	0.9	2.0	0.6
Retention Percent if Retained	96.6	96.6	99.2	99.1	96.9	97.9	94.1
Longline Catcher Processors							
RSOL & YSOL Discards (1,000 mt)	0.1	0.2	0.2	0.3	0.2	0.3	0.7
Percent of Total Groundfish	0.1	0.2	0.2	0.2	0.2	0.2	0.5
Retention Percent if Retained	84.2	85.6	85.1	84.5	86.2	84.1	85.9
All Sectors and Fisheries							
RSOL & YSOL Discards (1,000 mt)	61.2	55.5	72.0	41.9	38.1	41.4	17.4
Percent of Total Groundfish	3.2	3.0	3.9	2.6	2.7	2.6	1.0
Retention Percent if Retained	89.0	89.8	89.7	94.5	93.4	94.2	95.5

Source: NPFMC Sector Profiles Database, 2001

Alternative 2.1 which imposes a 70 percent GRS on HT-CP vessels > 125' as a fleet over the entire year, while allowing a 35 percent pollock MRA is expected to result in a 5.2 percentage point improvement in retention rates from 2001. While none of the affected vessels exceeded the GRS in 2001, the MRA regulatory changes generate an improvement approximately equal to the improvement expected under the status quo with IR/IU for flatfish. Table E-2 shows what might have occurred in 2001 if Alternative 2.1 had been in place. The table also shows the results for Alternative 2.2. As seen in the table a GRS at 85 percent in the A season and 90 percent in the B Season (Alt. 2.2) could result in higher retention than under IR/IU for flatfish. Table E-2 shows that for the HT-CP sector (with catch as in 2001), Alternative 2.2, an 85-90% GRS, would have required the retention of 30,477 metric tons, or roughly 15,000 metric tons more than IR/IU for flatfish. Table E-2 also shows the additional enforcement outcome that are likely with a more restrictive GRS program such as Alternative 2.2 where rates would be monitored each week.

Table E-2. Outcomes under Alternative 2.1 and 2.2 Using 2001 Catches

Sector	Vessel Enforcement Periods	Exceedances (No. Of Vessels)	Total Exceedances (Number)	Additional Retained (MT)	Increased Retention (Pct. Points)
Outcomes under Alternative 2.1					
HT-CP > 125'	15	0	0	13,344	5.4
HT-CP < 125'	NA	NA	NA	623	2.6
All HT-CPs	15	0	0	13,967	5.2
Outcomes under Alternative 2.2					
ST/FT-CP	29	2	11	173	2.3
HT-CP	842	15	603	30,477	13.3
P-CP	47	4	9	25	0.9
L-CP	1,066	23	617	5,554	5.8
All CPs	1,984	44	1,240	36,229	10.8

Source: NPFMC Sector Profiles Database, 2001

HT-CP Sector Summary

The HT-CP fleet consists of a relatively wide variety of vessels that ranges from 103 feet to 295 feet in length. Approximately 33 percent of the 23-24 vessels from the fleet that have fished in the BSAI in recent years are less than 125 feet. The remaining 67 percent are greater than 125' (Table E-3). As would be expected the smaller vessels are relatively less productive than the larger vessels. From 1995-2001 the smaller vessels generated approximately 12 percent of both catch and product value. By contrast the smaller vessels have accounted for roughly 18 percent of the total discards for the sector from 1995-2001. Vessels less than 125' have discarded an average of 48 percent of their catch during the seven year period, while vessels > 125' have discarded 38 percent. Industry sources indicate that the smaller vessels are not able to keep as many fish as larger vessels because of limitations in hold size and processing space.

Table E-3. Distribution of Activity between HT-CPs <125' and HT-CPs> 125'

Length Class	1995	1996	1997	1998	1999	2000	2001
Number of Vessels							
< 125'	9	8	11	8	9	8	7
> 125'	23	20	17	15	15	15	15
Product Value (\$ Millions)							
< 125'	8.1	17.2	18.3	16.4	18.8	23.4	11.4
> 125'	141.3	153.6	127.1	88.2	96.6	103.3	122.0
Product Value as a Percent of HT-CP Value							
< 125'	5.5	10.1	12.6	15.7	16.3	18.5	8.5
> 125'	94.5	89.9	87.4	84.3	83.7	81.5	91.5
Total Catch (1,000 mt)							
< 125'	20.5	40.0	55.6	41.8	38.3	45.7	20.9
> 125'	282.8	287.4	298.1	229.3	230.0	248.3	244.5
Percent of HT-CP Total Catch							
< 125'	6.7	12.2	15.7	15.4	14.3	15.6	7.9
> 125'	93.3	87.8	84.3	84.6	85.7	84.4	92.1
Discards as a Percent of Total Catch of Length Class							
< 125'	58.7	57.5	53.5	46.3	40.6	38.5	41.1
> 125'	40.0	35.7	33.2	26.6	32.0	29.4	27.9
Discards as a Percent of HT-CP Total Discards							
< 125'	9.6	18.3	23.1	24.1	17.4	19.4	13.8
> 125'	90.4	81.7	76.9	75.9	82.6	80.6	86.2

Source: NPFMC Sector Profiles Database, 2001

Impact of GRS Rates

The effectiveness of the various rates will depend on the distribution of retention rates among the various vessels—the more vessels that have historically retained less than the standard, the greater the improvement. Table E-4 provides insights into the distribution of retention among the various catcher processor sectors in non-pollock fisheries and the additional tons that would need to be retained in order to meet the standard based on catches in 2001. If for example the GRS is set at 70 percent enforced on an annual basis, then 10 HT-CPs would need to improve their retention to comply with the standard, as well as a single ST/FT-CP. At 70 percent approximately 6,032 mt more groundfish would have been retained and overall, the HT-CP retention rate would have improved from 75.1 percent to 77.4 percent.

If the GRS is set at 80 percent then vessels in sectors other than the HT-CP sector would be affected. The actual effectiveness of increasing retention will depend on whether regulation will be imposed on all CPs or just HT-CPs. If the GRS regulations are imposed on all CPs in non-Pollock fisheries, then based on 2001 results, 1 ST/FT-CP, 13 HT-CPs, 2 P-CPs and 6 L-CPs would be required to improve their groundfish retention rates, and an additional 16,236 mt would be retained, 78 mt by ST/FT-CPs, 15,591 by HT-CPs, less than 1 mt by P-CPs and 566 mt by L-CPs. Overall an 80 percent GRS would have increased the HT-CPs retention rate in 2001 from 75.1 percent to 81.2 percent.

Table E-4. Catcher Processors Below Specified Standards in 2001 and Additional Tons that Would Have to be Retained to Meet the Standard

Sector	GRS Percentage					
	65	70	75	80	85	90
	Number of Vessels Below Retention Standard					
ST/FT-CP	1	1	1	1	1	1
HT-CP	7	10	11	13	18	20
P-CP	0	0	0	2	2	2
L-CP	0	0	0	6	19	29
All CPs	8	11	12	22	40	52
	Additional Tons That Would Need to be Retained to Meet Standard					
ST/FT-CP	61	67	72	78	83	88
HT-CP	2,715	5,965	10,082	15,591	25,582	37,537
P-CP	0	0	0	1	46	91
L-CP	0	0	0	566	2,296	6,139
All CPs	2,777	6,032	10,154	16,236	28,006	43,855
	Retention Percentage if all Vessels Meet the Standard					
ST/FT-CP	93	93.3	93.4	93.4	93.5	93.6
HT-CP	76.1	77.4	79.0	81.2	85.2	90.0
P-CP	93.3	93.3	93.3	93.3	94.4	95.6
L-CP	85.5	85.5	85.5	86.0	87.4	90.7
All CPs	79.5	80.4	81.4	83.1	86.2	90.3

Source: NPFMC Sector Profiles Database, 2001

Within the HT-CP fleet there is considerable variation between larger and smaller vessels. (see Table E-5), and it has been proposed that the GRS regulation exempt vessels < 125'. Table 1 shows how the various retention standards would affect vessels by size class. As is demonstrated in the table, all of the HT-CPs < 125' retained less than 65 percent of their groundfish catch in 2001, while only 3 of the 15 vessels > 125' retained less than 65 percent. If vessels < 125' are exempt then the effectiveness of the GRS is diminished, but the ability of small HT-CPs to remain economically viable will continue.

Table E-5. HT-CPs by Length Below Specified Standards in 2001 and Additional Tons that Would Have to be Retained to Meet the Standard

Standard	65 Percent	70 Percent	75 Percent	80 Percent	85 Percent	90 Percent
	HT-CP by Length					
	Number of Vessels Below Retention Standard					
< 125'	6	6	6	6	6	7
> 125'	3	5	5	8	13	15
	Additional Tons (1,000s) That Would Need to be Retained to Meet Standard					
< 125	2.1	3.4	4.7	6.0	7.3	8.9
> 125	0.9	3.1	6.0	10.5	19.5	30.6

Source: NPFMC Sector Profiles Database, 2001

Frequently Asked Questions

The following series of questions and answers provides an additional summary of many of the issues that have been raised during previous iterations of this document.

1. What is the Groundfish Retention Standard?

The groundfish retention standard, or GRS, is a standard created by the North Pacific Fishery Management Council (NPFMC) and the National Marine Fisheries Service (NMFS) to measure how much of the groundfish that fishing vessels are catching is being kept. The GRS requires that a certain percentage of all groundfish a vessel catches must be kept. Vessels, or vessel pools, with retention rates below the GRS could be subject to prosecution by NMFS enforcement.

2. How is the retention rate for the GRS calculated?

The retention rate is an estimate of how much of the groundfish a fishing vessel's, or pool's, caught was kept for production. The GRS retention rate is calculated using the following equation:

$$(\text{Groundfish Product Weight} \div \text{Product Recovery Rate}) \div \text{Total Groundfish Catch} = \text{GRS}$$

The groundfish product weight is the total product weight produced by the boat during a set period. The product recovery rate is the average percentage of a single fish's total weight that a certain product represents. For example, a headed and gutted fish might weigh 85 percent of the original fish's weight. Dividing the product weight by the product recovery rate provides an estimate of whole fish weight. The total groundfish catch weight is the total weight of all groundfish the vessel caught in the same period as the groundfish product weight was produced.

3. Are NMFS PRRs accurate and could they affect enforcement?

NMFS PRRs are averages and do not account for variation in PRRs between fish sizes and producers. However, NMFS has stated they will use these PRRs for enforcement and that producers who believe they are meeting the GRS, but may have lower PRRs, will need to meet the standard or prove to NMFS that they naturally have a lower PRR if or when they receive a notification of a violation. It will be up to the vessels in question to provide all necessary records.

4. Why not just weigh discards rather than using PRRs to back calculate retention?

Weighing discards is probably impractical. Discard weighing would require a hopper scale in addition to the flow scale already proposed under GRS. Many boats do not have room for two scales and there would be additional costs associated with a second scale. In addition, the space requirement for separating discards of groundfish and non-groundfish including PSC, rock, mud, tunicates from one another might exceed the capacity of some boats.

If the GRS were redefined to equal total groundfish retention as a percent of total catch—where total catch includes rocks, mud, PSCs etc.—then the need to differentiate between groundfish and non-groundfish is eliminated, and with it the need to estimate species composition of discards. If the need to estimate species composition is eliminated then it is likely that additional observer coverage may not be necessary. Furthermore, redefining the GRS to include total catch increases incentives to reduce catches of rocks, mud, tunicates, PSCs etc. Estimates from NMFS observer program indicate that non-fish discard represented six percent of total catch weight in the HT-CP sector in 2002.

5. Can we be assured that flatfish discards will be reduced with the GRS?

If a GRS is set higher than the current retention rates, most vessels will have no choice but to improve their groundfish retention rates. However, in order to be sure that flatfish discards are reduced the GRS must be set high enough that vessels would not be able to make up the difference between the GRS and the current retention rate by solely increasing retention non-flatfish groundfish species (e.g. pollock, Pacific cod). If the GRS is set high enough then vessels, or vessel pools, would have no choice but

reduce flatfish discards. Alternatively it may be possible to redefine the GRS so that only flatfish catches are contained in the numerator and denominator. This is contrary to the current definition of the GRS, would complicate enforcement of the program, and expand the role of observer catch composition estimates in the calculation of the GRS.

6. How much would discards by the HT-CP sector be reduced if 100 percent retention of IR/IU Flatfish was required?

The analysis shows that in 2001, IR/IU would have reduced flatfish discards by roughly 15,000 mt or 5.6 percent of total catch by the HT-CP sector. This amount is roughly equivalent to discard reductions attained by choosing Alternative 2.1, which uses a GRS of 70% and also changes the rate and the way that pollock MRAs are calculated. Alternative 2.1 would probably not reduce flatfish discards by 15,000 metric tons because some of the reduced discards would probably come from non-flatfish species.

7. How does the maximum retainable allowance(MRA) affect retention rates?

The maximum retainable allowance is the maximum amount of a given species that a vessel is allowed to keep if that species is closed to directed fishing. The MRA for a species closed to directed fishing is a predetermined percentage of the total retained amount of species that remain open for directed fishing. For example, the MRA for pollock in the HT-CP fleet is 20 percent. Pollock on board can be no more than 20 percent of the retained catch of groundfish species that remain open. Any catch over the 20 percent MRA must be discarded. Because the MRA is enforced instantaneously, instead of over a period of time, high catches of species closed to directed fishing—especially if those catches come early in a trip—can lead to higher discard levels.

8. Could adjusting the MRA help retention levels without creating a GRS standard?

Yes, adjusting the MRA and MRA enforcement timing has the potential to increase retention rates without the imposition of a GRS. MRAs apply to both pollock and non-pollock flatfish species. Thus, any global change in MRAs and MRA enforcement would help both pollock and non-pollock retention. For more information on this discussion, see Chapter 4.

9. Why is the GRS being applied only to non-pollock fisheries?

Vessels in the pollock fisheries are exceptionally efficient with retention rates greater than 98 percent in each of the last five years. Non-pollock fisheries have much lower retention rates as a group. However, some vessels that participate in pollock fisheries also participate in other non-pollock fisheries and it was felt that these vessels should not be allowed to use their exceptionally high retention in pollock to mask lower retention rates in non-pollock fisheries.

10. If the Amendment C (GRS) and the proposed Amendment A creating co-ops for the non-AFA trawl CP sector are linked, won't scales be required on HT-CPs anyway?

While the Amendment C and Amendment A are linked, there is no guarantee that Amendment A would actually be implemented. If Amendment A and C are both approved and eventually implemented at the same time then it possible that the added costs of scales and observers would be offset by additional benefits of participating in a cooperative. Without a cooperative however, it does not appear that the benefits to the the HT-CP sector will outweigh the additional costs of the GRS program. It may be possible to phase in implementation of the GRS—with adjustments to the MRA rates and enforcement periods implemented in 2004, and the remainder of the GRS program with observers and scales implemented if and when the non-AFA trawl cooperative program is implemented.

A Discussion of Analytical Issues and Potential Changes in the Specification of Alternatives for Amendment A

Introduction

The IR/IU analytical team recommends that the sector allocations of BSAI groundfish and PSC limits be separated from the action of establishing a non-AFA Trawl CP Cooperative Program and that the two actions be addressed in separate FMP amendments—Amendment A-1 would provide for sector allocations and Amendment A-2 would establish a non-AFA Trawl CP Cooperative Program. The reason for the separation is that the sector allocations encompass all sectors in the BSAI, while the formation of the cooperative program pertains only to the non-AFA Trawl CP sector.

Furthermore, the IRIU analytical team presumes that Amendment A-1 needs to be approved before or at the same time as Amendment A-2. At a minimum, groundfish and/or PSC limit allocations to the non-AFA Trawl CP sector need to be approved before the Amendment A-2 can be implemented. The timing of approval is important because two conditions for the successful private negotiation of cooperatives are: 1) well-defined sectors each consisting of a sufficiently small number of vessels, and 2) allocations of groundfish and/or PSC limits that are available only to the vessels in each sector.

The IR/IU analytical team also recommends that several of the components (formerly Decision Points) of the non-AFA Trawl CP Cooperative Program be eliminated. This discussion paper contains a revised set of components that accomplishes the aforementioned separation of actions and reduces the number of components. To cross reference previous documents, we indicate for each component the corresponding Decision Point (DP) number(s) from the IR/IU motion approved by the Council in April 2003.

The remainder of this discussion paper contains recommendation for the respecification of Amendment A into two separate actions Amendment A1 and Amendment A2. Specification of the Sector Allocations is found beginning on this page through page 4. Specification of the the Non-AFA Trawl CP Cooperative Program is contained on pages 5 - 16. Information on the vessels that would qualify for the Non-AFA Trawl CP Cooperative program is found on page 16, and a discussion of squid-box issues is on page 17. Finally a separate Appendix is attached beginning on page 18 that shows preliminary information regarding the sector allocations.

Amendment A-1 Sector Allocations

Issue 1: Sector Definitions

For purposes of groundfish and PSC apportionment to sectors, the following sectors will be defined:

Non-AFA Trawl CPs	AFA Trawl CPs	Non-AFA Trawl CVs	AFA Trawl CVs	Longline CPs
Pot CPs	Pot CVs	Longline CVs	Jig CVs	

Note that this action does not contemplate changing fixed gear sector definitions for Pacific Cod, which were defined in Amendment 67.

Component 1 (*Adapted from DP 12.*) Determines whether a vessel because of its use of multiple gears over time may be part of more than one sector.

- Option 1.1 Yes, if the vessels qualifies for any sector then its catch history is part of that sector's apportionment.
- Option 1.2 No, the vessel will only be eligible to participate in one sector. Catches of

vessels that are not eligible for the sector will not be included in the sector's apportionment. Each vessel's sector will be determined by:

- Suboption 1.2.1 The sector in which it has the highest level of participation during the years used for the sector definitions.
- Suboption 1.2.2 The sector in which it most recently participated during the years used for the sector definitions.

Component 2 (*Adapted from DP 26*) Vessels will be determined to be eligible for a given sector if they meet minimum landings requirements (see the next component) in the years selected from the following:

- Option 2.1 1995-1997
- Option 2.2 1995-2002
- Option 2.3 1997-2002
- Option 2.4 1998-2002
- Option 2.5 1999-2002
- Option 2.6 2000-2002

Component 3 (*Adapted from DP 8*) Vessels will be determined to be eligible for a given sector if, during the previously specified sets of years, the vessel meets the minimum landings criteria selected from the following:

- Option 3.1 100 mt
- Option 3.2 500 mt
- Option 3.3 1,000 mt

Issue 2: Sector Allocations of Groundfish in the BSAI

Sector-level apportionments of groundfish (excluding pollock and any other species for which an allocation could create a "squid-box situation") will be accomplished in the Bering Sea by choosing preferred options (and suboptions) from each of the four components listed below.

Component 4 (*DP 26.1*) For species other than pollock (allocated under AFA) and Pacific cod (see component 6), each sector shall be allocated the percentage of the TAC—after CDQ allocations have been deducted from the TACs—of each allocated species that is equal to the average over the years—specified in the options below—of the annual percentage of harvest by vessels in the sector, relative to the amount of that species harvested by all vessels in all sectors.¹

¹The equation describing the Total Allowable Catch for a given sector, species, and year is shown in the equation at right,

where:

x is the sector,

y is the species,

z is the year for which the allocation is to be determined,

n is the year used in the allocation determination (starting with year N_1 and ending with year N_2),

$C_{n,x,y}$ is the catch of species y by vessels in sector x in year n ,

$TAC_{y,z}$ is Total Allowable Catch for species y in year z , and

$$A(x, y, z) = TAC_{y,z} \cdot \frac{\sum_{n=N_1}^{N_2} \frac{C_{n,x,y}}{x}}{N_2 - N_1 + 1}$$

- Option 4.1 The average of annual catch percentages from 1995–1997 will be used.
- Option 4.2 The average of annual catch percentages from 1995–2002 will be used.
- Option 4.3 The average of annual catch percentages from 1995–2002 will be used, excluding 2000 because of the injunction.
- Option 4.4 The average of annual catch percentages from 1998–2002 will be used.
- Option 4.5 The average of annual catch percentages from 1998–2002 will be used, excluding 2000 because of the injunction.
- Option 4.6 The average of annual catch percentages from 2000–2002 will be used.

Component 5 (DP 26.5) For purposes of apportionments, annual catch percentages will be defined using one of the following:

- Option 5.1 Total catch of the sector over total catch by all sectors
- Option 5.2 Retained catch of the sector over retained catch by all sectors

Component 6 (DP 26.2) Pacific cod allocations will be determined as follows:

- Option 6.1 Pacific cod shall be allocated in the same method used in Component 4. This option would supercede all existing apportionments of Pacific cod in the BSAI, including splits among the fixed gear sectors. *It is presumed this was the intent of the Council when approving this option of the IRIU motion in April. If the Council's intent was to modify allocations to fixed gear as a single sector, then Council should provide additional guidance to the analytical team.*
- Option 6.2 Pacific cod shall be allocated based on apportions in regulation with an additional split of the Trawl CP apportionment as follows:
 - Non-AFA Trawl CPs will be allocated 18.3 percent of the Pacific cod TAC available for the after deduction for the CDQ program.
 - AFA Trawl CPs will be allocated 5.2 percent of the Pacific cod TAC available for the after deduction for the CDQ program.
- Option 6.3 (DP 26.2.2) Pacific cod shall be allocated based on splits currently in regulation, but reducing trawl CV and trawl CP apportionments and increasing the apportionment to the fixed gear sector by the average of the percentages of the TAC (after CDQ apportionments) that were rolled over from trawl to fixed gear during the years in the suboptions below. The increased allocation to the fixed gear sector would be divided among fixed gear sectors according to trawl rollover provisions in existing regulations.² Allocation of the remaining trawl CV and CP apportionments would be based on either Option 6.1 or 6.2.
 - Suboption 6.3.1 The average of annual catch percentages from 1995–1997 will be used.
 - Suboption 6.3.2 The average of annual catch percentages from 1995–2002 will be used.

$A(x,y,z)$ is the allocation for a given sector (x), species (y), and year (z).

²The current regulation (approved under Amendment 64) apportions 95 percent of trawl rollover to Longline CPs and 5 percent to Pot vessels. Amendment 77 which is slated to supercede Amendment 64, proposes to continue the same split of trawl rollovers.

- Suboption 6.3.3 The average of annual catch percentages from 1995–2002 will be used, excluding 2000 because of the injunction.
- Suboption 6.3.4 The average of annual catch percentages from 1998–2002 will be used, excluding 2000 because of the injunction.
- Suboption 6.3.5 The average of annual catch percentages from 2000–2002 will be used.
- Option 6.4 *(DP 26.2.3)* Pacific cod shall be allocated among fixed gear sectors based on the allocations approved in BSAI Amendment 77 (see Table 3.27 on page 110 of the public review draft of Amendment 77). Allocation of the Trawl apportionment between AFA and non-AFA sectors would be based on Option 6.1 or 6.2.

Component 7 *(DP 26.3)* CDQ Allocations shall be removed from the TACs prior to allocation to sectors at percentage amounts equal to one of the following.

- Option 7.1 7.5% of the TAC of each species in the program
- Option 7.2 10% of the TAC of each species in the program
- Option 7.3 15% of the TAC of each species in the program
- Option 7.4 20% of the TAC of each species in the program

Issue 3: Sector Allocations of Prohibited Species Catch Limits in the BSAI

Sector allocations of PSC Limits in the BSAI will be accomplished by choosing preferred options and suboptions from the following list of components.

Component 8 *(DP 27.1 paragraph 1)* Prohibited species bycatch allowances shall be initially assigned to fishery groups (e.g. the rock sole/flathead sole/other flatfish group) based on the relative bycatch apportionments for the years used to determine the groundfish sector apportionments, expressed as a percentage of the total PSC allowance. *(In other words a weighted average of the of the PSC apportionment to each fishery group would be estimated and express as a percentage of the the PSC)*

Option 8.1 *(DP 27.1 paragraph 2)* Each sector shall be initially assigned an amount of each PSC allowance by fishery group based on each sector's historic rates during the period used to determine groundfish apportionments, relative to the total use of the PSC allowance during that same period. For example, if the Non-AFA Trawl CPs used 40 percent of the halibut PSC used by the trawl fleet in the Pacific cod fishery during the period used to determine groundfish apportionments, the Non-AFA Trawl CPs would be initially assigned 40 percent of the halibut PSC initially assigned to Pacific cod trawl fisheries. The overall PSC allocations could be reduced or kept at current levels by one of applying the following percentages to the overall PSC limit.

- Suboption 8.1.1 60%
- Suboption 8.1.2 75%
- Suboption 8.1.3 90%
- Suboption 8.1.4 100%

Option 8.2 *(DP 27.2)* Apportion PSC allowances to sectors in proportion to groundfish apportionments to sectors determined above.

For example, if the Non-AFA Trawl CPs are allocated 33.9 percent of the trawl apportionment of Pacific cod, the Non-AFA Trawl CPs would be allocated 33.9 percent of the halibut PSC allowance made for trawl Pacific cod.

Amendment A-2: Establishment of a Non-AFA Trawl CP Cooperative Program

For the sake of simplicity, the IR/IU analytical team removed several components (formerly Decision Points) that were deemed non-essential for initiating the non-AFA Trawl CP Cooperative Program and by moving those components that do not have multiple options (DP 3 for example) to a preamble section that describes the purpose of the program.

The Purpose of the Non-AFA Trawl CP Cooperative Program

The purpose of the program is to reduce discards in the Non-AFA Trawl CP Sector by promulgating regulations that facilitate private negotiation of fishery cooperatives among vessels in that sector. When the race for fish is eliminated by the formation of a cooperative, fishermen are able to fish more cleanly (i.e., minimize their bycatch), as they can fish in a less hurried fashion and avoid or discontinue fishing in areas where the catch of unwanted species is high without losing any competitive advantage. Furthermore, a cooperative may encourage collective efforts by industry to reduce bycatch. For example, a cooperative may restrict the harvest of target species in areas of high bycatch to member vessels with low bycatch rates as an incentive to promote cleaner fishing practices. In addition, the infrastructure of a cooperatives facilitates the exchange of fishing information (e.g., the location on bycatch “hotspots”) among fishermen, which can lead to reductions in bycatch. Without the benefits offered by a cooperative it is unlikely that vessels in the Non-AFA Trawl CP Sector will be able to meet Council bycatch/discard reduction goals and still maintain economic viability.

This amendment divides the allocations of groundfish and/or PSC limits to the Non-AFA Trawl CP Sector between two pools of vessels—one pool is for vessels in the Non-AFA Trawl CP Sector that join a cooperative and the other is for vessels in the sector that choose to stay out of the cooperative system and fish in an “open access” fishery. Vessels in a given pool will be allowed to continue to participate in target fisheries subject to PSC limits as long as the pool’s PSC limits have not been attained. Similarly, vessels in a given pool will be allowed to continue to participate in target fisheries subject to attainment of groundfish catch limits. Once a pool has attained a particular PSC or groundfish catch limit, vessels in that pool will be restricted as per existing regulations.

Components of a Non-AFA Trawl CP Cooperative Program

There are alternative ways to design a Non-AFA Trawl CP Cooperative Program, but each way is made up of a set of decision points or components that when taken together define a program. Some of the program components have various options (under Component 1, for example, the groundfish species included in the program may vary), but other components do not. These “single-option” components are listed below.

- The Program would limit its scope to selected groundfish and prohibited species catches with trawl gear by vessels in the Non-AFA Trawl CP Sector in the BSAI. Groundfish species not included in the program as well as other non-specified fish species or marine resources would not be explicitly managed within the Program, although other regulations regarding these other marine resources would not be superseded. *(These features was previously included as DP 3 and DP 7.)*
- The Program will not supercede pollock and Pacific cod IRIU programs, nor will it supercede the Groundfish License Limitation Program. All vessels participating in the program will need to have trawl endorsements with general licenses for BSAI. Length limits within the license will also be enforced such that any new vessel entering the fishery may not exceed the Maximum Length Overall (MLOA) specified on the license. *(These features were previously referenced in DPs 18-20.)*
- Any non-trawl or non-BSAI catches of vessel that are considered part of the non-AFA Trawl CP Sector will not be included in the Program, but would not necessarily be excluded from other rationalization programs. *(This feature was previously DP 12.)*

- New PSC limits for the following species will be created and allocated to the non-AFA trawl catcher processor sector. (*This feature was previously DP 4.*)
 - BSAI non-AFA trawl catcher processor multi-species halibut cap consisting of an apportionment of species identified in Component 1.
 - BSAI non-AFA trawl catcher processor multi-species red king crab cap consisting of an apportionment of the current Pacific cod trawl cap and caps for the flatfish fisheries.
 - BSAI non-AFA trawl catcher processor multi-species snow crab (*C. opilio*) cap consisting of an apportionment of the current Pacific cod trawl cap and caps for the flatfish fisheries (includes apportionments of the trawl sablefish/turbot/arrowtooth limits).
 - BSAI non-AFA trawl catcher processor multi-species Tanner crab (*C. bairdi*) Zone 1 cap consisting of an apportionment of the current Pacific cod trawl cap and caps for the flatfish fisheries.
 - BSAI non-AFA trawl catcher processor multi-species Tanner crab (*C. bairdi*) Zone 2 cap consisting of an apportionment of the current Pacific cod trawl cap and caps for the flatfish fisheries.
- Because it is one of the fundamental reasons to form a cooperative, it is presumed that annual allocations to the cooperative that result from catch histories of participating vessel will be transferable among cooperative members. Such transfers would not need to be approved by NOAA Fisheries. (*This feature was previously DP 17.*) Any member vessel of the cooperative will be eligible to use the catch history of any other member vessel regardless of vessel length. (*This feature has been adapted from DP 19.*) Permanent transfers of catch histories are less fundamental to the cooperative, and therefore options regarding permanent transfers are included in the alternatives.
- A cooperative created under this program must have adequate internal rules. Evidence of binding private contracts and remedies for violations of contractual agreements are required to be provided to NOAA Fisheries. The cooperative must demonstrate an adequate mechanism for monitoring and reporting prohibited species and groundfish catch. Vessels participating in the cooperative must agree to abide by all cooperative rules and requirements. (*This feature was previously DP 23.1.*)
- Vessels participating in the open access portion of the program will be subject to all the same regulations they would be without the Program including all restrictions of the LLP and the Groundfish Retention Standards (Amendment C) if they are approved. (*This feature was previously DP 23.2.*)
- Specific requirements for reporting, monitoring and enforcement requirements, and observer protocols will be developed for vessels participating in the cooperative portion of the Program in rulemaking process and will not be the purview of the cooperative. Components recordkeeping and reporting portion of the program should be developed to ensure that goal and objectives of the program are met in a cost effective manner. The NPFMC and cooperatives need to specify their goals and objectives for in-season monitoring and for program evaluation. (*This feature was previously DP 24.*)
- Review of the non-Trawl CP program will be accomplished by requiring a detailed annual report from any cooperative formed. Fishery managers will review the annual report and determine if the program is functioning as desired. It is recommended that in-depth assessments of program could be undertaken under the auspices of the Council/NOAA Fisheries be undertaken periodically (every three years, for example). Such in-depth studies will report the accomplishments of the program and indicate whether any changes are necessary. (*This feature was previously DP 25.*)
- Socioeconomic data collection programs have been included in AFA, and crab rationalization

programs, and are proposed in the GOA Rationalization program. Therefore the analytical team assumes that a socioeconomic data collection initiative would be developed and implemented under the Non-AFA Trawl CP Cooperative Program. The collection would include cost, revenue, ownership and employment data on a periodic basis to provide the information necessary to study the impacts of the program. Details of the collection will be developed in the analysis of the alternatives.

Specific Components & Options that Combine to Create Alternative Non-AFA Trawl CP Programs

By choosing options from each of the following 12 components, the Council can develop specific alternative programs for the non-AFA Trawl CP Sector. The analytical team believes that the components and options below are the minimum necessary for the successful development of the Program. It is possible that some of the options listed could be eliminated by the Council at the June meeting in Kodiak, if it is determined that a particular option is unreasonable or impractical. It is also possible for the Council to add other options to this list as they desire. For each of comparison, the original decision point number is included for each of the remaining components.

- Component 1 Identifies which species will be allocated to the non-AFA trawl catcher processor sector. *(Formerly DP 1.)*
- Option 1.1 Include all groundfish species for which trawling is allowed, except pollock already allocated to AFA fishery cooperatives.
 - Suboption 1.1.1 Exclude certain species to prevent allocations that are so small that they preclude persons from harvesting their allocation of species that are typically taken in directed fisheries. Allocations of groundfish species that are excluded would be regulated as they are under the status quo.
 - Option 1.2 Include only the following target species—Pacific cod, yellowfin sole, rock sole, flathead sole, Atka mackerel, Greenland turbot, AI Pacific Ocean perch, Alaska plaice. Species could be added or deleted through an amendment process. Allocations of groundfish species that are excluded would be regulated as they are under the status quo.
 - Option 1.3 Include only PSC species. All groundfish species allocations would be regulated as in the status quo.
- Component 2 Determines the disposition of incidental catch allowances of pollock for the Non-AFA Trawl CP Sector. *(Formerly DP 2.)*
- Option 2.1 Status Quo: A predetermined percentage of the pollock TAC is set aside for use as incidental catch. Up until the point the incidental catch set-aside has been caught, all pollock must be retained up to the MRB amount. After the incidental catch set-aside has been caught, pollock can not be retained by non-AFA vessels. The MRA is monitored and enforced such that a violation at any point in time can be prosecuted.
 - Option 2.2 A predetermined percentage of the pollock TAC is set aside for use as incidental catch. Up until the point the incidental catch set-aside has been caught, all pollock must be retained up to the MRB amount. After the incidental catch set-aside has been caught, pollock can not be retained by non-AFA vessels. In addition, NOAA Fisheries manages ICA for pollock as it does now (Option 2.1) but adjusts the MRB

percentage to insure that the historical bycatch requirements of pollock in the non-pollock fisheries are not exceeded. MRB percentage adjustments can be made by NOAA Fisheries either in-season or inter-annually to discourage increased bycatch (incidental catch) of pollock should pollock harvest amounts indicate that this is occurring. The MRB percentage could be 0 - 49% subject to the stipulation that non-AFA vessels are not engaged in directed fishing for pollock at any point in their fishing trips. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries.

- Option 2.3 A predetermined percentage of the pollock TAC is set aside for use as incidental catch. Up until the point the incidental catch set-aside has been caught, all pollock must be retained up to the MRB amount. After the incidental catch set-aside has been caught, pollock can not be retained by non-AFA vessels. In addition, NOAA Fisheries manages ICA for pollock as it does now (Option 2.1) but adjusts the MRB percentage to insure that the historical bycatch requirements of pollock in the non-pollock fisheries are not exceeded. MRB percentage adjustments can be made by NOAA Fisheries either in-season or inter-annually to discourage increased bycatch (incidental catch) of pollock should pollock harvest amounts indicate that this is occurring. The MRB percentage could be 0 - 49% subject to the stipulation that non-AFA vessels are not engaged in directed fishing for pollock at any point in their fishing trips. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries. In addition, the way MRB compliance is accounted for in fishing trips could be modified. Currently, it is enforced at any point in a trip. Alternatively, enforcement of MRB compliance could occur at other time periods. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries.

Component 3 Establishes procedures for reducing prohibited species catch limits for the non-AFA Trawl CPs Sector. (*Formerly DP 5.*)

- Option 3.1 No change in overall amount of the current PSC limits.
- Option 3.2 Reductions in the PSC limit for halibut is accomplished by taxing in-season non-permanent transfers of PSC within the cooperative. The halibut PSC limit is restored to its original level the following year
- Suboption 3.2.1 Transfers of PSC after August 1 are not taxed .
 - Suboption 3.2.2 Only un-bundled transfers of PSC are taxed.
 - Suboption 3.2.3 Reduce halibut PSC limits by 5% when PSC limits are linked to estimated biomass levels.

Component 4 Determines how a GRS (Amendment C) is applied. (*Formerly DP 6.*)

- Option 4.1 Impose a GRS on the cooperative as an aggregate and on the open access vessels as individuals. If the cooperative cannot meet the standard in the aggregate over a period of two years then the standard would be imposed on individual vessels within the cooperative.
- Option 4.2 Impose a GRS on all individual vessels in the non-AFA Trawl CP sector from the outset.

Component 5 Identifies vessels in the non-AFA trawl CP sector. (*Formerly DP 8.*) Owners of each

qualified vessels would be issued a Sector Eligibility Endorsement that will be attached to the vessels LLP identifying it as a member of the non-AFA Trawl CP Sector. *(Formerly DP 10.)*

Option 5.1 Non-AFA Fishing vessels registered under MarAd regulations and any other vessels eligible to participate in fish harvesting in the Alaska EEZ.

Suboption 5.1.1 In addition, vessels must have caught with trawl gear and processed between 1998-2002

5.1.1.1 500 mt

5.1.1.2 1000 mt

Suboption 5.1.2 In addition, vessels must have caught with trawl gear and processed between 1997-2002

5.1.2.1 500 mt

5.1.2.2 1000 mt

The original list of sub-options included 100 mt and 150 mt, but subsequent analysis indicates that these lower levels have no impact on the number of qualified vessels and have therefore been dropped by the analytical team.

Component 6 Establishes the percentage of eligible non-AFA Trawl CPs that must join the cooperative before the cooperative is allowed to operate. No later than December 1 of each year, an application must be filed with NOAA fisheries by the cooperative with a membership list for the year. In order to operate as a cooperative, members, as a percent of eligible non-AFA Trawl CPs, must be...

Option 6.1 At least 51 percent.

Option 6.2 At least 67 percent.

Option 6.3 At least 75 percent.

Option 6.4 At least 80 percent.

Component 7 Determines the method of allocation of PSC limits and groundfish between the cooperative and open access pools. *(Formerly DP 13.1.)*

Option 7.1 Catch history is based on total catch

Option 7.2 Catch history is based on total retained catch

Component 8 Determines which years of catch history are used in the calculation. *(Formerly DP 13.2.)*

The allocation of groundfish between the cooperative and open access pool is proportional to the catch history of groundfish in the vessels included in each pool. Applicable PSC limits are allocated between the cooperative and open access pool in same proportions as those species that have associated PSC limits. The catch history as determined by the option selected under this component will be indicated on the Sector Eligibility Endorsement which indicates the vessel's membership in the Non-AFA Trawl CP Sector. The aggregate histories will then applied to whichever either the cooperative or the open access pool.

Option 8.1 1995-2002.

Option 8.2 1995-2002 but each vessel drops its lowest annual catch during this period.

Option 8.3 1998-2002.

Option 8.4 1998-2002 but each vessel drops its lowest annual catch during this period.

Option 8.5 1999-2002.

Option 8.6 1999-2002 but each vessel drops its lowest annual catch during this period.

- Option 8.7 2000-2002 will be used in the calculation.
 - Option 8.8 Catch history from 2000-2002 will be used in the calculation—each vessel will drop its lowest annual catch during this period.
- Component 9 Establishes restrictions on permanent transfers of Sector Eligibility Endorsements. *(Formerly DP 15.) It is presumed that annual allocations within a cooperative may be transferred among participating vessels.*
- Option 9.1 Sector Eligibility Endorsements are transferable with the associated Groundfish LLP. All transfers must reported to NOAA Fisheries in order to track who owns endorsements for purposes of determining cooperative and open access pool sizes.
 - Option 9.2 Sector Eligibility Endorsements and associated LLPs are not transferable for the first three years of the program. *(This option may be critical if a sector apportionment is not attained and an interim Program based only on PSCs is created.)*
- Component 10 Determines who may purchase a Sector Eligibility Endorsement. *(Formerly DP 16.)*
- Option 10.1 The purchaser must be eligible to own a fishing vessel under MarAd regulations or any person who is currently eligible to own a vessel.
 - Option 10.2 The purchaser must own a vessel that is eligible to join the cooperative.
- Component 11 Determines if excessive share limits are established in the non-AFA trawl catcher processor sector. *(Formerly DP 21.)*
- Option 11.1 There is no limit on the consolidation in the non-AFA trawl catcher processor sector.
 - Option 11.2 Consolidation in the non-AFA trawl CP sector is limited such that no single company can harvest more than a fixed percentage of the overall sector apportionment. Companies that exceed the cap in the initial allocation would be grandfathered.
- Component 12 Establishes measures to mitigate negative impacts of the cooperative on fisheries not included in the cooperative program (e.g. fisheries in the GOA). *(Formerly DP 22.)*
- Option 12.1 Sideboards for cooperative members would be established by regulation using the same years used to calculate the apportionment of PSC and groundfish between the cooperative and open access pool until such time as these other fisheries are rationalized.
 - Option 12.2 The cooperative is required to prohibit members in the aggregate from exceeding their maximum percent of harvests in other target fisheries. Sideboards would not be established by regulation. This restriction would be discussed in the annual report of the cooperative submitted to the Council and NOAA Fisheries.

Preliminary Identification of Alternative Actions for Amendment A-2

Based on various combinations of the program components described above, the IR/IU analytical team identified a number of possible alternative actions that could be considered in an EA/RIR/IRFA for Amendment A-2. In addition to the status quo/no action alternative (Alternative 1), three alternatives were identified that are designed to facilitate private negotiation of fishery cooperatives among vessels in the Non-AFA Trawl CP Sector. Two of these alternatives (Alternative 2 and Alternative 3) are similar in that they would both allocate groundfish as well as PSC limits to a cooperative, but the alternatives differ with respect to the amount of flexibility offered in the formation and operation of a cooperative. The third alternative (Alternative 4) would allocate only PSC limits to a cooperative.

All three alternatives that facilitate the formation of a cooperative involve a two-step allocation of groundfish and /or PSC limits. During the first step an allocation of the total allowable catches (TACs) for specified groundfish and PSC limits are made to the Non-AFA Trawl CP Sector (Amendment A-1). During the second step allocations made to the Non-AFA Trawl CP Sector are divided between vessels that join a cooperative and vessels that choose to stay out of the cooperative system and fish in an "open access" fishery.

While the three alternatives facilitating the formation of a cooperative have this two-step allocation process in common, they differ in terms of the species allocated to a cooperative; the eligibility criteria for cooperative membership; mandated bycatch reductions for eligible vessels; division of the allocation of groundfish and /or PSC limits to the non-AFA trawl catcher processor sector between the cooperative and open access pools; the minimum percentage of eligible vessels that must agree to form a cooperative before a cooperative is allowed to operate; transferability of eligibility permits; excessive share provisions; and imposition of sideboards. The differences/similarities among the alternatives are summarized in Table 1.

Table 1. Summary of Possible Alternatives to be Considered in an EA/RIR/IRFA for Amendment A-2.

	Alternative 2: More Flexible Measure	Alternative 3: Less Flexible Measure	Alternative 4: Prohibited Species Specific Measure
Groundfish species allocated to the Non-AFA Trawl Catcher Processor Sector	All groundfish species for which trawling is allowed except pollock allocated under AFA. Other species may be excluded to prevent allocations that are so small that they preclude persons from harvesting their allocation of species that are typically taken in directed fisheries.	Pacific cod, yellowfin sole, rock sole, flathead sole, Atka mackerel, Greenland turbot, AI Pacific Ocean perch, Alaska plaice. Species may be added or deleted by a FMP amendment.	None
Disposition of incidental catch allowances of pollock	No change from status quo except NOAA Fisheries may make in-season or inter-annually adjustments of the MRB percentage to insure that the historical bycatch requirements of pollock in the non-pollock fisheries are not exceeded. The MRB percentage could be 0 - 49 percent subject to the stipulation that non-AFA vessels are not engaged in directed fishing for pollock at any point in their fishing trips. Additionally, the way MRB compliance is accounted for in fishing trips could be modified.	No change from status quo	Same as Alternative 2
Disposition of groundfish species not allocated to the Non-AFA Trawl Catcher Processor Sector	No change from status quo	No change from status quo	No change from status quo
PSC limits allocated to the Non-AFA Trawl Catcher Processor Sector	Multi-species halibut, red king crab, snow crab (<i>C. opilio</i>), Tanner crab (<i>C. bairdi</i>) Zone 1 and Tanner crab (<i>C. bairdi</i>) Zone 2 limits consisting of an apportionment of the current Pacific cod trawl limits and limits for the flatfish fisheries.	Same as Alternative 2	Same as Alternative 2
Reductions in bycatch of species such as forage fish, grenadiers, corals, etc. and interactions with other marine resources and habitats	No bycatch limits for non-specified species or marine resources established. However, should unreasonable bycatch and interactions occur, specific regulations to minimize impacts will be considered.	Same as Alternative 2	Same as Alternative 2

	Alternative 2: More Flexible Measure	Alternative 3: Less Flexible Measure	Alternative 4: Prohibited Species Specific Measure
PSC limits for the Non-AFA Trawl Catcher Processor Sector	No change from status quo	The PSC limit for halibut is reduced by 5 percent when PSC limits are linked to estimated biomass levels.	The PSC limit for halibut is accomplished by taxing in-season un-bundled transfers of PSC limits within a cooperative. The halibut PSC limit is restored to its original level the following year. Transfers of PSC limits after August 1 are not taxed.
Application of proposed groundfish retention standard	The groundfish retention standard, if approved by the Council and Secretary, is applied to vessels in a cooperative as a group. For vessels that are eligible but choose not to join a cooperative, the standard is applied to each vessel. If a cooperative cannot meet the standard in the aggregate over a period of two years, the standard would be applied to each vessel in the cooperative.	The groundfish retention standard is applied to each vessel eligible to join a cooperative.	Same as Alternative 2
Definition of the Non-AFA Trawl Catcher Processor Sector (this component defines the eligibility criteria for cooperative membership)	Non-AFA vessels that meet the AFA requirements for ownership of a US fishing vessel as implemented in MarAd and USCG regulations (including vessels that were exempted under MarAd regulations) and caught with trawl gear and processed 1000 mt of groundfish between 1998-2002.	Non-AFA vessels that meet the AFA requirements for ownership of a US fishing vessel as implemented in MarAd and USCG regulations (including vessels that were exempted under MarAd regulations) and caught with trawl gear and processed 1000 mt of groundfish between 1997-2002.	Non-AFA vessels that meet the AFA requirements for ownership of a US fishing vessel as implemented in MarAd and USCG regulations (including vessels that were exempted under MarAd regulations) and caught with trawl gear and processed 500 mt of groundfish between 1997-2002.
Issuance of a Sector Eligibility Endorsement to vessels eligible to join a cooperative	Yes	Same as Alternative 2	Same as Alternative 2
Minimum percentage of eligible non-AFA trawl catcher processors that must join a cooperative before a cooperative is allowed to operate.	A minimum of 67 percent. A cooperative must annually submit an application with a membership list to NOAA Fisheries prior to December 1.	A minimum of 80 percent. A cooperative must annually submit an application with a membership list to NOAA Fisheries prior to December 1.	A minimum of 75 percent. A cooperative must annually submit an application with a membership list to NOAA Fisheries prior to December 1.
Division of the allocation to the Non-AFA Trawl Catcher Processor Sector between the cooperative and open access pools	The historical catch of specified groundfish of each vessel eligible to join a cooperative is determined based on retained catch from 2000-2002, but each vessel drops its lowest annual catch during this period. The aggregate histories are applied to whichever pool vessels choose. The allocations of PSC limits and specified groundfish are proportional to the aggregate histories in each pool.	The historical catch of specified groundfish of each vessel eligible to join a cooperative is determined based on total catch from 1998-2002, but each vessel drops its lowest annual catch during this period. The aggregate histories are applied to whichever pool vessels choose. The allocations of PSC limits and specified groundfish are proportional to the aggregate histories in each pool.	The historical catch of specified groundfish of each vessel eligible to join a cooperative is determined based on total catch from 1995-2002, but each vessel drops its lowest annual catch during this period. The aggregate histories are applied to whichever pool vessels choose. The allocation of PSC limits is proportional to the aggregate histories in each pool.

	Alternative 2: More Flexible Measure	Alternative 3: Less Flexible Measure	Alternative 4: Prohibited Species Specific Measure
Restrictions on transfers of annual allocations within a cooperative	Annual allocations are transferable within a cooperative and need not be approved by NOAA Fisheries	Same as Alternative 2	Same as Alternative 2
Relationship between Sector Eligibility Endorsement and catch history of all groundfish	Catch history of the original eligible vessel is attached to a Sector Eligibility Endorsement .	Same as Alternative 2	Same as Alternative 2
Groundfish LLP license required for a Sector Eligibility Endorsement	Yes	Same as Alternative 2	Same as Alternative 2
Application of LLP length designations and area endorsements	LLP length designations and area endorsements do not apply to vessels in a cooperative. LLP length designations and area endorsements apply to vessels that are eligible but choose not to join a cooperative.	LLP length designations and area endorsements apply to all vessels eligible to join a cooperative.	Same as Alternative 2
Restrictions on permanent transfers of Sector Eligibility Endorsements	Sector Eligibility Endorsements are transferable. Purchasers must own a vessel that meets the AFA requirements for ownership of a US fishing vessel as implemented in MarAd and USCG regulations (including vessels that were exempted under MarAd regulations). LLP licenses and endorsements must be transferred together. All transfers must be reported to NOAA Fisheries in order to determine cooperative and open access pool sizes.	Sector Eligibility Endorsements are transferable. Purchasers must own a Sector Eligibility Endorsement and a vessel that meets the AFA requirements for ownership of a US fishing vessel as implemented in MarAd and USCG regulations (including vessels that were exempted under MarAd regulations). LLP licenses and endorsements must be transferred together. All transfers must be reported to NOAA Fisheries in order to determine cooperative and open access pool sizes.	Sector Eligibility Endorsements are not transferable for the first three years of the program.
Restrictions on consolidation in the non-AFA trawl catcher processor sector	No excessive share limits.	No single individual, corporation or other entity may harvest, through a fishery cooperative or otherwise, more than a fixed percentage of the sector allocation. A grandfather provision will be included for companies that exceed the excessive share limit.	Not applicable as Sector Eligibility Endorsements are not transferable

	Alternative 2: More Flexible Measure	Alternative 3: Less Flexible Measure	Alternative 4: Prohibited Species Specific Measure
Measures to mitigate negative impacts of a cooperative on other fisheries	A cooperative is required to prohibit members in the aggregate from exceeding their maximum percent of harvests in other target fisheries. Sideboards are not established by regulation.	Sideboards for cooperative members are established by regulation using the same years used to calculate the apportionment of PSC limits and groundfish between the cooperative and open access pools until such time as other fisheries are rationalized.	Same as Alternative 2
Reporting, monitoring and enforcement requirements and observer protocols in a cooperative	Specific requirements for monitoring and enforcing PSC and groundfish limits including observer coverage, sampling protocols, and vessels reporting and recordkeeping requirements will be developed in rulemaking processes by NOAA Fisheries and the Council.	Same as Alternative 2	Same as Alternative 2
Internal rule-making in a cooperative	A cooperative must provide evidence of binding private contracts and remedies for violations of contractual agreements to NOAA Fisheries.	Same as Alternative 2	Same as Alternative 2
Mandatory data collection initiative would be developed and implemented. The collection would include cost, revenue, ownership and employment data on a periodic basis to provide the information necessary to study the impacts of the program.	Yes	Yes	Yes
Cooperative program review	A cooperative must submit a detailed annual report to NOAA fisheries and the Council. An in-depth assessment of the cooperative program will be undertaken by the Council and NOAA Fisheries after the third year of the program.	Same as Alternative 2	Same as Alternative 2

The EA/RIR/IRFA will examine the expected effects of each alternative relative to the baseline (what is likely to occur in the absence of the proposed action, i.e., the status quo).

In order to provide additional information on the predicted effects of the alternative actions considered, "finer scale" analyses will be performed for key components that constitute the alternatives. These additional analyses will be in the form of sensitivity analyses, that is, the values of key components will be systematically varied one at a time and the impact on expected effects evaluated. Specifically, the analysis will examine the impact of varying the following variables:

- pollock maximum retainable bycatch allowance.
- tax level applied to in-season un-bundled transfers of halibut PSC limits within a cooperative.
- minimum tonnage to be eligible for cooperative membership and years for determining catch history.
- minimum percentage of eligible non-AFA trawl catcher processors that must join a cooperative before a cooperative is allowed to operate.
- years for determining the catch history in the division of the allocation to the non-AFA trawl catcher processor sector between the cooperative and open access pools.
- maximum percentage of the sector allocation a single individual, corporation or other entity may harvest, through a fishery cooperative or otherwise.

Vessels That Appear to Qualify in the Non-AFA Trawl CP Sector

ALASKA JURIS	ALASKA WARRIOR	BEAGLE	ENTERPRISE	PROSPERITY ²
ALASKA RANGER	ALASKAN ROSE	BERING ENTERPRISE ²	GOLDEN FLEECE	REBECCA IRENE
ALASKA SPIRIT	ALLIANCE	CAPE HORN	HARVESTER ENTERPRISE ²	SEA POWER
ALASKA VICTORY	AMERICAN NO 1	CONSTELLATION	LEGACY	SEAFISHER ¹
ALASKA VOYAGER	ARICA ¹	DEFENDER ¹	OCEAN PEACE	SEAFREEZE ALASKA
U.S. INTREPID	UNIMAK	VAERDAL		

- Notes:
- 1) Grey shaded cells indicate vessels that are grandfathered in as US fishing vessels under MARAD and AFA.
 - 2) Three vessels, Harvester Enterprise, and Bering Enterprise, Prosperity participated at level that could qualify them as part of the sector in 1997, but from 1998 until now these vessels have not participated.
 - 3) Six Non-AFA vessels had trawl CP landings during 1997-2002, but did not qualify at 100mt (two were classified as Pot CPs - the others were from the Non-AFA HT-CP sector).
 - 4) One Non-AFA vessel had trawl CP landings during 1998-2002, but did not qualify.
 - 5) None of the vessels in the Non-AFA ST-FT CP class fished after 1997 and, therefore, would not qualify.

Qualified Non-AFA Trawl CPS Under Alternatives in Component 5 (and Former Decision Point 8)

Qualifying Years	Minimum Requirement of Tons Landed/Processed			
	100mt	150mt	500mt	1,000mt
1998-2002	25	25	25	24
1997-2002	28	28	28	27

Note: 100mt and 150mt levels have no impact on the number of vessels, and could be eliminated as options. This is the change contemplated in Component 5.

A Discussion of Squid-Box Issues

The Non-AFA Trawl CP Cooperative Program under development contains alternatives that would include different suites of groundfish species in the initial allocation. One reason identified for excluding some groundfish species is the concern that allocations of small amounts of a bycatch species could preclude cooperative members from harvesting their entire allotment of target species. Cooperative members would use up the small allotment with incidental catches, before the target species allotments could be harvested. In the CDQ program this became known as the "squid box", since the CDQ groups would finish their squid allotment before they could harvest all of the other more valuable target species that have a "natural" level of squid bycatch. This problem also surfaced again in the AFA cooperatives when squid was allocated to the pollock cooperatives based on retained catch. Because relatively small levels of squid bycatch are unavoidable in the pollock fishery and all most no squid was retained during the years used to determine the allocation, the necessary amount of squid needed to harvest the pollock allocation was not allocated to the cooperatives. The squid box problem would have been much less acute (or would have gone away completely) if the allocation had been based on total catch instead of retained catch.

In the Non-AFA Trawl CP Cooperative Program under consideration, the squid box problem will likely be an issue for some species if the allocation is based in retained catch. If allocations are based on total catch, sectors will be given credit for all of their catch during the qualifying years. Assuming, fishing patterns and bycatch rates are similar during the years used to determine the allocation and the future fishing years, the natural levels of bycatch needed prosecute a fishery should be issued when the allocation is based on historic total catch. Based on the information presented in Table A-1 of Appendix A, it appears that the Alaska plaice, other groundfish, and other flatfish categories would represent the most cause for squid box concerns for the Non-AFA Trawl CP Sector. The Non-AFA Trawl CP Sector would be allocated at least 8 percent less of the TAC when retained catch was used versus total catch. Species like squid were not explicitly included in those tables, and may also represent squid box problems if they are allocated individually based in retained catch.

The squid-box issue could be also be significant problem in the sector allocations if retained catches rather than total catches are used in the allocation. For example, the longline CP sector in their Pacific cod target fishery catch small amounts (less than 5 percent of total groundfish catch) of rock sole and yellowfin sole—discarding almost all of it. If the longline CP sector is allocated rock sole and yellowfin sole in the sector allocation based retained catch, and they were required to have sufficient amounts of these flatfish to cover their incidental catch, a squid-box situation would be created.

It appears that it is possible to overcome squid-box type problems with the judicious use of incidental catch allowances (ICAs) for each sector and maximum retainable allowances (MRAs).

Appendix A: Preliminary IRIU Amendment A Data

The tables presented in this section are intended to provide background information on BSAI groundfish harvests by vessel sector over the years 1995-2002. This information may be useful when considering various cooperative alternatives, however, these tables should be considered drafts.

The data in these tables is based on a compilation of data sets developed by staff at the NMFS Alaska Fisheries Science Center (AFSC). AFSC staff used ADF&G fishticket data for catcher vessels and NMFS Weekly Production Reports and Observer data for catcher/processors. The following bullets are presented to help the reader interpret the data:

1. CDQ harvests were excluded from all tables.
2. BSAI pollock harvests were excluded from all tables.
3. Only BSAI harvests are included in the tables.
4. Vessels were given a sector classification each year; and all of their catch (regardless of gear type used) was included in that class. Some tables show only the harvest by sector when trawl gear was used. Those annual catch tables note in the title that they are based on trawl gear harvests only.
5. Vessels were annually assigned to a sector. Therefore, the same vessel's catch could be included in different sectors if they were reclassified from one sector to another during the time period considered.

Translation table for the species codes included in the Appendix A tables.

Species Group	Definition of Species Group
AK-PLAICE	Alaska Plaice (BSAI)
ARTH	Arrowtooth Flounder (BSAI)
ATKA-BSAI	Atka Mackerel (for the entire BSAI)
FSOL	Flathead Sole (BSAI)
OFLT	Other Flatfish (BSAI)
ORCK	Other Rockfish (BSAI)
OTHER GF	Other Groundfish (BSAI)
PCOD	Pacific Cod (BSAI)
POP-AI	Pacific Ocean Perch (AI only)
POP-EBS	Pacific Ocean Perch (BS only)
RSOL	Rock Sole (BSAI)
SABL	Sablefish (BSAI)
SCNO	Sharpchin and Northern Rockfish (BSAI)
SRRE	Shortraker and Rougheye Rockfish (BSAI)
TURB	Greenland Turbot (BSAI)
YSOL	Yellowfin Sole (BSAI)

Translation table for the sector codes included in the Appendix A tables.

Sector	Definition of Sector
AFA 20	The 20 AFA catcher/processors
AFA 9	The 9 catcher/processors retired by the AFA
JIG-CV	Jig gear catcher vessels
LGL-CP	Longline Catcher/processors (freezer longliners)
LGL-CV	Longline catcher vessels
NON-AFA HT-CP	Non-AFA Head and Gut trawl catcher/processors
NON-AFA ST-FT-CP	Non-AFA surimi and fillet catcher/processors
POT-CP	Pot gear catcher/processors
POT-CV	Pot gear catcher vessels
TWL-CV	Trawl catcher vessels

Note: Vessels are annually reclassified based on their participation that year. They will be assigned to a sector for an entire year. However, in all sectors except "AFA 20", "AFA 9", and "Non-AFA ST-FT-CP" vessels could be assigned to more than one sector over the 1995-2002 time period considered in this Appendix.

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Table A.1: Annual Percentage of Total Catch (When Harvests by All Gear Types are Included) by Non-AFA HT-CP Sector, 1995-2002.

Species Group	Data	YEAR								
		1995	1996	1997	1998	1999	2000	2001	2002	Avg.
AK-PLAICE	% of Tons Reported	27.52%	55.00%	56.62%	83.92%	67.02%	76.78%	95.00%	96.55%	69.80%
	% of Tons Retained	18.81%	39.13%	30.59%	99.58%	5.56%	25.83%	19.64%	9.54%	31.08%
ARTH	% of Tons Reported	45.97%	53.18%	51.08%	70.17%	81.03%	77.94%	83.00%	78.91%	67.66%
	% of Tons Retained	32.62%	65.93%	64.09%	84.17%	88.42%	88.92%	92.66%	87.72%	75.57%
ATKA-BSAI	% of Tons Reported	85.02%	90.85%	80.68%	84.81%	98.56%	99.64%	99.36%	99.18%	92.26%
	% of Tons Retained	83.39%	89.96%	79.78%	84.01%	98.81%	99.99%	99.71%	99.48%	91.89%
FSOL	% of Tons Reported	61.04%	67.34%	73.63%	83.89%	85.95%	84.54%	86.19%	84.77%	78.42%
	% of Tons Retained	84.14%	88.30%	92.26%	94.31%	94.93%	92.23%	90.84%	91.76%	91.10%
OFLT	% of Tons Reported	68.24%	69.15%	65.05%	77.32%	92.69%	94.60%	95.90%	86.63%	81.20%
	% of Tons Retained	71.32%	72.05%	56.22%	67.70%	61.05%	85.61%	87.45%	88.37%	73.72%
ORCK	% of Tons Reported	31.06%	45.52%	23.14%	34.54%	69.17%	61.22%	65.07%	57.73%	48.43%
	% of Tons Retained	17.86%	40.29%	23.54%	24.16%	64.45%	66.33%	64.68%	66.68%	46.00%
OTHER GF	% of Tons Reported	26.39%	31.02%	29.18%	31.38%	38.25%	38.53%	35.31%	39.85%	33.74%
	% of Tons Retained	4.18%	2.21%	4.39%	11.23%	5.72%	24.22%	26.16%	22.18%	12.54%
PCOD	% of Tons Reported	14.75%	12.43%	11.94%	13.31%	15.14%	15.97%	15.40%	18.02%	14.62%
	% of Tons Retained	10.67%	9.29%	9.16%	13.37%	14.62%	15.93%	15.16%	17.76%	13.25%
POP-AI	% of Tons Reported	93.36%	97.66%	97.00%	98.90%	99.76%	99.84%	99.91%	99.96%	98.30%
	% of Tons Retained	95.42%	98.59%	99.25%	99.91%	99.95%	100.00%	100.00%	100.00%	99.14%
POP-EBS	% of Tons Reported	78.80%	87.43%	38.31%	35.58%	59.07%	84.17%	35.87%	14.71%	54.24%
	% of Tons Retained	95.41%	94.15%	30.40%	36.54%	52.08%	89.76%	55.71%	26.11%	60.02%
RSOL	% of Tons Reported	70.55%	73.69%	77.83%	78.88%	85.30%	89.26%	90.93%	91.81%	82.28%
	% of Tons Retained	82.20%	88.75%	86.44%	84.78%	96.71%	91.70%	93.15%	96.25%	90.00%
SABL	% of Tons Reported	13.16%	10.36%	6.11%	11.43%	23.28%	18.97%	20.02%	14.47%	14.73%
	% of Tons Retained	12.86%	10.54%	5.91%	11.35%	22.12%	17.37%	20.29%	13.93%	14.30%
SCNO	% of Tons Reported	89.15%	93.14%	81.32%	84.35%	97.49%	96.83%	95.86%	97.12%	91.91%
	% of Tons Retained	95.23%	99.32%	96.12%	99.15%	95.50%	99.49%	92.91%	93.79%	96.44%
SRRE	% of Tons Reported	68.62%	70.00%	88.42%	56.29%	64.60%	49.72%	64.81%	65.78%	66.03%
	% of Tons Retained	75.98%	81.52%	96.80%	80.87%	81.01%	76.33%	80.38%	84.47%	82.17%
TURB	% of Tons Reported	33.89%	23.16%	16.89%	15.39%	29.88%	27.74%	39.38%	27.11%	26.68%
	% of Tons Retained	41.82%	25.48%	18.83%	12.35%	26.54%	27.45%	36.78%	23.74%	26.62%
YSOL	% of Tons Reported	55.93%	55.15%	69.09%	77.61%	80.24%	86.88%	94.96%	95.28%	76.89%
	% of Tons Retained	51.39%	52.99%	69.64%	76.62%	78.05%	86.09%	95.95%	96.14%	75.86%

Source: Data set developed by AFSC from Blend and Fishticket files.

Notes: Pollock and CDQ harvests are excluded.

Table A.2: Annual Percentage of Total Catch (Made with Trawl Gear Only) by Non-AFA HT-CP Sector, 1995-2002.

Species Group	Data	YEAR								
		1995	1996	1997	1998	1999	2000	2001	2002	Avg.
AK-PLAICE	% of Tons Reported	27.52%	55.00%	56.62%	83.92%	67.02%	76.78%	95.00%	96.56%	69.80%
	% of Tons Retained	18.81%	39.13%	30.59%	99.58%	5.56%	25.80%	19.64%	9.54%	31.08%
ARTH	% of Tons Reported	60.68%	64.98%	73.41%	84.16%	94.12%	90.79%	93.71%	89.52%	81.42%
	% of Tons Retained	55.87%	79.49%	84.89%	89.03%	93.28%	90.65%	94.59%	92.43%	85.03%
ATKA-BSAI	% of Tons Reported	85.17%	90.93%	80.79%	84.98%	98.72%	99.99%	99.86%	99.40%	92.48%
	% of Tons Retained	83.39%	89.96%	79.78%	84.02%	98.82%	100.00%	99.96%	99.48%	91.93%
FSOL	% of Tons Reported	62.13%	68.45%	74.86%	85.23%	87.20%	85.81%	87.45%	86.75%	79.74%
	% of Tons Retained	84.27%	88.41%	92.52%	94.51%	95.03%	92.32%	90.93%	91.90%	91.24%
OFLT	% of Tons Reported	68.34%	69.25%	65.20%	77.54%	93.44%	95.59%	97.26%	90.54%	82.14%
	% of Tons Retained	71.32%	72.07%	56.22%	67.70%	61.19%	85.66%	88.57%	88.79%	73.94%
ORCK	% of Tons Reported	62.64%	84.09%	48.14%	67.04%	95.61%	94.77%	97.87%	95.90%	80.76%
	% of Tons Retained	67.06%	90.78%	79.74%	94.15%	98.17%	98.68%	98.44%	98.99%	90.75%
OTHER GF	% of Tons Reported	56.98%	53.31%	61.95%	72.89%	77.24%	80.25%	76.25%	80.52%	69.93%
	% of Tons Retained	18.28%	5.62%	15.04%	33.28%	15.68%	70.49%	47.29%	55.49%	32.64%
PCOD	% of Tons Reported	29.85%	26.55%	27.71%	31.61%	36.56%	38.49%	49.82%	42.34%	35.37%
	% of Tons Retained	25.67%	22.37%	23.15%	31.50%	35.64%	38.14%	49.30%	41.82%	33.45%
POP-AI	% of Tons Reported	93.37%	97.67%	97.00%	98.91%	99.76%	99.94%	99.95%	99.97%	98.32%
	% of Tons Retained	95.42%	98.59%	99.25%	99.91%	99.95%	100.00%	100.00%	100.00%	99.14%
POP-EBS	% of Tons Reported	80.01%	87.47%	38.34%	35.59%	59.14%	84.46%	35.94%	14.78%	54.47%
	% of Tons Retained	95.42%	94.15%	30.41%	36.54%	52.12%	89.91%	55.71%	26.26%	60.06%
RSOL	% of Tons Reported	70.61%	73.80%	77.88%	78.98%	85.42%	89.32%	91.03%	91.88%	82.36%
	% of Tons Retained	82.23%	88.76%	86.45%	84.79%	96.72%	91.70%	93.15%	96.26%	90.01%
SABL	% of Tons Reported	66.78%	88.92%	96.29%	95.69%	98.15%	99.14%	94.82%	91.33%	91.39%
	% of Tons Retained	65.33%	97.79%	97.59%	95.48%	97.83%	99.05%	95.53%	93.24%	92.73%
SCNO	% of Tons Reported	89.34%	93.48%	82.09%	85.69%	98.19%	98.24%	98.09%	98.06%	92.90%
	% of Tons Retained	95.28%	99.34%	96.20%	99.61%	95.69%	99.73%	94.59%	94.41%	96.86%
SRRE	% of Tons Reported	91.51%	91.72%	99.41%	98.60%	95.81%	96.85%	98.99%	96.43%	96.17%
	% of Tons Retained	93.28%	96.88%	99.85%	99.86%	96.68%	98.30%	99.14%	95.78%	97.47%
TURB	% of Tons Reported	69.86%	91.96%	88.20%	86.27%	98.04%	96.65%	97.68%	97.43%	90.76%
	% of Tons Retained	72.03%	98.88%	99.24%	94.88%	98.78%	98.97%	98.20%	97.52%	94.81%
YSOL	% of Tons Reported	55.99%	55.32%	69.19%	77.90%	80.51%	87.25%	95.96%	96.06%	77.27%
	% of Tons Retained	51.39%	52.99%	69.65%	76.63%	78.06%	86.11%	95.98%	96.16%	75.87%

Source: Data set developed by AFSC from Blend and Fishticket files.

Notes: Pollock and CDQ harvests are excluded.

Table A.3: Non-Trawl harvests included in each sector, 1995-2002 (harvest is reported in metric tons).

Species Group	Data	SECTOR									
		AFA 20	AFA 9	JIG-CV	LGL-CP	LGL-CV	NON-AFA HT-CP	NON-AFA ST-FT-CP	POT-CP	POT-CV	TWL-CV
AK-PLAICE	Total Tons	0	0	0	1	0	0	0	Conf.	0	0
	Retained Tons	0	0	0	0	0	0	0		0	0
ARTH	Total Tons	0	7	Conf.	14,452	2,005	0	0	20	272	0
	Retained Tons	0	0		1,376	4	0	0	0	3	0
ATKA-BSAI	Total Tons	0	0	13	746	2	0	0	12	271	0
	Retained Tons	0	0	0	150	0	0	0	3	0	0
FSOL	Total Tons	0	3	0	2,389	2	0	0	3	10	0
	Retained Tons	0	0	0	146	0	0	0	0	3	0
OFLT	Total Tons	0	0	0	552	1	0	0	2	9	0
	Retained Tons	0	0	0	18	0	0	0	0	2	0
ORCK	Total Tons	0	0	50	1,281	717	0	0	2	32	0
	Retained Tons	0	0	50	761	513	0	0	0	5	0
OTHER GF	Total Tons	0	38	Conf.	94,162	1,678	11	0	673	3,831	0
	Retained Tons	0	0		13,811	7	0	0	134	143	0
PCOD	Total Tons	0	436	1,704	765,710	4,828	73	0	31,523	122,294	0
	Retained Tons	0	430	1,695	744,809	2,827	73	0	31,188	121,433	0
POP-AI	Total Tons	0	0	0	14	0	0	0	0	0	0
	Retained Tons	0	0	0	0	0	0	0	0	0	0
POP-EBS	Total Tons	0	0	0	25	Conf.	0	0	0	1	0
	Retained Tons	0	0	0	2		0	0	0	0	0
RSOL	Total Tons	0	0	0	334	0	4	0	2	17	0
	Retained Tons	0	0	0	13	0	0	0	0	0	0
SABL	Total Tons	0	Conf.	2	4,847	4,835	0	0	3	568	0
	Retained Tons	0		2	4,004	4,697	0	0	2	560	0
SCNO	Total Tons	0	Conf.	0	384	3	0	0	1	5	0
	Retained Tons	0		0	9	0	0	0	0	0	0
SRRE	Total Tons	0	Conf.	0	1,447	314	0	0	2	2	0
	Retained Tons	0		0	543	65	0	0	0	0	0
TURB	Total Tons	0	Conf.	2	30,439	5,139	0	0	2	137	0
	Retained Tons	0		2	27,650	1,683	0	0	0	14	0
YSOL	Total Tons	0	0	0	2,340	0	0	0	303	400	0
	Retained Tons	0	0	0	87	0	0	0	9	7	0

Table A.4: Comparison of the Options under Component 4 for the Non-AFA HT-CP Sector (the H&G CP sector).

Species Group	Data	Options Under Component 4 (based on Avg. of sector's percent of annual harvest)					
		Option 4.1	Option 4.2	Option 4.3	Option 4.4	Option 4.5	Option 4.6
AK-PLAICE	% of Tons Reported	46.32%	69.67%	68.68%	83.78%	85.55%	89.44%
	% of Tons Retained	29.51%	31.08%	31.83%	32.03%	33.58%	18.34%
ARTH	% of Tons Reported	49.73%	65.40%	64.19%	76.77%	76.93%	79.95%
	% of Tons Retained	53.27%	72.40%	70.74%	87.97%	87.86%	89.77%
ATKA-BSAI	% of Tons Reported	85.51%	87.40%	87.06%	86.35%	86.16%	99.39%
	% of Tons Retained	84.37%	86.52%	86.15%	85.48%	85.29%	99.72%
FSOL	% of Tons Reported	66.74%	75.29%	74.74%	84.04%	84.23%	85.17%
	% of Tons Retained	88.02%	89.71%	89.70%	92.78%	92.92%	91.61%
OFLT	% of Tons Reported	67.21%	79.20%	77.54%	89.00%	87.73%	92.38%
	% of Tons Retained	66.45%	73.08%	71.47%	78.01%	76.12%	87.14%
ORCK	% of Tons Reported	33.15%	47.12%	45.50%	53.52%	52.89%	61.34%
	% of Tons Retained	27.23%	45.82%	42.95%	57.25%	54.98%	65.89%
OTHER GF	% of Tons Reported	28.71%	32.91%	32.32%	36.33%	35.88%	37.89%
	% of Tons Retained	3.59%	12.42%	10.77%	17.90%	16.32%	24.19%
PCOD	% of Tons Reported	12.97%	14.15%	14.01%	15.12%	15.05%	16.47%
	% of Tons Retained	9.67%	12.91%	12.57%	14.93%	14.82%	16.28%
POP-AI	% of Tons Reported	95.99%	97.61%	97.49%	99.35%	99.33%	99.90%
	% of Tons Retained	97.74%	99.04%	98.93%	99.97%	99.96%	100.00%
POP-EBS	% of Tons Reported	65.06%	50.82%	46.90%	45.57%	36.08%	44.92%
	% of Tons Retained	73.31%	60.01%	55.76%	52.04%	42.61%	57.19%
RSOL	% of Tons Reported	73.72%	80.45%	79.66%	86.56%	86.10%	90.67%
	% of Tons Retained	85.63%	88.79%	88.69%	92.49%	92.70%	93.70%
SABL	% of Tons Reported	9.86%	14.67%	14.07%	17.60%	17.27%	17.82%
	% of Tons Retained	9.74%	14.24%	13.80%	16.98%	16.89%	17.20%
SCNO	% of Tons Reported	87.87%	88.53%	88.32%	85.76%	85.68%	96.60%
	% of Tons Retained	96.89%	95.56%	95.26%	96.11%	95.29%	95.39%
SRRE	% of Tons Reported	75.65%	65.79%	68.14%	59.90%	62.54%	60.00%
	% of Tons Retained	84.74%	82.13%	82.97%	80.61%	81.68%	80.39%
TURB	% of Tons Reported	24.60%	26.51%	26.37%	27.84%	27.88%	31.40%
	% of Tons Retained	28.68%	26.54%	26.43%	25.37%	24.85%	29.32%
YSOL	% of Tons Reported	59.69%	74.61%	73.45%	86.71%	86.76%	92.37%
	% of Tons Retained	57.60%	73.60%	72.39%	86.57%	86.69%	92.73%

Table A.5: Component 4.1 - Average of annual harvest percentage by sector based on 1995-1997 catch.

Species Group	Data	SECTOR									
		AFA 20	AFA 9	JIG-CV	LGL-CP	LGL-CV	NON-AFA HT-CP	NON-AFA ST-FT-CP	POT-CP	POT-CV	TWL-CV
AK-PLAICE	% of Tons Reported	6.82%	0.41%	0.00%	0.00%	0.00%	46.32%	0.00%	0.00%	0.00%	46.45%
	% of Tons Retained	0.19%	0.00%	0.00%	0.00%	0.00%	29.51%	0.00%	0.00%	0.00%	70.30%
ARTH	% of Tons Reported	3.91%	4.18%	0.00%	21.06%	2.90%	49.73%	2.09%	0.01%	0.13%	15.99%
	% of Tons Retained	1.65%	0.87%	0.00%	27.21%	0.03%	53.27%	5.20%	0.00%	0.01%	11.75%
ATKA-BSAI	% of Tons Reported	4.16%	9.98%	0.02%	0.05%	0.00%	85.51%	0.00%	0.00%	0.07%	0.21%
	% of Tons Retained	4.36%	11.24%	0.00%	0.00%	0.00%	84.37%	0.00%	0.00%	0.00%	0.02%
FSOL	% of Tons Reported	9.38%	5.13%	0.00%	1.63%	0.00%	66.74%	2.67%	0.00%	0.02%	14.44%
	% of Tons Retained	4.77%	2.65%	0.00%	0.18%	0.00%	88.02%	0.71%	0.00%	0.01%	3.65%
OFLT	% of Tons Reported	17.21%	4.06%	0.00%	0.16%	0.00%	67.21%	1.22%	0.00%	0.01%	10.15%
	% of Tons Retained	18.43%	1.59%	0.00%	0.02%	0.00%	66.45%	0.37%	0.00%	0.00%	13.15%
ORCK	% of Tons Reported	8.48%	2.52%	2.71%	27.60%	17.95%	33.15%	0.86%	0.13%	0.92%	5.70%
	% of Tons Retained	2.01%	1.03%	4.82%	34.31%	26.65%	27.23%	0.00%	0.05%	0.64%	3.25%
OTHER GF	% of Tons Reported	6.02%	3.17%	0.00%	45.98%	0.97%	28.71%	1.54%	0.38%	1.85%	11.37%
	% of Tons Retained	7.54%	1.34%	0.00%	67.57%	0.01%	3.59%	0.63%	0.98%	0.82%	17.53%
PCOD	% of Tons Reported	4.51%	4.03%	0.14%	42.86%	0.32%	12.97%	1.76%	2.25%	7.66%	23.51%
	% of Tons Retained	3.01%	3.30%	0.16%	47.36%	0.13%	9.67%	1.16%	2.54%	8.68%	23.99%
POP-AI	% of Tons Reported	2.12%	1.61%	0.00%	0.00%	0.00%	95.99%	0.06%	0.00%	0.00%	0.21%
	% of Tons Retained	1.91%	0.15%	0.00%	0.00%	0.00%	97.74%	0.06%	0.00%	0.00%	0.14%
POP-EBS	% of Tons Reported	1.18%	0.81%	0.00%	0.49%	0.00%	65.06%	6.86%	0.00%	0.03%	25.56%
	% of Tons Retained	0.16%	0.02%	0.00%	0.01%	0.00%	73.31%	0.01%	0.00%	0.00%	26.49%
RSOL	% of Tons Reported	7.41%	3.33%	0.00%	0.09%	0.00%	73.72%	1.20%	0.00%	0.01%	14.24%
	% of Tons Retained	6.69%	2.47%	0.00%	0.01%	0.00%	85.63%	0.57%	0.00%	0.00%	4.61%
SABL	% of Tons Reported	0.10%	0.05%	0.00%	46.30%	40.77%	9.86%	0.33%	0.00%	0.31%	2.28%
	% of Tons Retained	0.11%	0.03%	0.00%	42.71%	44.60%	9.74%	0.36%	0.00%	0.30%	2.14%
SCNO	% of Tons Reported	4.97%	5.99%	0.00%	0.48%	0.00%	87.87%	0.00%	0.00%	0.02%	0.67%
	% of Tons Retained	0.37%	2.41%	0.00%	0.05%	0.00%	96.89%	0.00%	0.00%	0.00%	0.28%
SRRE	% of Tons Reported	3.56%	0.49%	0.01%	14.87%	5.05%	75.65%	0.05%	0.00%	0.02%	0.31%
	% of Tons Retained	2.52%	0.09%	0.02%	9.78%	2.68%	84.74%	0.01%	0.00%	0.02%	0.13%
TURB	% of Tons Reported	0.92%	0.37%	0.00%	53.18%	15.75%	24.60%	0.62%	0.00%	0.01%	4.56%
	% of Tons Retained	0.64%	0.19%	0.00%	60.69%	4.98%	28.68%	0.31%	0.00%	0.00%	4.51%
YSOL	% of Tons Reported	25.02%	4.33%	0.00%	0.10%	0.00%	59.69%	1.81%	0.02%	0.07%	8.94%
	% of Tons Retained	26.02%	3.95%	0.00%	0.01%	0.00%	57.60%	2.08%	0.00%	0.00%	10.34%

Table A.6: Component 4.2 - Average of annual harvest percentage by sector based on 1995-2002 catch.

Species Group	Data	SECTOR									
		AFA 20	AFA 9	JIG-CV	LGL-CP	LGL-CV	NON-AFA HT-CP	NON-AFA ST-FT-CP	POT-CP	POT-CV	TWL-CV
AK-PLAICE	% of Tons Reported	11.69%	0.31%	0.00%	0.00%	0.00%	69.67%	0.00%	0.00%	0.00%	18.33%
	% of Tons Retained	38.43%	0.00%	0.00%	0.00%	0.00%	31.08%	0.00%	0.00%	0.00%	30.49%
ARTH	% of Tons Reported	3.04%	3.62%	0.00%	14.64%	2.06%	65.40%	2.04%	0.02%	0.28%	8.90%
	% of Tons Retained	2.28%	0.78%	0.00%	12.29%	0.02%	72.40%	5.07%	0.00%	0.01%	7.15%
ATKA-BSAI	% of Tons Reported	1.61%	10.51%	0.02%	0.16%	0.00%	87.40%	0.00%	0.00%	0.05%	0.24%
	% of Tons Retained	1.68%	11.69%	0.00%	0.03%	0.00%	86.52%	0.00%	0.00%	0.00%	0.07%
FSOL	% of Tons Reported	7.41%	4.09%	0.00%	1.57%	0.00%	75.29%	2.58%	0.00%	0.01%	9.03%
	% of Tons Retained	4.13%	1.98%	0.00%	0.15%	0.00%	89.71%	0.70%	0.00%	0.00%	3.33%
OFLT	% of Tons Reported	8.22%	3.13%	0.00%	1.00%	0.00%	79.20%	1.19%	0.00%	0.02%	7.24%
	% of Tons Retained	8.66%	1.19%	0.00%	0.24%	0.00%	73.08%	0.36%	0.00%	0.02%	16.45%
ORCK	% of Tons Reported	3.76%	4.13%	1.25%	25.09%	13.48%	47.12%	0.84%	0.06%	0.64%	3.62%
	% of Tons Retained	1.05%	0.77%	2.30%	29.66%	18.55%	45.82%	0.00%	0.02%	0.25%	1.57%
OTHER GF	% of Tons Reported	4.36%	2.62%	0.00%	47.06%	0.84%	32.91%	1.51%	0.34%	1.99%	8.36%
	% of Tons Retained	8.08%	1.01%	0.00%	61.44%	0.03%	12.42%	0.62%	0.62%	0.87%	14.90%
PCOD	% of Tons Reported	3.47%	3.83%	0.10%	46.35%	0.29%	14.15%	1.72%	1.85%	7.33%	20.90%
	% of Tons Retained	2.93%	3.32%	0.11%	48.25%	0.19%	12.91%	1.14%	1.99%	7.83%	21.34%
POP-AI	% of Tons Reported	0.88%	1.30%	0.00%	0.02%	0.00%	97.61%	0.06%	0.00%	0.00%	0.12%
	% of Tons Retained	0.73%	0.11%	0.00%	0.00%	0.00%	99.04%	0.06%	0.00%	0.00%	0.06%
POP-EBS	% of Tons Reported	15.46%	0.79%	0.00%	0.30%	0.00%	50.82%	6.74%	0.00%	0.03%	25.85%
	% of Tons Retained	9.48%	0.01%	0.00%	0.10%	0.00%	60.01%	0.01%	0.00%	0.01%	30.38%
RSOL	% of Tons Reported	6.14%	2.69%	0.00%	0.09%	0.00%	80.45%	1.18%	0.00%	0.00%	9.45%
	% of Tons Retained	6.18%	1.84%	0.00%	0.01%	0.00%	88.79%	0.56%	0.00%	0.00%	2.62%
SABL	% of Tons Reported	0.07%	0.04%	0.07%	40.27%	39.37%	14.67%	0.33%	0.05%	3.86%	1.27%
	% of Tons Retained	0.06%	0.02%	0.08%	37.16%	42.67%	14.24%	0.36%	0.06%	4.18%	1.17%
SCNO	% of Tons Reported	2.29%	7.33%	0.00%	0.99%	0.01%	88.53%	0.00%	0.00%	0.02%	0.83%
	% of Tons Retained	1.55%	1.81%	0.01%	0.43%	0.00%	95.56%	0.00%	0.00%	0.00%	0.65%
SRRE	% of Tons Reported	2.25%	0.51%	0.01%	25.41%	5.68%	65.79%	0.05%	0.07%	0.07%	0.16%
	% of Tons Retained	2.00%	0.07%	0.01%	14.15%	1.55%	82.13%	0.01%	0.00%	0.01%	0.08%
TURB	% of Tons Reported	0.75%	0.34%	0.02%	59.73%	9.66%	26.51%	0.62%	0.00%	0.40%	1.97%
	% of Tons Retained	0.42%	0.14%	0.02%	66.82%	3.88%	26.54%	0.31%	0.00%	0.04%	1.82%
YSOL	% of Tons Reported	15.90%	3.27%	0.00%	0.35%	0.00%	74.61%	1.77%	0.04%	0.05%	4.01%
	% of Tons Retained	16.99%	2.90%	0.00%	0.01%	0.00%	73.60%	2.03%	0.00%	0.00%	4.47%

Table A-7: Component 4.3 - Average annual harvest by sector based on 1995-2002 catch, minus the 2000 catch.

Species Group	Data	SECTOR									
		AFA 20	AFA 9	JIG-CV	LGL-CP	LGL-CV	NON-AFA HT-CP	NON-AFA ST-FT-CP	POT-CP	POT-CV	TWL-CV
AK-PLAICE	% of Tons Reported	10.46%	0.31%	0.00%	0.00%	0.00%	68.68%	0.00%	0.00%	0.00%	20.54%
	% of Tons Retained	35.56%	0.00%	0.00%	0.00%	0.00%	31.83%	0.00%	0.00%	0.00%	32.61%
ARTH	% of Tons Reported	3.10%	3.63%	0.00%	15.03%	2.16%	64.19%	2.05%	0.02%	0.32%	9.49%
	% of Tons Retained	2.35%	0.78%	0.00%	13.82%	0.02%	70.74%	5.09%	0.00%	0.02%	7.19%
ATKA-BSAI	% of Tons Reported	1.86%	10.59%	0.02%	0.14%	0.00%	87.06%	0.00%	0.00%	0.05%	0.28%
	% of Tons Retained	1.94%	11.79%	0.00%	0.04%	0.00%	86.15%	0.00%	0.00%	0.00%	0.09%
FSOL	% of Tons Reported	7.73%	4.11%	0.00%	1.60%	0.00%	74.74%	2.59%	0.00%	0.01%	9.21%
	% of Tons Retained	4.37%	1.98%	0.00%	0.15%	0.00%	89.70%	0.70%	0.00%	0.00%	3.09%
OFLT	% of Tons Reported	9.31%	3.13%	0.00%	1.00%	0.00%	77.54%	1.19%	0.00%	0.02%	7.80%
	% of Tons Retained	9.82%	1.20%	0.00%	0.27%	0.00%	71.47%	0.36%	0.00%	0.01%	16.87%
ORCK	% of Tons Reported	4.05%	4.14%	1.41%	25.21%	14.26%	45.50%	0.84%	0.06%	0.59%	3.94%
	% of Tons Retained	1.09%	0.77%	2.59%	30.80%	19.71%	42.95%	0.00%	0.02%	0.28%	1.78%
OTHER GF	% of Tons Reported	4.43%	2.62%	0.00%	47.26%	0.82%	32.32%	1.52%	0.36%	1.85%	8.82%
	% of Tons Retained	8.51%	1.01%	0.00%	61.11%	0.02%	10.77%	0.62%	0.70%	0.92%	16.35%
PCOD	% of Tons Reported	3.70%	3.85%	0.11%	46.58%	0.25%	14.01%	1.72%	1.92%	7.15%	20.72%
	% of Tons Retained	3.07%	3.33%	0.12%	48.73%	0.15%	12.57%	1.14%	2.07%	7.68%	21.14%
POP-AI	% of Tons Reported	1.00%	1.31%	0.00%	0.01%	0.00%	97.49%	0.06%	0.00%	0.00%	0.13%
	% of Tons Retained	0.83%	0.11%	0.00%	0.00%	0.00%	98.93%	0.06%	0.00%	0.00%	0.07%
POP-EBS	% of Tons Reported	16.27%	0.79%	0.00%	0.30%	0.00%	46.90%	6.75%	0.00%	0.03%	28.94%
	% of Tons Retained	10.14%	0.01%	0.00%	0.09%	0.00%	55.76%	0.01%	0.00%	0.01%	33.97%
RSOL	% of Tons Reported	6.20%	2.69%	0.00%	0.10%	0.00%	79.66%	1.18%	0.00%	0.01%	10.17%
	% of Tons Retained	6.17%	1.85%	0.00%	0.01%	0.00%	88.69%	0.56%	0.00%	0.00%	2.72%
SABL	% of Tons Reported	0.07%	0.04%	0.07%	40.01%	40.39%	14.07%	0.33%	0.05%	3.54%	1.43%
	% of Tons Retained	0.06%	0.02%	0.08%	36.76%	43.72%	13.80%	0.36%	0.06%	3.82%	1.32%
SCNO	% of Tons Reported	2.54%	7.37%	0.00%	0.94%	0.01%	88.32%	0.00%	0.00%	0.02%	0.79%
	% of Tons Retained	1.73%	1.81%	0.00%	0.46%	0.00%	95.26%	0.00%	0.00%	0.00%	0.74%
SRRE	% of Tons Reported	2.34%	0.51%	0.01%	23.73%	4.89%	68.14%	0.05%	0.07%	0.07%	0.18%
	% of Tons Retained	2.10%	0.07%	0.01%	13.09%	1.66%	82.97%	0.01%	0.00%	0.01%	0.09%
TURB	% of Tons Reported	0.78%	0.34%	0.02%	58.80%	10.45%	26.37%	0.62%	0.00%	0.43%	2.19%
	% of Tons Retained	0.46%	0.14%	0.02%	66.33%	4.20%	26.43%	0.31%	0.00%	0.04%	2.07%
YSOL	% of Tons Reported	16.81%	3.28%	0.00%	0.35%	0.00%	73.45%	1.78%	0.03%	0.05%	4.25%
	% of Tons Retained	17.90%	2.90%	0.00%	0.01%	0.00%	72.39%	2.04%	0.00%	0.00%	4.76%

Table A.8: Component 4.4 - Average of annual harvest percentage by sector based on 1998-2002 catch.

Species Group	Data	SECTOR								
		AFA 20	AFA 9	JIG-CV	LGL-CP	LGL-CV	NON-AFA HT-CP	POT-CP	POT-CV	TWL-CV
AK-PLAICE	% of Tons Reported	14.64%	0.11%	0.00%	0.00%	0.00%	83.78%	0.00%	0.00%	1.47%
	% of Tons Retained	61.37%	0.00%	0.00%	0.00%	0.00%	32.03%	0.00%	0.00%	6.60%
ARTH	% of Tons Reported	2.61%	2.30%	0.00%	11.31%	1.62%	76.77%	0.03%	0.39%	4.98%
	% of Tons Retained	2.79%	0.57%	0.00%	3.89%	0.02%	87.97%	0.00%	0.02%	4.74%
ATKA-BSAI	% of Tons Reported	0.21%	12.93%	0.00%	0.22%	0.00%	86.35%	0.00%	0.04%	0.26%
	% of Tons Retained	0.21%	14.16%	0.00%	0.05%	0.00%	85.48%	0.00%	0.00%	0.10%
FSOL	% of Tons Reported	6.59%	1.52%	0.00%	1.61%	0.00%	84.04%	0.00%	0.00%	6.24%
	% of Tons Retained	3.84%	0.05%	0.00%	0.13%	0.00%	92.78%	0.00%	0.00%	3.21%
OFLT	% of Tons Reported	3.10%	0.60%	0.00%	1.54%	0.00%	89.00%	0.00%	0.02%	5.74%
	% of Tons Retained	2.90%	0.03%	0.00%	0.38%	0.00%	78.01%	0.00%	0.03%	18.64%
ORCK	% of Tons Reported	1.00%	8.75%	0.40%	22.93%	10.57%	53.52%	0.01%	0.47%	2.35%
	% of Tons Retained	0.48%	0.02%	0.80%	27.05%	13.81%	57.25%	0.00%	0.01%	0.57%
OTHER GF	% of Tons Reported	3.49%	1.14%	0.00%	49.01%	0.78%	36.33%	0.33%	2.13%	6.80%
	% of Tons Retained	8.52%	0.05%	0.00%	58.62%	0.04%	17.90%	0.42%	0.92%	13.54%
PCOD	% of Tons Reported	2.93%	3.59%	0.07%	49.29%	0.27%	15.12%	1.66%	7.29%	19.77%
	% of Tons Retained	2.90%	3.60%	0.07%	49.20%	0.23%	14.93%	1.68%	7.40%	19.98%
POP-AI	% of Tons Reported	0.14%	0.41%	0.00%	0.03%	0.00%	99.35%	0.00%	0.00%	0.07%
	% of Tons Retained	0.02%	0.00%	0.00%	0.00%	0.00%	99.97%	0.00%	0.00%	0.01%
POP-EBS	% of Tons Reported	25.47%	0.83%	0.00%	0.21%	0.00%	45.57%	0.01%	0.03%	27.88%
	% of Tons Retained	15.08%	0.00%	0.00%	0.15%	0.00%	52.04%	0.00%	0.02%	32.72%
RSOL	% of Tons Reported	5.54%	0.97%	0.00%	0.10%	0.00%	86.56%	0.00%	0.00%	6.83%
	% of Tons Retained	6.00%	0.03%	0.00%	0.00%	0.00%	92.49%	0.00%	0.00%	1.47%
SABL	% of Tons Reported	0.05%	0.00%	0.14%	36.78%	38.66%	17.60%	0.10%	6.00%	0.66%
	% of Tons Retained	0.03%	0.00%	0.16%	33.95%	41.66%	16.98%	0.11%	6.52%	0.60%
SCNO	% of Tons Reported	0.74%	11.35%	0.00%	1.23%	0.02%	85.76%	0.00%	0.01%	0.88%
	% of Tons Retained	2.28%	0.07%	0.01%	0.66%	0.00%	96.11%	0.00%	0.00%	0.87%
SRRE	% of Tons Reported	1.47%	0.58%	0.00%	31.70%	6.05%	59.90%	0.14%	0.09%	0.07%
	% of Tons Retained	1.69%	0.00%	0.00%	16.78%	0.87%	80.61%	0.01%	0.00%	0.04%
TURB	% of Tons Reported	0.65%	0.26%	0.02%	64.08%	6.08%	27.84%	0.01%	0.64%	0.42%
	% of Tons Retained	0.30%	0.00%	0.02%	70.80%	3.23%	25.37%	0.00%	0.06%	0.21%
YSOL	% of Tons Reported	11.08%	0.40%	0.00%	0.51%	0.00%	86.71%	0.05%	0.04%	1.20%
	% of Tons Retained	12.29%	0.00%	0.00%	0.02%	0.00%	86.57%	0.00%	0.00%	1.12%

Table A-9: Component 4.5 - Catch fractions by sector based on 1998-2002 catch, minus 2000 catch.

Species Group	Data	SECTOR								
		AFA 20	AFA 9	JIG-CV	LGL-CP	LGL-CV	NON-AFA HT-CP	POT-CP	POT-CV	TWL-CV
AK-PLAICE	% of Tons Reported	13.21%	0.11%	0.00%	0.00%	0.00%	85.55%	0.00%	0.00%	1.12%
	% of Tons Retained	62.08%	0.00%	0.00%	0.00%	0.00%	33.58%	0.00%	0.00%	4.34%
ARTH	% of Tons Reported	2.59%	2.30%	0.00%	11.03%	1.69%	76.93%	0.03%	0.47%	4.96%
	% of Tons Retained	3.01%	0.57%	0.00%	4.40%	0.01%	87.86%	0.00%	0.02%	4.12%
ATKA-BSAI	% of Tons Reported	0.26%	13.01%	0.00%	0.20%	0.00%	86.16%	0.00%	0.04%	0.32%
	% of Tons Retained	0.26%	14.26%	0.00%	0.06%	0.00%	85.29%	0.00%	0.00%	0.13%
FSOL	% of Tons Reported	6.87%	1.52%	0.00%	1.66%	0.00%	84.23%	0.01%	0.00%	5.72%
	% of Tons Retained	4.16%	0.05%	0.00%	0.14%	0.00%	92.92%	0.00%	0.00%	2.73%
OFLT	% of Tons Reported	3.68%	0.60%	0.00%	1.67%	0.00%	87.73%	0.00%	0.03%	6.29%
	% of Tons Retained	3.48%	0.03%	0.00%	0.47%	0.00%	76.12%	0.00%	0.03%	19.87%
ORCK	% of Tons Reported	0.83%	8.78%	0.46%	22.83%	11.26%	52.89%	0.02%	0.34%	2.59%
	% of Tons Retained	0.41%	0.02%	0.93%	28.34%	14.62%	54.98%	0.00%	0.01%	0.69%
OTHER GF	% of Tons Reported	3.36%	1.14%	0.00%	49.48%	0.73%	35.88%	0.36%	1.89%	7.15%
	% of Tons Retained	9.35%	0.05%	0.00%	57.08%	0.02%	16.32%	0.49%	1.00%	15.69%
PCOD	% of Tons Reported	3.17%	3.60%	0.08%	50.21%	0.20%	15.05%	1.72%	6.91%	19.06%
	% of Tons Retained	3.14%	3.60%	0.08%	50.19%	0.16%	14.82%	1.74%	7.02%	19.25%
POP-AI	% of Tons Reported	0.18%	0.41%	0.00%	0.01%	0.00%	99.33%	0.00%	0.00%	0.07%
	% of Tons Retained	0.03%	0.00%	0.00%	0.00%	0.00%	99.96%	0.00%	0.00%	0.01%
POP-EBS	% of Tons Reported	29.22%	0.84%	0.00%	0.18%	0.00%	36.08%	0.01%	0.03%	33.65%
	% of Tons Retained	17.63%	0.00%	0.00%	0.15%	0.00%	42.61%	0.00%	0.02%	39.60%
RSOL	% of Tons Reported	5.44%	0.97%	0.00%	0.11%	0.00%	86.10%	0.00%	0.00%	7.37%
	% of Tons Retained	5.90%	0.03%	0.00%	0.01%	0.00%	92.70%	0.00%	0.00%	1.36%
SABL	% of Tons Reported	0.05%	0.00%	0.14%	35.42%	40.24%	17.27%	0.10%	5.97%	0.80%
	% of Tons Retained	0.03%	0.00%	0.16%	32.42%	43.21%	16.89%	0.11%	6.47%	0.72%
SCNO	% of Tons Reported	0.79%	11.42%	0.00%	1.23%	0.01%	85.68%	0.00%	0.01%	0.85%
	% of Tons Retained	2.78%	0.07%	0.00%	0.77%	0.00%	95.29%	0.00%	0.00%	1.09%
SRRE	% of Tons Reported	1.44%	0.58%	0.00%	30.35%	4.77%	62.54%	0.14%	0.09%	0.09%
	% of Tons Retained	1.78%	0.00%	0.00%	15.58%	0.90%	81.68%	0.01%	0.00%	0.05%
TURB	% of Tons Reported	0.68%	0.26%	0.02%	63.42%	6.56%	27.88%	0.01%	0.75%	0.43%
	% of Tons Retained	0.32%	0.00%	0.02%	70.86%	3.64%	24.85%	0.00%	0.06%	0.24%
YSOL	% of Tons Reported	11.30%	0.40%	0.00%	0.55%	0.00%	86.76%	0.04%	0.04%	0.90%
	% of Tons Retained	12.54%	0.00%	0.00%	0.02%	0.00%	86.69%	0.00%	0.00%	0.76%

Table A.10: Component 4.6 - Average of annual harvest percentage by sector based on 2000-2002 catch.

Species Group	Data	SECTOR							
		AFA 20	JIG-CV	LGL-CP	LGL-CV	NON-AFA HT-CP	POT-CP	POT-CV	TWL-CV
AK-PLAICE	% of Tons Reported	9.56%	0.00%	0.00%	0.00%	89.44%	0.00%	0.00%	0.99%
	% of Tons Retained	75.64%	0.00%	0.00%	0.00%	18.34%	0.00%	0.00%	6.02%
ARTH	% of Tons Reported	2.00%	0.00%	10.97%	0.87%	79.95%	0.04%	0.60%	5.57%
	% of Tons Retained	2.29%	0.00%	2.98%	0.02%	89.77%	0.00%	0.01%	4.93%
ATKA-BSAI	% of Tons Reported	0.01%	0.00%	0.30%	0.00%	99.39%	0.00%	0.06%	0.24%
	% of Tons Retained	0.00%	0.00%	0.09%	0.00%	99.72%	0.00%	0.00%	0.19%
FSOL	% of Tons Reported	6.40%	0.00%	1.73%	0.00%	85.17%	0.01%	0.00%	6.70%
	% of Tons Retained	4.11%	0.00%	0.11%	0.00%	91.61%	0.00%	0.00%	4.17%
OFLT	% of Tons Reported	0.88%	0.00%	2.21%	0.00%	92.38%	0.01%	0.03%	4.49%
	% of Tons Retained	1.45%	0.00%	0.59%	0.00%	87.14%	0.00%	0.01%	10.81%
ORCK	% of Tons Reported	1.13%	0.45%	20.41%	14.75%	61.34%	0.02%	0.60%	1.29%
	% of Tons Retained	0.63%	0.72%	17.40%	15.11%	65.89%	0.00%	0.01%	0.24%
OTHER GF	% of Tons Reported	3.23%	0.00%	48.78%	0.90%	37.89%	0.36%	2.03%	6.80%
	% of Tons Retained	6.22%	0.00%	56.15%	0.07%	24.19%	0.31%	0.26%	12.81%
PCOD	% of Tons Reported	2.16%	0.06%	51.52%	0.40%	16.47%	1.63%	8.10%	19.68%
	% of Tons Retained	2.16%	0.06%	51.42%	0.35%	16.28%	1.64%	8.22%	19.86%
POP-AI	% of Tons Reported	0.02%	0.00%	0.05%	0.00%	99.90%	0.00%	0.00%	0.03%
	% of Tons Retained	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
POP-EBS	% of Tons Reported	30.10%	0.00%	0.32%	0.00%	44.92%	0.01%	0.01%	24.65%
	% of Tons Retained	10.76%	0.00%	0.25%	0.00%	57.19%	0.00%	0.00%	31.80%
RSOL	% of Tons Reported	4.43%	0.00%	0.08%	0.00%	90.67%	0.00%	0.00%	4.82%
	% of Tons Retained	4.13%	0.00%	0.00%	0.00%	93.70%	0.00%	0.00%	2.17%
SABL	% of Tons Reported	0.08%	0.00%	31.26%	40.59%	17.82%	0.01%	9.45%	0.80%
	% of Tons Retained	0.05%	0.00%	28.40%	43.36%	17.20%	0.00%	10.33%	0.65%
SCNO	% of Tons Reported	0.79%	0.00%	1.52%	0.02%	96.60%	0.01%	0.02%	1.06%
	% of Tons Retained	2.32%	0.01%	0.88%	0.00%	95.39%	0.00%	0.00%	1.39%
SRRE	% of Tons Reported	1.50%	0.00%	29.74%	8.32%	60.00%	0.26%	0.11%	0.07%
	% of Tons Retained	1.87%	0.00%	16.49%	1.21%	80.39%	0.00%	0.00%	0.04%
TURB	% of Tons Reported	0.50%	0.02%	60.41%	6.29%	31.40%	0.02%	1.00%	0.37%
	% of Tons Retained	0.27%	0.02%	67.70%	2.37%	29.32%	0.00%	0.07%	0.25%
YSOL	% of Tons Reported	5.77%	0.00%	0.69%	0.00%	92.37%	0.04%	0.03%	1.10%
	% of Tons Retained	6.32%	0.00%	0.03%	0.00%	92.73%	0.00%	0.00%	0.93%

Table A.11: Pacific cod allocations with Non-AFA HT-CP sector allocated 18.3 percent of TAC and other TRAWL sectors adjusted proportionally.

Species Group	Data	SECTOR									
		AFA 20	AFA 9	JIG-CV	LGL-CP	LGL-CV	NON-AFA HT-CP	NON-AFA ST-FT-CP	POT-CP	POT-CV	TWL-CV
Component 4.1	% of Tons Reported	3.80%	3.39%	0.14%	42.86%	0.32%	18.30%	1.48%	2.25%	7.66%	19.80%
	% of Tons Retained	2.19%	2.39%	0.16%	47.36%	0.13%	18.30%	0.84%	2.54%	8.68%	17.41%
Component 4.2	% of Tons Reported	2.99%	3.30%	0.10%	46.35%	0.29%	18.30%	1.48%	1.85%	7.33%	18.00%
	% of Tons Retained	2.38%	2.70%	0.11%	48.25%	0.19%	18.30%	0.92%	1.99%	7.83%	17.34%
Component 4.3	% of Tons Reported	3.17%	3.30%	0.11%	46.58%	0.25%	18.30%	1.47%	1.92%	7.15%	17.75%
	% of Tons Retained	2.46%	2.67%	0.12%	48.73%	0.15%	18.30%	0.91%	2.07%	7.68%	16.92%
Component 4.4	% of Tons Reported	2.57%	3.16%	0.07%	49.29%	0.27%	18.30%	0.00%	1.66%	7.29%	17.38%
	% of Tons Retained	2.53%	3.14%	0.07%	49.20%	0.23%	18.30%	0.00%	1.68%	7.40%	17.44%
Component 4.5	% of Tons Reported	2.77%	3.14%	0.08%	50.21%	0.20%	18.30%	0.00%	1.72%	6.91%	16.66%
	% of Tons Retained	2.72%	3.12%	0.08%	50.19%	0.16%	18.30%	0.00%	1.74%	7.02%	16.67%
Component 4.6	% of Tons Reported	1.98%	0.00%	0.06%	51.52%	0.40%	18.30%	0.00%	1.63%	8.10%	18.02%
	% of Tons Retained	1.96%	0.00%	0.06%	51.42%	0.35%	18.30%	0.00%	1.64%	8.22%	18.04%

Table A.12: Changes in Pacific cod allocations when Non-AFA HT-CP sector is allocated 18.3 percent of TAC and other TRAWL sectors adjusted proportionally.

Species Group	Data	SECTOR									
		AFA 20	AFA 9	JIG-CV	LGL-CP	LGL-CV	NON-AFA HT-CP	NON-AFA ST-FT-CP	POT-CP	POT-CV	TWL-CV
Component 4.1	% of Tons Reported	-0.71%	-0.64%	0.00%	0.00%	0.00%	5.33%	-0.28%	0.00%	0.00%	-3.71%
	% of Tons Retained	-0.83%	-0.90%	0.00%	0.00%	0.00%	8.63%	-0.32%	0.00%	0.00%	-6.58%
Component 4.2	% of Tons Reported	-0.48%	-0.53%	0.00%	0.00%	0.00%	4.15%	-0.24%	0.00%	0.00%	-2.90%
	% of Tons Retained	-0.55%	-0.62%	0.00%	0.00%	0.00%	5.39%	-0.21%	0.00%	0.00%	-4.00%
Component 4.3	% of Tons Reported	-0.53%	-0.55%	0.00%	0.00%	0.00%	4.29%	-0.25%	0.00%	0.00%	-2.96%
	% of Tons Retained	-0.61%	-0.67%	0.00%	0.00%	0.00%	5.73%	-0.23%	0.00%	0.00%	-4.22%
Component 4.4	% of Tons Reported	-0.35%	-0.43%	0.00%	0.00%	0.00%	3.18%	0.00%	0.00%	0.00%	-2.39%
	% of Tons Retained	-0.37%	-0.46%	0.00%	0.00%	0.00%	3.37%	0.00%	0.00%	0.00%	-2.55%
Component 4.5	% of Tons Reported	-0.40%	-0.45%	0.00%	0.00%	0.00%	3.25%	0.00%	0.00%	0.00%	-2.40%
	% of Tons Retained	-0.42%	-0.48%	0.00%	0.00%	0.00%	3.48%	0.00%	0.00%	0.00%	-2.58%
Component 4.6	% of Tons Reported	-0.18%	0.00%	0.00%	0.00%	0.00%	1.83%	0.00%	0.00%	0.00%	-1.65%
	% of Tons Retained	-0.20%	0.00%	0.00%	0.00%	0.00%	2.02%	0.00%	0.00%	0.00%	-1.82%

Table A.13: Average annual percentage of Pacific cod harvested with trawl gear by sector.

DP 26 Options	Data	AFA 20	AFA 9	LGL-CP	NON-AFA	NON-AFA	POT-CP	TWL-CV
					HT-CP	ST-FT-CP		
Component 4.1	% of Tons Reported	9.56%	8.43%	0.26%	27.65%	3.55%	0.04%	50.51%
	% of Tons Retained	7.29%	7.81%	0.34%	23.45%	2.77%	0.05%	58.29%
Component 4.2	% of Tons Reported	7.83%	8.02%	0.25%	32.97%	3.36%	0.05%	47.52%
	% of Tons Retained	7.04%	7.62%	0.32%	31.41%	2.63%	0.06%	50.93%
Component 4.3	% of Tons Reported	8.36%	8.08%	0.25%	32.78%	3.38%	0.05%	47.11%
	% of Tons Retained	7.44%	7.67%	0.32%	30.98%	2.65%	0.06%	50.89%
Component 4.4	% of Tons Reported	7.12%	8.20%	0.00%	37.13%	0.00%	0.06%	47.48%
	% of Tons Retained	7.07%	8.15%	0.00%	36.70%	0.00%	0.06%	48.01%
Component 4.5	% of Tons Reported	7.79%	8.23%	0.00%	37.59%	0.00%	0.06%	46.33%
	% of Tons Retained	7.73%	8.19%	0.00%	37.12%	0.00%	0.06%	46.90%
Component 4.6	% of Tons Reported	6.32%	0.00%	0.00%	46.06%	0.00%	0.07%	47.55%
	% of Tons Retained	6.34%	0.00%	0.00%	45.54%	0.00%	0.07%	48.05%

Table A-14: Allocation, Catch and Rollovers of Pacific Cod, 1995-2002

Item	1995	1996	1997	1998	1999	2000	2001	2002
Allocation (Initial)								
CDQ (7.5%)	0	0	0	15,750	13,275	14,475	14,100	15,000
Fixed Gear (51%)	110,000	118,800	137,700	99,068	83,500	91,048	88,689	94,350
Longline (C-P)			-	-	-	-	70,551	75,080
Longline (C-V)			-	-	-	-	265	282
Pot			-	-	-	-	16,139	17,175
Other			-	-	-	-	1,735	1,813
Jig (2%)	5,000	5,400	5,400	3,885	3,275	3,571	3,478	3,700
Trawl (47%)	135,000	145,800	126,900	91,298	76,951	83,907	81,733	86,950
Catcher-Processor			63,450	45,649	38,475	41,953	40,867	43,475
Catcher-Vessel			63,450	45,649	38,475	41,953	40,867	43,475
TAC	250,000	270,000	270,000	210,000	177,000	193,000	188,000	200,000
Allocation (Year-End)								
CDQ		0	0	15,750	13,275	14,475	14,100	15,000
Fixed Gear	121,800	138,200	152,700	110,567	95,300	103,048	113,955	104,437
Longline (C-P)			-	-	-	-	95,821	89,920
Longline (C-V)			-	-	-	-	665	482
Pot			-	-	-	-	17,469	14,035
Jig	400	1,000	400	385	475	571	478	300
Trawl	127,200	130,800	116,900	83,298	67,950	74,906	57,734	78,450
Catcher Processor			51,450	42,649	31,475	32,953	30,867	36,975
Catcher-Vessel			65,450	40,649	36,475	41,953	26,867	41,475
Total	249,400	270,000	270,000	210,000	177,000	193,000	186,267	198,187
Total Catch (Fixed Gear)								
Longline (C-P)	-	-	-	-	-	-	96,032	89,397
Longline (C-V)	-	-	-	-	-	-	637	404
Longline subtotal	102,600	94,701	124,233	98,094	78,852	85,106	96,669	89,801
Pot	20,299	32,617	22,047	13,657	16,150	18,783	16,460	15,054
Total	122,899	127,318	146,280	111,751	95,002	103,889	113,129	104,855
Total Catch (Trawl)								
Catcher-Processor	0	0	48,177	41,639	31,111	31,883	29,397	36,496
Catcher-Vessel	0	0	63,035	39,669	36,079	41,593	21,354	41,683
Trawl Total	121,530	113,089	111,212	81,308	67,190	73,476	50,751	78,179
Total Catch (Jig)								
	599	267	173	192	169	71	71	166
BSAI All Gear Total Catch (Excludes CDQ)	245,028	240,674	257,665	193,251	162,361	177,436	163,951	183,200
Quota Rollover Amounts								
Fixed Gear	11,800	19,400	15,000	11,500	11,800	12,000	25,266	11,900
Longline (C-P)	-	-	-	-	-	-	24,870	14,840
Longline (C-V)	-	-	-	-	-	-	-843	200
Pot	-	-	-	-	-	-	1,239	-3,140
Trawl	-7,800	-15,000	-10,000	-8,000	-9,000	-9,000	-23,999	-8,500
Trawl (C-P)	-	-	-12,000	-3,000	-7,000	-9,000	-10,000	-6,500
Trawl (C-V)	-	-	2,000	-5,000	-2,000	0	-14,000	-2,000
Jig	-4,000	-4,400	-5,000	-3,500	-2,800	-3,000	-3,000	-3,400
Net Rollover	0	0	0	0	0	0	-1733	0
Estimated Quota Rollover Amounts Harvested¹ (Total catch in all Target Fisheries Minus Initial allocation)								
Fixed Gear (From Trawl and Jig)	11,800	8,518	8,580	11,500	11,502	12,000	ERR	10,505
Longline (C-P)	-	-	-	-	-	-	24,870	14,317
Longline (C-V)	-	-	-	-	-	-	372	122
Pot	-	-	-	-	-	-	??	0
Quota Rollover Amounts Harvested in Pacific Cod Target Fisheries (Estimates taken from BSAI FMP Amendment 77)²								
Fixed Gear	8,568	3,923	4,729	3,666	10,681	13,868	26,056	10,505
Longline (C-P)	7,109	3,161	4,686	3,655	10,176	10,936	23,912	14,317
Longline (C-V)	37	2	0	0	28	98	355	122
Pot (C-P)	0	136	14	11	28	430	820	0
Pot (C-V)	1,422	624	29	0	449	2,404	969	0

Notes:

1/ The "Estimated Quota Rollover Amounts Harvested" were constrained to be no greater than the total amount rolled over to that sector.

2/ The 2002 estimates are based on the total Pacific cod catch reported on the NMFS Website (www.fakr.noaa.gov/2002/bas02b.txt) dated 04/21/03

**SUMMARY OF COUNCIL ACTIONS
ON IR/IU
TRAILING AMENDMENTS A, C AND D
AT THE APRIL 2003 MEETING**

Amendment A (Multi-Species H&G Coops and Sector Allocations) and Amendment C (Minimum Groundfish Retention) Linkage

Amendments A and C will be linked and integrated at the earliest possible time, with implementation to occur concurrently. (Intent is to take final action on Amendment C in June 2003, then determine specific timeline for action on Amendment A.)

Amendment A (Multi-Species H&G Coops) Proposal – Alternatives, Elements and Options

The **purpose** of this amendment is to reduce discards in the multi-species trawl fisheries by promulgating regulations that facilitate the creation of Bering Sea and Aleutian Islands Non-AFA Trawl Catcher Processor Cooperatives (NATCPCs or CO-OPs) in the Bering Sea and Aleutian Islands. The **problem** with the pending flatfish IRIU regulations, or proposed minimum bycatch retention standards, is that they require significant and costly actions by participants in an environment that precludes innovative solutions. In the current derby-style management regime, an individual fisher incurs the full costs of reducing his or her bycatch by deploying more expensive gear, searching for cleaner fishing grounds, etc., while the benefits of that individual's efforts to decrease bycatch are spread across all participants in the fishery even though others may not be incurring those same costs. Without the operational flexibility offered by cooperative style management it is unlikely that this sector will be able to meet proposed bycatch/discard reduction goals and still maintain economic viability.

The **goal** of this amendment is to create operational flexibility for participants to reduce bycatch of prohibited species and target species. It accomplishes this goal by allocating Groundfish Catch Limits (GCLs) of selected species and PSC limits between two pools of vessels—one pool is for vessels wishing to participate in CO-OPs, and the other pool is for non-AFA trawl catcher processors wishing to remain under the current "race for fish" regime. Vessels in a given pool will be allowed to continue to participate in target fisheries subject to PSC limits as long as the pool's PSC limits have not been attained. Similarly, vessels in a given pool will be allowed to continue to participate in target fisheries subject to attainment of GCLs. Once a pool has attained a particular PSC limit or GCL, vessels in that pool will be restricted as per existing regulations.

The decision tree that follows examines the various issues that must be addressed when developing a complete non-AFA Trawl CP (NATCP) program. It should be noted that the same general format can be used to describe cooperatives in other fisheries in the BSAI.

In developing this decision tree, the IR/IU technical committee focused most of their effort on the various elements and options and spent relatively little time on the issue of dividing target fisheries between the NATCPs and various user groups including AFA Trawl CPs, AFA and

non-AFA Trawl CVs, Longline CPs, Longline CVs, Pot CPs, and Pot CVs. This decision point, which along with the splits of PSCs and has been the subject of ongoing industry meetings, is described in the last two points of the decision tree (Decision Point 26 and Decision Point 27).

Decision Point 1. Which groundfish species will be included within the scope of the amendment and be specifically allocated as GCLs to the non-AFA Trawl CP sector?

- 1.1 All species for which trawling is allowed, excluding pollock that is already allocated to the AFA cooperatives.
 - 1.1.1 Certain species could be excluded from the program at the outset to prevent potential “squid-box” situations.
- 1.2 Include only the following target species—Pacific cod, Yellowfin Sole, Rock Sole, Flathead sole, Atka Mackerel, Greenland Turbot, AI Pacific Ocean Perch, Alaska Plaice. Species could be added or deleted through an amendment process.
- 1.3 Include only PSC species, in the event that sector allocations have not been accomplished or do not appear to be on the horizon. (The option *creates PSC Bycatch Cooperative as per the original Amendment A. The committee included this as a fall-back option in case sector splits cannot be accomplished.*)

The document assessing Amendment A will need to discuss the disposition of species that are not specifically allocated to specific sectors.

Decision Point 2. What is the disposition of incidental catch allowances of pollock?

- 2.1 **Status Quo:** A predetermined percentage of the pollock TAC would be set aside for use as incidental catch. Up until the point the incidental catch set-aside has been caught, all pollock must be retained up to MRB standards. After the incidental catch set-aside has been caught, pollock could not be retained by non-AFA vessels.

The following two sub options could augment the status quo and are not mutually exclusive. Insert NMFS language that defines directed fishing.

- 2.1.1 **Status Quo Plus:** NMFS manages ICA for pollock as it does now (i.e. 2.1), but adjust MRB rates to insure that the historical bycatch requirements of pollock in the non-pollock fisheries are not exceeded. MRB rate adjustments can be made by NMFS managers either in-season or inter-annually to discourage increased bycatch (incidental catch) of pollock should pollock harvest amounts indicate that this is occurring. MRB rate adjustments could be made between 0 and 49% subject to the stipulation that non-AFA vessels are not engaged in directed fishing for pollock at any point in their trip. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries.
(Bycatch requirements are defined as the amounts of bycatch needed to harvest the species subject to cooperative management defined in Decision Point 1. Consideration must be given to historic bycatch rates and total bycatch levels, as well as changes in comparative biomass levels of the species involved. Bycatch requirements would be funded by the current pollock ICA.)
- 2.1.2 **Status Quo Plus 2:** Additionally, the Council might consider action that would change the way MRB compliance is accounted for in fishing trips. Currently, it is enforced at any point in the trip. Other options for consideration would be

enforcement of MRB compliance on other time periods. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries.

(Other periods to be analyzed would include trips as defined by NMFS, weekly reporting periods, or trips as defined as the period of time between port calls. This portion of the analysis would also include the issue of dealing with this issue as part of an inter-coop agreement.)

Decision Point 3. What is the disposition of groundfish species not included in Decision Point 1

3.1 Status quo for any species not allocated

Overall catches of non-allocated groundfish are controlled by TACs/OFLs

For other sectors adjustments for the MRB status might be considered as in 2.1.2.

Decision Point 4. Which PSC limits will be included within the scope of the amendment?

4.1 BSAI Non-AFA Trawl CP Multi-Species Halibut Cap consisting of an apportionment species allocated in Decision Point 1.

4.2 BSAI Non-AFA Trawl CP Multi-species Red King Crab Cap consisting of an apportionment of the current Pacific cod trawl cap and the caps for the flatfish fisheries.

4.3 BSAI Non-AFA Trawl CP Multi-species Snow crab (*C. opilio*) Cap consisting of an apportionment of the current Pacific cod trawl cap and the caps for the flatfish fisheries (includes apportionments of the trawl sablefish/turbot/arrowtooth limits).

4.4 BSAI Non-AFA Trawl CP Multi-species Tanner crab (*C. bairdi*) Zone 1 Cap consisting of an apportionment of the current Pacific cod trawl cap and the caps for the flatfish fisheries.

4.5 BSAI Non-AFA Trawl CP Multi-species Tanner crab (*C. bairdi*) Zone 2 Cap consisting of an apportionment of the current Pacific cod trawl cap and the caps for the flatfish fisheries.

The IRIU Technical Committee recommended that the program be limited to species allocated in Decision Point 1, and therefore only PSC limits that are relevant to those fisheries would be included. The committee recognized that the PSC limits for halibut in the Pacific cod fishery would need to be explicitly divided (at a minimum) between non-AFA trawl catcher processors and all other trawl harvesting vessels—this second class would include AFA catcher processors and all trawl catcher vessels. The analysis will address potential implications of not having further splits of PSC (ie. between trawl catcher vessels and AFA catcher processors.)

The committee indicated the need to create an aggregate PSC limit that would combine apportionments of the halibut cap that are currently made for the various flatfish fisheries and a new CP apportionment for Pacific cod—the newly created aggregate limit would be applied to the non-AFA trawl CP multi-species fisheries. Similar changes would be made for crab PSC limits, as appropriate. Salmon and herring limits would not be affected because they do not constrain the affected fisheries. If, salmon and herring PSC limits constrain the multi-species fisheries at some point in the future, those PSC limits should be considered for inclusion.

The IRIU technical committee assumes that the current process used by the Council to apportion various PSC limits to various fisheries will continue. The fisheries in the BSAI are dynamic enough that the halibut apportionment need be fairly fluid as embedded in the current process. Once such apportionments are approved by the Council, specific sub-apportionments would be made to the CO-OP and to the open-access fisheries.

Decision Point 5. Will there be predetermined reductions in prohibited species catch limits?

- 5.1 Status quo.
- 5.2 Reductions in halibut prohibited species catches will be accomplished by taxing in-season non-permanent transfers of PSC within the CO-OP. The halibut PSC limit will be restored to its original level the following year
 - 5.2.1 Transfers after August 1 would not be taxed (*allows clean-up fishing without a tax*).
 - 5.2.2 Only un-bundled transfers of PSC would be taxed.
- 5.3 Reduce halibut PSC limits by 5 percent when a program to link PSC limits to estimated biomass levels is implemented.

Decision Point 6. How will the amendment accomplish actual reductions in groundfish discards?

- 6.1 Impose Amendment C standards on the cooperative as an aggregate and on other vessels that are eligible to participate in the cooperative as individuals. If the cooperative cannot meet the standards in the aggregate over a period of two years then Amendment C regulations would be imposed on individual vessels within the cooperative.
- 6.2 Impose Amendment C standards on all individual vessels that are eligible to participate in the cooperative from the outset.

Decision Point 7. How will the amendment accomplish reductions in bycatch of other species such as forage fish, grenadiers, corals, etc, and interactions with other marine resources and habitats?

- 7.1 No specific limits for non-specified species or marine resources will be incorporated in the initial amendment. However, should unreasonable bycatch and interactions occur, specific regulations to minimize impacts will be considered.

Decision Point 8. What are the requirements for being considered part of non-AFA trawl CP sector.

- 8.1 The vessel owner must be eligible to own a fishing vessel under Marad, and ...
 - 8.1.1 To be eligible a vessel must have caught with trawl gear and processed between 1998-2002.
 - 8.1.1.1 100 MT
 - 8.1.1.2 150 MT
 - 8.1.1.3 500 MT
 - 8.1.1.4 1000 MT
 - 8.1.2 To be eligible a vessel must have caught with trawl gear and processed between 1997-2002.

- 8.1.2.1 100 MT
- 8.1.2.2 150 MT
- 8.1.2.3 500 MT
- 8.1.2.4 1000 MT

Second generation owners of eligible vessels remain eligible as long as they can register under Marad regulations for fishing vessels.

“Catch history” of the boats that are found eligible will determine the “catch history” applied when making sector apportionments in Decision Point 26.

Decision Point 9. What is the mechanism for determining which vessels of the eligible vessels are participating in the Cooperative?

- 9.1 Application by a cooperative with final membership lists would be submitted annually to NMFS prior to December 1.

Decision Point 10. Will a new permit be issued to vessels eligible to participate in the CO-OP?

- 10.1 Yes, A new non-AFA Trawl CP permit (CO-OP Eligibility Permit) will be issued.

Decision Point 11. What percentage of the CO-OP Eligibility Permit of eligible non-AFA Trawl CPs in the sector must join the CO-OP before the cooperative is allowed to operate?

- 11.1 At least 51 percent of the eligible non-AFA Trawl CPs must participate in a cooperative.
- 11.2 At least 67 percent of the eligible non-AFA Trawl CPs must participate in a cooperative.
- 11.3 At least 75 percent of the eligible non-AFA Trawl CPs must participate in a cooperative.
- 11.4 At least 80 percent of the eligible non-AFA Trawl CPs must participate in a cooperative.
- 11.5 100 percent of the eligible non-AFA Trawl CPs must participate in a cooperative.

Decision Point 12. Will non-trawl catches of eligible vessels be considered part of the vessels catch history for determining the overall apportionment to the non-AFA trawl sector.

- 12.1 At the time of determining eligibility each eligible vessel must declare whether its non-trawl catches will count as part of the non-AFA trawl CP apportionment. (See also Decision Point 20 which discusses whether non-trawl gear may be used to harvest non-AFA Trawl apportionments.)

Some vessels that are primarily non-AFA trawl CPs have landings with non-trawl gear, and some vessels that are considered Pot CPs or Longline CPs have trawl landings that could make them eligible to participate in a CO-OP.

Decision Point 13. How will the allocation of PSC limits and GCLs between non-AFA Trawl CP CO-OP pool and the non-AFA trawl open access pool be determined? This allocation is completely independent of a sector split that determines the total amount of groundfish and PSCs that are allocated to the non-AFA Trawl CP sector.

13.1 The allocation of GCLs between pools would be proportional to the catch history of groundfish in the multi-species target fisheries of the vessels included in each pool. PSC will be allocated between the cooperative and open access pools in same proportions as those species that have associated PSC limits. The catch history of each vessel that has the option of joining the CO-OP will be determined and fixed at the time the CO-OP is established (see Decision Point 13.2). The aggregate histories will then be applied to whichever pool or cooperative the vessel chooses.

13.1.1 Catch history will be based on total catch

13.1.2 Catch history will be based on total retained catch

There is some concern that using retained catch may skew catch histories toward larger vessels. It is requested that the use of retained and total catch be thoroughly examined.

An hypothetical example of apportionments of halibut PSC between open access and the CO-OP is shown in the table below. The table of assumes that the split of groundfish species between non-AFA trawl CPs and all other sectors has already been made and assumes that that 2/3rds of the eligible non-AFA trawl CPs have decided to join the CO-OP.

Table 1. Hypothetical Example of Apportionment of Groundfish and PSC to CO-OP and Open Access Pools

	Non-AFA Trawl CP	Other Sectors	PostNon-CDQAFA TACTCP		Non-AFA Trawl CP Pool Apportionments			
	(percentage)		(metric tons)		CO-OP	Open	CO-OP	Open
Groundfish					percentage		(metric tons)	
Pacific Cod	15	85	186,750	28,013	61	39	17,118	10,894
Yellowfin Sole	87	13	75,375	65,576	69	31	45,411	20,165
Rock Sole	85	15	39,600	33,660	63	37	21,082	12,578
Flathead Sole	81	19	18,000	14,580	63	37	9,117	5,463
Other Flatfish	88	12	11,700	10,296	71	29	7,356	2,940
Halibut PSC Apportionments								
Trawl PCOD	32	68	1,434	458	61	39	280	178
Yellowfin Sole	87	13	886	771	69	31	534	237
Rock Sole, Flathead Sole, O. Flatfish	86	14	779	667	65	35	432	236

Notes:

- 1) Non-AFA Trawl CP percent of groundfish are approximates from data supplied by NMFS-AFSC
- 2) TAC and PSC limits are from 2003
- 3) Tons and PSC limits apportioned to Non-AFA Trawl CPs are estimated by multiplying Non-AFA Trawl CP percentage by TAC
- 4) CO-OP and Open Access percentages are hypothetical and assume approximately 2/3 of Non-AFA Trawl CP participate in the CO-OP.
- 5) CO-OP and Open Access pool amounts are estimated by multiplying CO-OP and Open percentage by the non-AFA Trawl CP apportionment.

13.2 Which years of catch history should be used in the calculation?

13.2.1 Catch history from 1995-2002 will be used in the calculation.

13.2.2 Catch history from 1995-2002 will be used in the calculation—each vessel will drop its lowest annual catch during this period.

13.2.3 Catch history from 1998-2002 will be used in the calculation.

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13.2.5 Catch history from 1999-2002 will be used in the calculation.

13.2.6 Catch history from 1999-2002 will be used in the calculation—each vessel will drop its lowest annual catch during this period.

13.2.7 Catch history from 2000-2002 will be used in the calculation.

13.2.8 Catch history from 2000-2002 will be used in the calculation—each vessel will drop its lowest annual catch during this period.

Decision Point 14. Will the CO-OP Eligibility Permit have a specific catch history associated with it?

14.1 Yes, the catch history of the original eligible vessel will be attached to the permit

The catch history will be used only to determine the apportionment of the sector's allocation that goes into the cooperative's pool. The catch history will not be a guarantee that the owner of the permit will be entitled to a certain percentage of the total allowable catch.

If no catch history is attached to the CO-OP Eligibility Permit what is the point of the CO-OP Eligibility Permits other than voting privileges. Further, with no catch history attached to the CO-OP Eligibility Permit, there is no vehicle for permanently transferring apportionments and no apparent means to indicate how much should be allocated to the open access pool and how much goes to the cooperative.

Decision Point 15. What, if any restrictions shall there be on permanent transfers of CO-OP Eligibility Permits?

15.1 CO-OP Eligibility Permits are transferable. All transfers of CO-OP Eligibility Permits must reported to NMFS so that NMFS may track who owns permit for purposes of determining cooperative and open access pool sizes.

15.2 CO-OP Eligibility Permits are not transferable.

Decision Point 16. Who may purchase a CO-OP Eligibility Permit?

16.1 The purchaser must be eligible to own a fishing vessel under MARAD regulations or any person that is currently eligible to own a vessel.

16.2 The purchaser must own a vessel that is eligible to participate in the CO-OP.

Decision Point 17. Within a cooperative, are annual catch allocations that result from qualified catch histories (CO-OP Eligibility Permit) transferable?

17.1.1 Yes, annual catch allocations that result from CO-OP Eligibility Permits are infinitely transferable. Such transfers need not be approved by NMFS.

17.1.2 No, annual catch allocations that result from CO-OP Eligibility Permits are not transferable.

The committee viewed the in-season transfers of allocations as essential for the proper function of the cooperative, but include the no transfer option for completeness.

Decision Point 18. Within the CO-OP, will a groundfish LLP will be required.

18.1 Yes.

18.2 No. (*No, implies any US fishing vessel of any length may harvest CO-OP groundfish.*)

Decision Point 19. Do CO-OP Eligibility Permits supercede Groundfish LLP length designations and area endorsements?

19.1 Groundfish LLP length designations and area endorsements within CO-OP

19.1.1 Within a CO-OP, groundfish LLP length designations and area endorsements will not apply. Any LLP qualified vessel of any length may harvest CO-OP groundfish as long as the vessel qualifies for either BS or AI area endorsement.

19.1.2 Within a CO-OP, groundfish LLP length designations and area endorsements will apply.

19.2 Groundfish LLP length designations and area endorsements in the open access pools.

19.2.1 Within the open access portion of the Non-AFA trawl cather-processor apportionment, all groundfish LLP length designations and area and gear endorsements will apply.

Decision Point 20. Do CO-OP Eligibility Permits supersede Groundfish LLP gear endorsements?

20.1 Groundfish LLP gear designations will be maintained. Only vessels with non-trawl gear endorsements will be allowed to use non-trawl gear. All groundfish harvests regardless of gear used will be counted against apportionments made to the non-AFA Trawl CP Sector.

20.2 Groundfish LLP gear designations will be maintained. Only vessels with non-trawl gear endorsements will be allowed to use non-trawl gear. All groundfish harvests with trawl gear will be counted against apportionments made to the non-AFA Trawl CP Sector. Non-trawl harvests by eligible vessels will not be counted against apportionments made to the non-AFA Trawl CP Sector.

(See also Decision Point 12 which determines whether non-trawl catches of eligible vessel count as part of the non-AFA trawl CP apportionments. The document will examine gear crowding, price factors, sea-lion issues, sea-bird issues, and PSC spilts relative to other gears, particularly effects in the fixed-gear Pacific cod fisheries.)

Decision Point 21. Will there be excessive share limits in the non-AFA Trawl CP Sector

21.1 There will be no limit on the consolidation of the non-AFA trawl CP fleet.

21.2 Consolidation of the non-AFA trawl CP sector will be limited such that no single company can harvest more than a fixed percentage the overall sector apportionment. Companies that exceed the cap would be grandfathered. (*Companies are defined using*

a 51 percent ownership rule. The analysis will show percentages that currently exist in the fishery, and suggest a potential range of excessive share limits.)

Decision Point 22. Is it likely that the CO-OPs will have negative impacts on fisheries that are not included in the program (e.g. fisheries in the GOA)? If so, what measures will be used to curtail or mitigate these impacts?

22.1 Sideboards on harvesting in for CO-OP members would be established by regulation using the same years as used to calculate the apportionment of PSC and GCLs between the CO-OP and the race for fish pools, until such time as these other fisheries are rationalized.

22.2 Require the CO-OP to prohibit members in the aggregate from exceeding their maximum percent of harvests in other target fisheries. Sideboards would not be established by regulation. This restriction would be discussed in the annual report of each CO-OP and would be reviewed by the Council and NOAA Fisheries.
(Implementation of GOA Rationalization may imply that sideboards need to be changed.)

Decision Point 23. What would be the procedure for assuring that CO-OPs have adequate internal rules?

23.1 Evidence of binding private contracts and remedies for violations of contractual agreements must be provided to NOAA Fisheries. Each CO-OP must demonstrate an adequate mechanism for monitoring and reporting PSC and GCL catch.

23.1.1 Vessels participating in the CO-OP will agree to abide by all cooperative rules and requirements.

23.2 Vessels participating in the open access pool will be subject only to applicable regulations

Decision Point 24. What Reporting, Monitoring and Enforcement Requirements and Observer Protocols need to be established?

24.1 Specific requirements for monitoring and enforcing PSC limits and GCLs including observer coverage, sampling protocols, and vessels reporting and record-keeping requirements will be developed in rulemaking processes and will not be the purview of CO-OPs. Components of the program will be developed in separate processes to ensure that goal and objectives of the program are met in a cost effective manner. The NPFMC and cooperatives need to specify their goals and objectives for:

24.1.1 In-season monitoring

24.1.2 Program evaluation

In earlier committee meetings it was generally agreed that is not clear that any changes will be necessary to the current observer program, but if it is determined that, for example, additional observer coverage will be necessary, then options will be developed as appropriate. The committee was advised that the appropriate way to determine observer coverage was to first determine the goals and objectives of the observer program for the CO-OP Program. Following the determination of goals and objectives it is appropriate to

examine the costs and benefits of any additional observer coverage. It may be appropriate to examine observer coverage requirements from two different perspectives:

- 1) Observer coverage rules would be based, as in the current system on a boat-by-boat basis, in which each vessel is required to have observers on board for fixed percentage of the time (i.e. 30%, 100%, or 200%--2 observers).*
- 2) Observer coverage rules would be based on an objective that a pre-determined percentage of the aggregate catch would be observed. For example, the program objective might be that 67 percent of the hauls within the CO-OP program are observed, and deployment of observers would be developed to meet that objective.*

The committee discussed the use of alternative monitoring methods. For example, rather than requiring observers to monitor whether or not PSCs or groundfish were being discarded, video systems could be developed that would automatically transmit recordings on a real-time basis.

Decision Point 25. Review of the CO-OP program

Review of the CO-OP program will be accomplished by requiring a detailed annual report from the CO-OP. NOAA fisheries and the NPFMC will review the annual report and determine if the program is functioning as desired. An in-depth assessment of program will be undertaken under the auspices of the Council/NOAA Fisheries after the third year of the program implementation. The study will report the accomplishment of the program and indicate whether any changes are necessary.

The technical committee considered review of the CO-OP program mandatory.

Decision Point 26. How will sector-level apportionments of groundfish for use in the CO-OP Program be determined.

26.1 The CO-OP Program shall be allocated the percentage of the TAC of each species of groundfish from Decision Point 1, that is equal to the average of the annual percentage of harvest by CO-OP Eligible vessels in the years specified in the sub-options below, relative to the amount of such species harvested by all vessels during the same period (after CDQ allocations). In other words:

- $\text{Catch of CO-OP Eligible Vessels} \div \text{Catch of All Vessels} = \text{CO-OP Percent}$
- $\text{CO-OP Percent} \times \text{TAC} = \text{CO-OP Program Apportionment}$

26.1.1 The average of annual catch percentages from 1995–1997 will be used.

26.1.2 The average of annual catch percentages from 1995–2002 will be used.

26.1.2.1 Optionally exclude 2001 because of the injunction.

26.1.3 The average of annual catch percentages from 1998–2002 will be used.

26.1.3.1 Optionally exclude 2001 because of the injunction.

26.1.4 The average of annual catch percentages from 2000–2002 will be used.

26.2 Pacific cod allocations will be determined using one of the following methods:

26.2.1 The CO-OP Program will be allocated a no less than 18.3 percent of the Pacific cod TAC available after deduction for the CDQ program. *(This allocation equals the Trawl CP apportionment of Pacific cod less the 5.2 percent that has been established and AFA-CP harvest sideboard.)*

26.2.2 Pacific cod shall be apportioned in the same method used in 26.1 for all other allocated species.

26.2.3 Fixed gear

26.2.3.1 Allocations with rollover

26.2.3.2 Allocations without rollover

Use apportionments outlined in Table 9, "Percentages of Allocations," found on page 104 of Amendment 77.

26.3 CDQ Allocation

26.3.1 7.5%

26.3.2 10%

26.3.3 15%

26.3.4 20%

26.4 Other Trawl Allocation

26.4.1 For AFA Vessels: Allocate to Coops, subject to AFA rules

26.4.2 For Non-AFA Vessels: Sector allocation

26.5 For purposes of apportionments, harvests will be defined using one of the following:

26.5.1 Total Catch over Total Catch

26.5.2 Retained Catch over Retained Catch

The analysis will discuss the disposition of the nine trawl CPs retired under AFA.

Decision Point 27. How will sector-level apportionments of PSC to the non-AFA Trawl sector for use in the CO-OP Program be determined.

27.1 Prohibited species bycatch allowances shall be initially assigned to fishery groups (e.g. the rock sole, flathead sole, other flatfish group) based on the relative bycatch apportionments for the years used to determine the groundfish sector apportionments (see Decision Point 26), expressed as a percentage of the total PSC allowance.

The CO-OP Program shall be initially assigned an amount of each PSC allowance by fishery group based on the CO-OP Eligible sector's historic rates during the period

used to determine groundfish apportionments, relative to the total use of the PSC allowance during that same period.

For example, if the CO-OP Eligible vessels used 40 percent of the halibut PSC used by the trawl fleet in the Pacific cod fishery during the period used to determine groundfish apportionments, the CO-OP Program would be initially assigned 40 percent of the halibut PSC initially assigned to Pacific cod trawl fisheries.

Options to apply relative historic usage at the following percentages:

27.1.1 60%

27.1.2 75%

27.1.3 90%

27.1.4 The PSC bycatch allowances referred to above should also be analyzed using the years 2000-2002.

27.2 Apportion PSC allowances to sectors in proportion to groundfish apportionments to sectors determined in Decision Point 26.

For example, if the CO-OP program is allocated 33.9 percent of the trawl apportionment of Pacific cod, the CO-OP Program would be allocated 33.9 percent of the halibut PSC allowance made for trawl Pacific cod.

Amendment C (Minimum Groundfish Retention)

Description of the Alternatives

The following alternatives are under consideration for initial review.

Alternative 1: (Status Quo/No Action) Allow the existing IR/TU regulations for flatfish in the BSAI to be implemented beginning June 1, 2004. The improved retention regulations would require that all rock sole and yellowfin sole in the BSAI be retained and that processors create products that yield at least 15 percent from each fish harvested.

Alternative 2: Add a minimum Groundfish Retention Standard (GRS) for all groundfish fisheries (excluding the pollock target fisheries) to the Goals and Objectives section of the BSAI Groundfish FMP. The GRS would apply in principle to all vessels harvesting groundfish in the BSAI. The GRS would be set at a point within the range of 65 percent to 90 percent of the total amount of groundfish caught. The specific GRS percentage will be determined by the Council in its final decision. The GRS would not supercede the 100 percent retention standards already set for pollock and Pacific cod under existing IR/TU regulations. In addition to meeting the GRS, all groundfish retained would have to be processed into primary products that comprise 15 percent or more of the round weight of each fish retained.

In addition to changes in the FMP Goals and Objectives, regulations would be promulgated and enforced on certain vessels and sectors in the fleet based on the guidance from NMFS that certified scales and 100 percent observer coverage will be

required to enforce GRS regulations. The following decision points will determine the scope of the content of the GRS regulations.

Decision Point 1. To which sectors should the GRS enforceable regulations apply.

- A. All Catcher Processors
- B. All Catcher Processors > 125'
- C. All Trawl Catcher Processors including AFA trawl catcher processors participating in non-pollock target fisheries
- D. All Trawl Catcher Processors > 125' including AFA trawl catcher processors participating in non-pollock target fisheries
- E. Non-AFA Trawl Catcher Processors > 125'
- F. Non-AFA Trawl Catcher Processors (Head and Gut Trawl Catcher Processors) with exemptions and production limits for vessels < 125'.

What are maximum production levels for exempt (< 125') non-AFA trawl CPs?

- 1. Total catch in any week shall not exceed 600 mt.
- 2. Total catch in any week shall not exceed 700 mt.
- 3. Total catch for the year shall not exceed 13,000 mt
- 4. Total catch for the year shall not exceed 17,000 mt

The decision to include a specific sector under regulation implies that certified scales and 100 percent observer coverage will be required.

Decision Point 2. At what level of the fleet would the GRS be enforced?

- A. Enforcement of standard across vessel pools.
- B. Enforcement of standard by individual vessels.

Decision Point 3. Will there be a single GRS or multiple GRS for different seasons?

- A. Establish a single standard for all fishing activity.
- B. Establish different standards for the "A" Season and the "B" Season.

Decision Point 4. Over what period will attainment of the GRS for the vessel be calculated?

- A. At the end of each week for each area and gear fished
- B. At the end of each week over all areas and gears fished
- C. At the end of fishing trip as defined by the offloading of fish
- D. At the end of each month
- E. At the end of each quarter
- F. At the end of each fishing season
- G. At the end of each year

Decision Point 5. At what percentage of total groundfish caught should the GRS be set?

- A. 65 percent of all groundfish caught must be retained
- B. 70 percent of all groundfish caught must be retained
- C. 75 percent of all groundfish caught must be retained
- D. 80 percent of all groundfish caught must be retained

- E. 85 percent of all groundfish caught must be retained
- F. 90 percent of all groundfish caught must be retained

Decision Point 6. What is the disposition of incidental catch allowances of pollock?

- A. **Status Quo:** A predetermined percentage of the pollock TAC would be set aside for use as incidental catch. Up until the point the incidental catch set-aside has been caught, all pollock must be retained up to MRB standards. After the incidental catch set-aside has been caught, pollock could not be retained by non-AFA vessels.

The following two suboptions could augment the status quo and are not mutually exclusive. Insert NMFS language that defines directed fishing.

- B. **Status Quo Plus:** NMFS manages ICA for pollock as it does not, but adjusts MRB rates to insure that the historical bycatch requirements of pollock in the no-pollock fisheries are not exceeded. MRB rate adjustments can be made by NMFS managers either in-season or inter-annually to discourage increased bycatch (incidental catch) of pollock should pollock harvest amounts indicate that this is occurring. MRB rate adjustments could be made between 0 and 49% subject to the stipulation that non-AFA vessels are not engaged in directed fishing for pollock at any point in their trip. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries.

(Bycatch requirements are defined as the amounts of bycatch needed to harvest the species subject to cooperative management defined in Decision Point 1 of Amendment A. Consideration must be given to historic bycatch rates and total bycatch levels, as well as changed in comparative biomass levels of the species involved. Bycatch requirements would be funded by the current pollock ICA.)

- C. **Status Quo Plus 2:** Additionally, the Council might consider action that would change the way MRB compliance is accounted for in fishing trips. Currently, it is enforced at any point in the trip. Other options for consideration would be enforcement of MRB compliance on other time periods. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries.

(Other periods to be analyzed would include trips as defined by NMFS, weekly reporting periods, or trips as defined as the period of time between port calls. This portion of the analysis would also include the issue of dealing with this issue as part of an inter-coop agreement.)

Amendment D (5% Retention)

NMFS will forward annually to the Council the most recent information on discard rates in the BSAI and GOA fisheries, and based on that information using a 3-year rolling average of discards at the 5% threshold rate, a regulatory amendment process would be initiated to change the list of exempted fisheries. The assessment will be conducted on an annual basis and rulemaking would commence only if the list of exempt and non-exempt fisheries changes. NMFS will examine the possibility of using the annual specifications process as the vehicle for potential regulatory change.



UNITED STATES DEPARTMENT OF COMMERCE
NOAA/National Marine Fisheries Service
Alaska Enforcement Division
1211 Gibson Cove Road
Kodiak, Alaska 99615

DATE: June 10, 2003

MEMORANDUM FOR: Enforcement Committee

FROM: Kenneth D. Hansen *KDH*
Assistant Special Agent in Charge, Western Alaska

SUBJECT: Enforcement concerns with current incarnation of
Minimum Groundfish Retention Standard (Amend. C)

Non-inclusion of PSC and "non-groundfish" weight in catch/retention calculations

An important operational issue is the treatment of prohibited species under a GRS. In the flatfish fisheries, Pacific halibut and king crab PSC frequently constitute a component of the total catch. The January 22, 2003 Amendment C Draft Discussion Paper is silent on the treatment of prohibited species. While they are a "regulatory discard", their treatment as a "non-groundfish" component of total catch is a question. The October 2002 decision framework document indicated prohibited species were included in "total catch" for purposes of GRS compliance and enforcement, and recognized this would provide for a disincentive for PSC catch, as a high PSC catch would require a corresponding higher retention of groundfish to meet a GRS. Recent discussions with Marcus Hartley revealed his assumption was that PSC would **not** be included in the calculations for GRS compliance and enforcement, and the analysis to date had been made on this assumption. Recent discussions indicate the current thought is to exclude PSC from GRS calculations.

Under existing regulations, all PSC is required to be discarded in a timely manner. If PSC is to be excluded from GRS groundfish catch, these items would either need to be sorted prior to going over a scale, or their weight obtained from sorting and weighing separately after passing over the scale, or their weight estimated by species composition basket sampling methods.

Clearly, under any GRS system, there would also need to be additional sorting of items from the "total catch", such as rocks, corals, derelict gear and other debris, and potentially other benthic invertebrates which may not be defined as "GRS groundfish". Frequently in the flatfish fisheries, when vessels are fishing and processing in close proximity to each other, previously discarded fish heads and offal are "re-caught", and sometimes comprise a significant portion of the catch. These items would also need to be sorted from the catch prior to weighing or their percentage composition of the catch similarly computed and deducted from the total catch.

This sorting and weighing must occur with observer oversight to meet enforceability concerns. Ideally, these items would be sorted from the GRS groundfish catch prior to passing over a scale, which would relieve the need for their accurate re-weighing after passing over a flow scale, for the purposes of GRS compliance.

However, in practice, it is very unlikely flatfish vessels would be able to efficiently sort these various items prior to weighing of the catch. Thus, the most viable existing means of determining the accurate weight of these items would be extrapolation of weights of PSC and non-GRS groundfish based upon species composition observer sampling, and subtracting these amounts from the total catch scale weight. In the cases of very "clean" hauls, vessels might be given the opportunity, on a case by case basis, to pre-select between a "whole haul" and "basket sampling" method, prior to the observer beginning sampling duties?

Several issues arise when using observer basket sampling data for compliance and enforcement purposes. As was found when attempting to prosecute violations of the "VIP" standards, which were principally based upon observer sampling data, the establishment of statistically valid sampling protocols and observer adherence to these protocol will likely be a screening criteria and a necessary element of any successful prosecution.

Pollock and Pcod excluded from "groundfish" for numerator and denominator of catch and retention calculations

Recent indications are that pollock and Pacific cod, species already addressed by existing IR/IU requirements, will not be included in the calculations of "total catch" for GRS compliance. These species are required to be retained up to the lawful MRA applicable to the vessel. Required retention of MRA amounts of IR/IU pollock and/or Pcod is measured as a percentage of retained catch of basis species (species for which directed fishing is open). Under the proposed minimum GRS program, compliance monitoring of required retention of IR/IU pollock and/or Pcod is not foreseen to be problematic.

Many of the previously discussed sorting and sampling issues are germane when discussing IR/IU pollock/Pcod. If these species are excluded from GRS groundfish "total catch" calculations, they would also have to be sorted prior to weighing, or estimated by basket sampling methods.

Necessity to use after-the-fact "database" approach to monitor compliance with GRS

Given the necessity of having to rely upon observer sampling data to determine the denominator of the GRS equation, compliance monitoring by NMFS Enforcement or USCG will be impossible to conduct in the field. Similar to the past VIP Program, to generate the total catch amounts, observer species composition sampling data would be required to be turned in subsequent to an observer's deployment, debriefed for accuracy, keypunched, then the necessary reports generated, to compute total catch of "GRS groundfish", per applicable definitions. The delay in being able to make these calculations would likely be months. This delay would be exacerbated when an observer leaves a vessel in the middle of a voyage, and goes on to another

vessels, taking the data with them, delaying debriefing of the data.

If GRS compliance is desired to be monitored on an other than after-the-fact, spot-check basis, or in response to suspected violations (however that might occur), then there would be a need to generate reports of total catch, on a vessel by vessel basis, and compare that to retained catch data, which, currently, could only be derived from Weekly Production Reports or Product Transfer Reports. As a result, a sophisticated data entry and tracking program would be required to effectively be able to monitor GRS compliance and identify potential violators.

A possible solution might lie with the vessel receiving the embarked observer's species composition sampling forms, and, similar to the CDQ fishery, compiling this sampling data into a daily report totaling receipts of "GRS groundfish". This data could be recorded in a logbook and/or reported to the agency, and could be used for compliance monitoring, as it was "vessel reported". If this data was available aboard the vessel, and was able to be used in a real time basis by Enforcement during a boarding (at offload), effective field compliance monitoring or investigation of suspected violations of a minimum GRS might be possible.

Individual vessel vs. multiple vessel compliance basis

The complexity of monitoring or enforcing a GRS would vary dramatically depending upon the level of the fleet the standard was applied to. Generally speaking, if the "total catch" and retained catch data were developed, maintained and/or submitted by the individual vessel in a somewhat "real-time" manner, the GRS compliance calculations for an **individual vessel** would be a rather straightforward exercise, and could be conducted in the field.. As indicated above, the retained catch (numerator) component of the GRS calculation is assumed to be the WPR and PTR, and already exists in a format appropriate for GRS compliance monitoring.

If GRS compliance were enforced on a **multiple vessel or pool basis**, no field enforcement of the GRS would be feasible. It would be necessary to develop software applications to monitor compliance by the applicable time period. Suspected violations of a GRS could then be referred to Enforcement for investigation.

"Reporting period" for compliance with a GRS

Given the number of calculations involved, and the complexity of the calculations, Enforcement is not prepared to conduct other than spot checks of individual vessels for compliance with any GRS in the field. The degree to which NMFS Enforcement or USCG at-sea enforcement units could effectively determine compliance with a GRS would depend upon the period the GRS applied to.

Retained catch is currently available via the Daily Cumulative Production Logbook (DCPL) and the resultant Weekly Production Report (WPR). This report, however, is limited in it's use for GRS compliance for several reasons. First, the weekly reporting period covered by a WPR does not correspond to any other period aboard the vessel. Restated, today's production aboard a vessel may be from catch made this morning, the previous day, or two days prior, and may be

from mixed hauls. It is very difficult at best, and frequently impossible, to try to relate daily cumulative production or amounts in the DCPL/WPR to specific hauls.

For enforceability, a "trip" basis would clearly be the most effective opportunity for field enforcement personnel to be able to determine compliance with a GRS. (In this case, "trip" is not meant to be the regulatory definition of a trip, but the period of fishing and processing between offloads of product.) At an offload, the vessel has had the opportunity (and regulatory requirement) to have the DCPL updated and completed, thereby recording all of the fish most recently processed. The vast majority of groundfish processor vessels conduct complete offloads of all groundfish at each offload. If a vessel did not offload all groundfish product at the previous offload, there is a requirement to report on the Product Transfer report for the previous offload the types and amounts of any product remaining aboard the vessel. Thus, at offload, there is a method to accurately determine which product by type and amounts is attributable to the most recent trip.

It is at the point of transfer of fish product at the end of a processing trip that the only opportunity exists where the DCPL and WPR's accurately reflect the product aboard the vessel. This is the numerator of the GRS equation. It is also only at offload that Enforcement is able to actually audit the reported amounts of product, to insure the vessel is actually accurately reporting product, and thus complying with a variety of record keeping/reporting, MRA and other regulatory requirements, including a minimum GRS.

UNITED STATES SEAFOODS, L.L.C.

June 3, 2003

Mr. David Benton
Chairman,
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, Alaska 99601

RECEIVED
JUN - 3 2003
N.P.F.M.C.

Re: *IR/IU Amendments A and C*

Dear Chairman Benton:

US Seafoods manages three H&G catcher-processors. Our vessels run the gamut from two of the larger H&G vessels to one of the very smallest. We are writing to you to convey our concerns regarding IR/IU. In particular, we are concerned that Amendment A (multi-species coops) may be rushed without appropriate analysis or consideration.

US Seafoods asks the Council to:

- Move forward with Amendment A following the implementation of Amendment C, and
 - Reform the Maximum Retainable Allowance ("MRA") regulations, as an initial phase of Amendment C.
1. The Partial Disapproval of 100% retention calls for a re-evaluation of the Amendment A timetable.

Amendment A was originally introduced at the February 2003 Council meeting to provide the H&G sector with the tools to effectively deal with regulations requiring the 100% retention of Bering Sea flatfish that were scheduled to go into effect June 2004. As you already know, NOAA Fisheries recently issued a Partial Disapproval of Amendment 75 (100% retention of rock sole and yellowfin sole), because the record showed that the costs of such a regulation would greatly outweigh the benefits. The Partial Disapproval represents a fundamental change to the IR/IU landscape that takes away the need to expedite the Amendment A safety net.

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The Partial Disapproval also changes IR/IU from an analytical and administrative perspective. The present Amendment C EA/RIR/IRFA uses 100% retention as the status quo bookend. The analysis should now be revised so that status quo accurately reflects current regulatory reality, rather than 100% retention under Amendment 75.

Furthermore, the current Amendment A alternatives and options promise a more flexible and practicable approach than 100% retention of flatfish. For example, the total ground fish retention standard package currently considered includes fisheries such as Atka mackerel, Pacific Ocean perch, and Aleutian Islands Pacific cod all of which typically have significantly higher retention rates than the Bering Sea flatfish fisheries. Amendment C also has an option for measuring retention compliance across pools of vessels. And, lastly the smaller vessels which would have been particularly impacted by 100% retention have an option which exempts them entirely from the new reporting and retention regulations. We hope that the Council adopts an Amendment C that includes: a phased-in retention standard, permits GRS pools, reforms the MRA regulations, and provides for a <125 ft exemption. However, as Amendment C emphasizes practicable solutions over punitive measures, the rationale for expediting Amendment A is lessened.

2. Amendment A is itself Problematic.

While US Seafoods is a proponent of rationalization, we are concerned with the direction that Amendment A is taking. At the April Council meeting in Anchorage, Amendment A was transformed from an H&G-only package into a comprehensive multi-sector ground fish rationalization program. The scope of Amendment A is now vast, complex, potentially controversial, and far removed from the problem statement and purpose of IR/IU. Amendment A now includes multiple gear types and sectors with very different profiles, issues, and potential solutions. (For example the H&G sector is arguably not over capitalized while the freezer long-line sector likely is. Moreover the two sectors have very different gear, target, and PSC issues.) Amendment A now also raises state water and harvester-processor questions that will not be quickly untangled.

Without a clear problem statement and purpose we anticipate that Amendment A will become an allocative quagmire. Should that occur the proposal that was intended to help the H&G sector is likely to turn out to be punitive to our fleet. This concern is not without some basis, of the present allocative options contained in Amendment A, the majority would significantly

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diminish the H&G sector's available target and PSC species - without which rationalization is empty.

3. The MRA regulations are inconsistent with National Standard 9, and should be reformed.

In contrast to Amendment A which has become increasingly complicated, there are some fairly straightforward solutions which the Council could quickly implement under Amendment C. The H&G sector's retention rates could be immediately improved, simply by reforming the MRA regulations. In keeping with the purpose of IR/IU, the Council should take a hard look at those regulations which frustrate the goal of reducing discards. National Standard 9 ("NS9") requires that, "any FMP and any regulation promulgated ... minimize by-catch to the extent practicable." The current MRA regulations force vessels to discard retainable and salable fish without a clear conservation or management rationale - and are therefore inconsistent with the spirit of NS9, and are arguably arbitrary.

The MRA regulations create regulatory discards in two separate ways. First, the maximum retainable allowance of bycatch species is measured instantaneously against the product that the vessel has on board at any given time. This means that MRA species that are caught early on in a trip before there is adequate product on-board, must be discarded. Ironically, those same fish caught by that same vessel later on during that same trip, can be legally kept and processed. Changing the MRA measurement from an instantaneous basis to a trip basis would produce an immediate improvement in the retention rate of the H&G sector without significant costs. Second, the MRA percentages (for pollock, flatfish, and other species) are set unreasonably low and also contribute to unnecessary regulatory discards.

In short, we ask that the Council focus its attention on making Amendment C as practicable as possible, before tackling Amendment A. We thank you for your consideration of these complex issues, and look forward to continuing our work with the Council on IR/IU.

Sincerely yours,



Matthew Doherty

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Alaska Crab Coalition

3901 Leary Way N.W. Ste. 6

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206 547 7560

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acc-crabak@earthlink.net**RECEIVED**

JUN - 3 2003

N.P.F.M.C

June 3, 2003

Mr. David Benton, Chairman
 North Pacific Fishery Management Council
 605 West 4th St. Ste. 306
 Anchorage, Alaska 99501-2252

**RE: AGENDA ITEM C-5(a) IR/TU, MULTI-SPECIES CO-OPS
 CRAB BYCATCH REDUCTION PROPOSALS FOR BSAI GROUND FISH
 RATIONALIZATION**

Dear Mr. Benton:

The ACC has a long history of involvement with the development of bycatch reduction measures in the BSAI multi-species groundfish fisheries. The ACC was involved in the initial development of Prohibited Species Caps (PSCs) for king and tanner crab and halibut in the Eastern Bering Sea dating back to 1985 and subsequent bycatch reduction measures during the 1990s. The following are proposed crab bycatch reduction proposal options that the ACC requests the NPFMC consider within the framework of BSAI groundfish rationalization proposals.

The ACC is well aware, that with the onset of rationalization of the multi-species groundfish fisheries that the groundfish industry, by its own statements as part of the NPFMC administrative record in 1997 and 1998 and the now demonstrated reduction of king and tanner bycatch by the rationalized AFA inshore and offshore pollock fleets, that the industry is fully capable of reducing its bycatch of crab and halibut by at least 30 per cent of existing levels with an individual vessel quota-based rationalization program.

The ACC wishes to submit these options for analysis:

1. Zone 1, bairdi and red king crab cap reduction options:

- All at once discount option: 35% reduction, based on average actual bycatch for period 1995-2002, in CV and CP trawl rock sole, yellowfin sole and Pacific cod on day one. Allow open trades between co-ops thereafter.
- Ratchet down phase-in option: overall phase-in 40% reduction, based on average actual bycatch for period 1995-2002, CV and CP trawl in rock sole, yellowfin sole and Pacific cod. 8% per year PSC reduction over 5 years, with first year free.
- Combination: For open access fishers, CV and CP trawl in rock sole, yellowfin sole, Pacific cod, 10% reduction per year based on average actual bycatch for period 1995-2002, reduction each year for 5 years. For co-op fishers, add ratchet down option, 40% phase-in option.

2. Zone 2, bairdi and c.opilio cap reduction:

- Reduce minimum threshold caps for bairdi and c.opilio in Zone 2 to the average actual bycatch for the period 1995-2002, in CV and CP trawl rock sole, yellowfin sole and Pacific cod.

Sincerely,



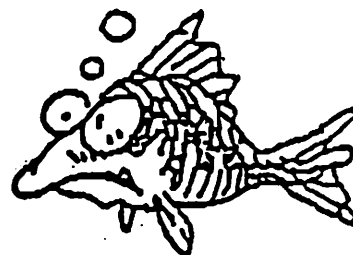
Arni Thomson, Executive Director

**North
Pacific
Longline
Association**

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Agenda C-5 (a)

June 3, 2003

**Mr. David Benton, Chairman
North Pacific Fishery Management Council
606 W 4th St
Anchorage, AK 99501**

RE: IRIU Trailing Amendments A & C

Dear Dave:

The North Pacific Longline Association represents freezer-longliners that fish for groundfish off Alaska, processing and freezing their product at sea. We are pleased to offer comments on IR/IU Trailing Amendments A and C.

Trailing Amendment A – Cod Rollovers

Trailing Amendment A, at Decision Point 26.2.3, Fixed gear, suggests analysis of sector allocations of Pacific cod to fixed gear operators with and without rollovers. These rollovers have a long history, are extremely important to the fixed gear fisheries, and should certainly be examined at this time with an eye to reapportioning the BSAI cod TAC between fixed and mobile gear operators based on recent catch history. Rollovers have accounted for 17% of the fixed gear harvest from 2000 – 2002.

BSAI Amendments 24 and 46

BSAI Amendment 24 was implemented in February of 1994. Its purpose was to provide industry and community stability by directly allocating to gear groups the approximate average percentage of the Pacific cod TAC taken in the years 1991 – 1993. The TAC was allocated 44% to fixed gear, 54% to trawl gear, and 2% to jig gear. The action was approved through 1996.

BSAI Amendment 46 was implemented in January of 1997. It was intended to extend and update the management measures authorized by Amendment 24. Final percentages were chosen based on the current harvest percentages taken by the trawl and fixed gear sectors, while retaining the 2% allocation for jig gear. The amendment had no sunset provision, but was scheduled for review in four years (2000).

At its October 2001 meeting the Council did in fact vote to reconsider Amendment 46. Robin Samuelson moved for an analysis to address cod rollovers from the trawl sector to the fixed gear sector since 1997 (1997 – 2001) so the Council could consider a reapportionment of the BSAI cod TAC based on catch history and dependency during the time period; there would be no change in the jig apportionment. The motion carried with one objection. (Minutes, NPFMC Meeting, October 2001, p. 18.)

The February 2002 Council newsletter stated that the re-evaluation of the BSAI trawl/fixed gear Pacific cod allocations was “placed as lower priority relative to existing projects.”

Reconsidering BSAI Amendment 46 and Recent Catch History

There is ample precedent for reconsidering the Pacific cod gear allocations established by Amendment 46. The allocations contained in its predecessor, Amendment 24, were based on the three years prior to its implementation (1991 – 1993). The allocations in Amendment 46 were established on then-current catch history, and it was to have been reviewed in 2001 - four years after its implementation. In fact the Council voted to do so in October of 2001, but did not follow through. A related action, Amendment 64, Pacific Cod Fixed Gear Allocations, is scheduled to sundown after three years, and final action on its renewal will be taken in a timely manner at this Council meeting.

We are now in the seventh year since Amendment 46 was implemented – three years beyond its official review date. The gear allocations contained in the amendment should be reconsidered in light of recent catch history in the course of establishing sector splits under IR/IU Amendment A. If necessary a decision point should be introduced into the Amendment A elements and options paper for reconsideration of cod allocations to jig and <60' operators.

Trailing Amendment C – Minimum Groundfish Retention

Alternative 2 would set a minimum groundfish retention standard (GRS) for all groundfish fisheries except pollock, which would apply “in principle” to all vessels harvesting groundfish in the BSAI. It is our view that imposing GRS on the freezer-longliner fisheries is unnecessary because retention rates are adequate, and that costs of GRS to this sector would greatly outweigh benefits.

During 2001, freezer-longliners <125' retained 89.1% of their catch, while freezer-longliners >125' retained 85.3% (EA/RIR Table 29, p. 53). Most of the discards are in the “other species” category, and some 85% of those discards are skates (FIS) for which there is very little market. These retention rates have remained fairly constant from 1995 – 2001 (EA/RIR, p. 18.).

Discard rates were higher in the freezer-longliner fishery for sablefish (Table 7, p. 18), but the fishery is infinitesimal by comparison with the other fisheries conducted by the gear type. In 2001 it accounted for only 0.3% of the total BSAI freezer-longliner catch (Table 6, p. 17; FIS Bycatch Report, attached). Discards amounted to only 39 mt, and the groundfish retention rate was 93% (FIS Report). The fishery is so small that when its groundfish retention rate is added to that of the cod target fishery, almost no change takes place (Table 7). The retention figures in Table 7 apparently include grenadiers, a Nonspecified species under the FMP (not FMP groundfish) – “...species groups of no current economic value taken...only as an incidental catch...Virtually no data exist which would allow population assessments...No record of catch is necessary...No TAC is established...the allowable catch is the amount which is taken incidentally while fishing...” (BSAI Groundfish FMP)

Freezer-longliner compliance with GRS would require certified scales and 200% observer coverage to measure and verify total catch. Because the flow of fish coming on board freezer-longliners is much smaller and more sporadic than on trawl vessels, the freezer-longliners would be required to have certified motion compensated hopper scales rather than flow scales. They would also be required to have certified platform scales and observer stations. Scale acquisition and installation costs would be about \$30,000 for each vessel, or \$1.3 million for the 42 vessels in the fleet. Each vessel would have to carry at least one extra observer at a cost of \$2,130 per week, for an annual total of \$2.86 million for 32 weeks of fishing.

Since the vessels <125' are retaining 89.1% of their catch, and the vessels >125' are retaining 85.3% (2001, Table 29), scale and observer costs for freezer longliners would be considerable with very little improvement in retention unless GRS is set at a very high level. Costs outweigh benefits, and the fleet should be exempted from GRS.

Conclusions

We conclude that there is ample precedent for reconsideration of the cod allocations by gear group established by Amendment 46 – and that the reconsideration is long overdue. We encourage the Council to undertake that reconsideration in the process of establishing groundfish sector splits under IRIU Trailing Amendment A.

We also conclude that groundfish retention rates in the freezer-longliner fishery are satisfactory, and that the costs of imposing GRS on the sector would greatly outweigh benefits. For those reasons we are hopeful that the Council will exempt the freezer-lognliner fleet from the GRS provision of Trailing Amendment C.

Thank you for your attention.

Sincerely,



Thorn Smith
Executive Director

Attachment

2001

AREA:
GEAR:
TYPE:
TARGET:

BSAI
Hook and line
Catcher/processor
Sablefish

GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	0	0	0	-	0.000	0
Pacific Cod	5	5	0	0.0%	0.000	0
Yellowfin sole	0	0	0	-	0.000	0
Rock sole	0	0	0	-	0.000	0
Flathead sole	0	0	0	-	0.000	0
Other flatfish	0	0	0	-	0.000	0
Greenland turbot	83	75	8	9.3%	0.019	17,000
Arrowtooth flounder	30	16	14	45.7%	0.034	30,000
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shortraker/rougheye rockfish	8	6	2	24.9%	0.005	4,000
Other rockfish	38	37	1	1.7%	0.002	1,000
Sablefish	274	273	1	0.5%	0.003	3,000
Other Species	13	0	13	100.0%	0.032	29,000
TOTAL	451	412	39	8.5%	0.093	85,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)		0 kg/mt	
Halibut Mortality (mt)		0 kg/mt	
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	0 crab	0.000 indiv/mt	
Other Tanner crab	47 crab	0.113 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	182 crab	0.441 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	1 salmon	0.003 indiv/mt	
Halibut and Herring Discard Pounds	0 pounds		
Crab and Salmon Discard Numbers	230 individuals		

PROWLER FISHERIES, INC.

P.O. Box 1364
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June 3, 2003

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Fax (907) 772-9385

Mr. David Benton, Chairman
NPFMC
606 W. 4th Street
Anchorage, AK 99501

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N.P.F.M.C

Re: C-5: IRTU Trailing Amendments C and A

Mr. Chairman,

On behalf of Prowler Fisheries, I submit these comments on IRTU for consideration by the NPFMC. Prowler Fisheries owns and operates three freezer-longline vessels in the EBS and WGOA that primarily fish for p-cod. Prowler Fisheries also participates in the sablefish fishery in the GOA.

Amendment C: Minimum Groundfish Retention Standards

We request that the CP H&L fleet not be included in the sectors required to comply with the GRS (Component 2 of Alternative 2) for the following reasons:

- 1.) The CP H&L fleet is currently operating at a high level of groundfish retention (85% retention 1995-2001, Table 7, p. 18). This applies to all CP H&L fisheries combined.
- 2.) Amendment C was developed to provide an alternate compliance method that would mitigate the potentially detrimental socioeconomic effects of 100% retention of flatfish (yellowfin sole and rock sole) for the sectors who discard significant amounts of these species in the BSAI. The CP H&L sector catches and discards minimal amounts of these species (0.29 metric tons/yr, 1995-2001 avg. Table E-1, p. x). Amendment C was not developed with the CP H&L fleet in mind. For the same reason, the CP H&L fleet was exempted in Amendment D.
- 3.) The cost of including the CP H&L fleet in the GRS would be large and the overall benefits would be small. The cost of the increased observer coverage and the purchase/installation of the certified motion compensated hopper scales as well as the certified platform scales would exceed \$3.0 million dollars for the CP H&L fleet. If the GRS was set at 80% there would be little reduction in discards for CP H&L (p. 52-53). From an 80% GRS that included all vessels in all sectors, the anticipated increased total retention is 16,236 mt by all vessels (p. xi). Of that, CP H&L would comprise 3.5% of the additional retention (566 mt) at a direct cost of over \$3.0 million plus additional costs (hold space etc.).



Frozen at Sea Longline Caught Fish

The depiction of the sablefish CP H&L fishery that is shown in Table 7 (p.18) incorrectly includes grenadiers in the GRS. Grenadiers are not groundfish but are classified as a non-specified species. Groundfish is defined as FMP species or target species including "other species". Grenadiers do not fit in any of these categories and is identified by a non-FMP species code. For example, if grenadiers are excluded in the GRS calculation for 2001, the retention rate becomes 91% for the CP H&L sablefish fishery. It is assumed that grenadiers are also incorrectly included in Table 8 (p. 20) and Table 9 (p. 21) as well.

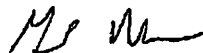
Additionally, the numbers associated with the BSAI CP H&L sablefish fishery are small in terms of number of participants (14 vessels, 1995-01 average, Table 4, p. 15); amount of catch (less than 1% of all CP H&L harvest, 1995-01 average, Table 6, p. 17); and the amount of discards (39 mt of groundfish in 2001, from NMFS and FIS). The lack of magnitude of the sablefish fishery retention and discards (even when including grenadiers) is evident in Table 8 (p. 18). The comparison between "Longline CPs: Pacific Cod" and "Longline CPs: All fisheries" shows retention rates with a miniscule difference between the two (0.9%).

Amendment A

In Decision Point 26, the all gear BSAI cod allocation is now on the table. Under fixed gear, the alternatives include with and without rollovers. The exclusion of rollovers will not give an accurate picture of catch history and should be deleted. While other elements are considered, catch history has consistently been the preeminent basis of allocation issues at the NPFMC. The exclusion of rollovers does not reflect catch history nor does it reflect the origin and history of those rollovers.

The fixed gear/trawl allocation was last in front of the Council in 1996 (Amendment 46). This allocation was scheduled for review in January 2001. This review did not occur as it was placed on a lower priority relative to existing Council projects at that time. The allocation in Amendment 46 was based on recent catch history and assumptions based on halibut PSC mortality by sector. Those assumptions have not held up over time and the result has been rollovers from the trawl to the fixed gear sector (primarily CP H&L). The rollovers have become a significant portion of the CP H&L catch history (17.4% in 2000-02). A chronology of BSAI p-cod allocation decisions at the NPFMC is attached to put this issue in perspective, particularly the origin and the significance of the rollovers. The all gear BSAI cod allocation is overdue for review but now occurs in IRIU Amendment A.

Thank you for your consideration,



Gerry Merrigan

Government Affairs
Prowler Fisheries

History of BSAI Pacific Cod Allocations

I.) Transition from the Foreign Fishery to Joint Venture to the Domestic Fishery

In order to fulfill the objectives of the Magnuson Act, there was a transition in the BSAI cod fishery from the foreign fleet to the joint venture fleet and finally to the domestic fleet. The foreign cod fishery (longline and trawl) was phased out by 1988. The joint venture trawl cod fishery peaked in 1988 (110,000 mt) and was phased out by 1990 (8,000mt). The resulting domestic catch by sector for the time period after phase-out of the foreign fishery and prior to Amendment 24 is below:

YEAR	LONGLINE	POT	FIXED	TRAWL	JIG
1990	47,598 (28%)	1,386 (1%)	48,984 (29%)	118,336 (71%)	139 (0.08%)
1991	79,703 (37%)	6,673 (3%)	86,376 (40%)	131,688 (60%)	No report
1992	101,182 (49%)	13,680 (7%)	114,862 (56%)	90,272 (44%)	117 (0.06%)
1993	65,688 (39%)	2,098 (1%)	67,786 (40%)	99,051 (60%)	35 (0.02%)
1990-92			42%	58%	
1991-93			46%	54%	

Table 1: Annual distribution of BSAI Pacific cod catch by sector in mt, 1990-93 (From Appendix A, Table A4, Amendment 24 EA/RIR/IRFA).

The increase in pot and longline harvest was in part due to cod trawl closures beginning in 1989 due to halibut PSC limits. There was no allocation of cod between gear types nor were there rollovers between sectors. The primary management tool was apportionment of PSC limits by season. Separate halibut PSC allowances were determined annually for the cod longline and trawl fisheries. Cod was being caught by longline, pot, jig, and trawl (in both directed and incidental) fisheries.

There were halibut PSC limit induced closures in the cod trawl fishery from 1990-92. By 1992, the fixed gear portion of the cod harvest was 56% and the trawl portion was 44%. In 1992, the Council was requested to look at establishing allocations in BSAI p-cod.

II.) Amendment 24: BSAI Pacific Cod Allocation by TAC and Season: Final action, June 1993. Implemented February, 1994.

Problem Statement: *"The BSAI p-cod fishery, through overcapitalized open access management, exhibits numerous problems which include: compressed fishing seasons, periods of high bycatch, waste of resource, gear conflicts and an overall reduction in benefit from the fishery. The objective of this amendment is to provide a bridge to comprehensive rationalization. It should provide a measure of stability to the fishery while allowing various components of the industry to optimize their utilization of the resource."* [emphasis added].

Amendment 24 included:

- 1.) Allocation of BSAI p-cod TAC among sectors: 44% fixed gear/54% trawl/2% jig (allocation to run through 1996).
- 2.) Seasonal apportionment of BSAI p-cod TAC.
- 3.) Rollovers, i.e. reallocation from one sector to another in order to fully harvest the allocation. Reallocation could go from trawl to fixed gear and visa versa as needed.

Allocation: The allocation was based on recent catch history. The exception was the substantial increase to jig gear in order to increase participation of small shore based vessels. The recollection of most participants was that the jig allocation came equally from both fixed gear and trawl gear. However, according to the amendment summary in the DPSEIS (Appendix A) the allocation was based "...on approximately the average percent of Pacific cod taken with these gear type in 1991-93."

If the DPSEIS summary is correct, then the 2% jig allocation came predominately from fixed gear (and predominately from longline). The 1991-93 catch history was 46% fixed/54% trawl and the resulting allocation was 44% fixed gear/54% trawl/2% jig. For the same time period, longline comprised 92% of the fixed gear harvest. However, institutional memory indicates that the jig allocation came from fixed and trawl gear equally. In either case, the important distinction is that when the Council chose to allocate to a new fishery beyond its catch history, that allocation was done when all gear is on the table (and not a subset of gear types).

Following Amendment 24, the fixed gear proportion of catch increased primarily due to rollovers from jig and trawl (due to halibut PSC constraints) as well as an increase in pot effort. The Council was scheduled to revisit the allocation prior to December 31, 1996. The resulting catch by sector for the time period after Amendment 24 and prior to Amendment 46 is below.

YEAR	LOGLINE	POT	FIXED	TRAWL	JIG	TOTAL ROLL-OVERS TO FIXED GEAR
1994	85,573 (44.2%)	8,184 (4.2%)	93,757 (48.4%)	99,313 (51.2%)	730 (0.4%)	
1995	102,600 (41.9%)	20,299 (8.3%)	122,899 (50.2%)	121,530 (49.6%)	599 (0.25%)	11,800
1996	94,701 (39.3%)	32,617 (13.6%)	127,318 (52.9%)	113,089 (47%)	267 (0.1%)	19,400
1994-95			49.3%	50.4%		
1994-96			50.5%	49.3%		

Table 2: Annual distribution of BSAI Pacific cod catch by sector in mt, 1994-96. From NMFS website: Groundfish Catch Statistics and Information Bulletins

III.) Amendment 46: Pacific Cod Allocation (11). Final action, June 1996.
Implemented, January 1997.

Problem Statement: *"The BSAI p-cod fishery continues to manifest many of the problems that led the NPFMC to adopt Amendment 24 in 1993. These problems include compressed fishing seasons, periods of high bycatch, waste of resource, and new entrants competing for the resource due to crossovers allowed under the NPFMC's Moratorium Program. Since the apportionment of BSAI cod TAC between fixed gear, jig, and trawl gear was implemented on Jan. 1, 1994, when Amendment 24 went into effect, the trawl, jig, and fixed gear components have harvested the TAC with demonstrably differing levels of PSC mortality, discards, and bycatch of non-target species. Management measures are needed to ensure that the cod TAC is harvested in a manner which reduces discards in the target fisheries, reduces PSC mortality, reduces non-target bycatch of cod and other groundfish, takes into account the social and economic aspects of the variable allocations and addresses the impacts of the fishery on the habitat. In addition, the amendment will continue to promote stability in the fishery as the NPFMC continues on the path towards comprehensive rationalization."* [emphasis added]

Amendment 46 included:

- 1.) **Allocation:** The allocation between sectors was amended to 51% fixed/ 47% trawl/2% jig (formerly 44% fixed/54% trawl/2% jig). Within the trawl sector, a 50/50 split between CV and CP was adopted.
- 2.) **Rollovers:** All unused jig quota was to be reallocated to fixed gear on September 15 of each year. In a fishing year, if trawl, pot, and H&L gear were unable to catch their allocations, the projected portion to be left unharvested would be reallocated to other gear types as needed.
- 3.) **Halibut PSC Mortality Caps:** The trawl halibut PSC mortality cap for p-cod was established to be no greater than 1,600 mt. The H&L halibut PSC mortality cap for p-cod was established to be no greater than 900 mt.
- 4.) **Review:** There was no sunset provision but the Council was scheduled to review this agreement in four years following the date of implementation. [Note: this review should have then occurred on January 1, 2001 but did not.]

Allocation: The allocation percentages came from an industry negotiation and were subsequently adopted by the Council. However, the basis for the allocation ranges considered in the alternatives largely revolved around catch history and differing halibut PSC mortality by each sector. There was a specific focus on reducing PSC mortality, reducing impacts on habitat, and reducing cod discards by the different gear sectors. The exception again was the jig fishery where the allocation was roughly eight times the recent catch history.

The analysis made several assumptions concerning PSC use by sector and the resulting limitation on cod harvest by that sector. For example, the analysis concluded under a 49% fixed gear/ 49% trawl split, the longline sector would need a minimum of 912 mt of halibut PSC, and the trawl sector would need a minimum of 1,749 mt of PSC to cover

cod catch in the directed (target) cod fisheries. The Council adopted a 51% fixed gear/47% trawl split (and 2% jig) with 900 mt halibut PSC cap on longline and a 1600 mt halibut PSC cap on trawl.

If the assumptions in the analysis held true for halibut PSC use in the trawl fishery, there should have been sufficient halibut PSC to prosecute the trawl cod fisheries (directed and incidental) and catch the allocation (47%) without having any rollovers. The analysis stated that if the current 54% trawl/44% fixed gear split continued (as in Amendment 24), there would be an annual rollover to fixed gear of 12,000 mt/yr from trawl. It was anticipated that the reallocation would minimize the amount of rollovers.

However, despite the reallocation in Amendment 46, there has still been an average rollover from trawl to fixed gear of 11,416 mt annually (1997-02). The primary reason for this rollover has been the use of halibut PSC in the trawl fishery. The longline fishery (fixed gear) has been able to lower its PSC use and catch its allocation plus rollovers without exceeding the halibut PSC cap. The resulting catch by sector for the time period after Amendment 46 to present is below:

YEAR	LOGLINE	POT	FIXED	TRAWL	JIG	TOTAL ROLLOVERS TO FIXED GEAR
1997	124,233 (48.2%)	22,047 (8.6%)	146,280 (56.8%)	111,212 (43.2%)	173 (0.07%)	15,000
1998	98,094 (50.8%)	13,657 (7.1%)	111,751 (57.8%)	81,308 (42.1%)	192 (0.1%)	11,500
1999	78,852 (48.6%)	16,150 (9.9%)	95,002 (58.5%)	67,190 (41.4%)	169 (0.1%)	17,800
2000	85,106 (48%)	18,783 (10.6%)	103,889 (58.6%)	73,476 (41.4%)	71 (0.04%)	12,000
2001	96,874 (59.0%)	16,507 (10.1%)	113,381 (69.1%)	50,752 (30.9%)	71 (0.04%)	27,000
2002	89,802 (49.0%)	15,054 (8.2%)	104,856 (57.2%)	78,178 (42.7%)	166 (0.09%)	15,400
1997-02			59.6%	40.3%		
1997-99			57.7%	42.2%		
2000-02			61.6%	38.3%		

Table 3: Annual distribution of BSAI p-cod catch by sector in mt (1997-02). From NMFS website: Groundfish Catch Statistics and Information Bulletins.

Amendment 46 (and allocation split) was scheduled for review in January 1, 2001, but this did not occur. The next action by the Council toward comprehensive rationalization was Amendment 64.

IV.) Amendment 64: BSAI Fixed Gear Pacific Cod Allocations: Final action, October 1999. Implemented July, 2000. Sunset date December 31, 2003.

Problem Statement: *"The hook-and-line and pot fisheries for p-cod in the BSAI are fully utilized. Competition for this resource has increased for a variety of reasons, including increased market value of cod products and a declining ABC/TAC. Longline and pot fishermen who have made significant long-term investments, have long catch histories, and are significantly dependent on the BSAI cod fisheries need protection from others who have little or limited catch history and wish to increase their participation in the fishery. This requires prompt action to promote stability in the BSAI fixed gear cod fishery until comprehensive rationalization is completed."* [emphasis added].

Amendment 64 included:

- 1.) Allocation: The Council adopted an allocation of 80% CP H&L, 0.3% CV H&L, 18.3% pot, 1.4% CV <60'. The allocation was roughly based on 1995-98 with some changes (pot and CV <60'). The CV < 60' sector received an allocation four times larger than its catch history along with the additional provision of being able to initially harvest off the >60' CV pot and H&L allocation before accruing harvest to the <60' quota.
- 2.) Rollovers: Any unused CV H&L and CV <60' are to roll to CP H&L in September. Any jig and trawl rollovers will be apportioned to CP H&L and pot in the proportion of actual harvest of rollovers in 1996-98. [Note: this is the 95/5].
- 3.) Bycatch of p-cod in other fixed gear fisheries comes off the top of the overall fixed gear allocation before allocations before the directed fisheries are set.
- 4.) Sunset December 31, 2003.

VI.) Amendment 67: BSAI P-Cod Species and Gear Endorsements: Final action in April 2000. Implemented in January 2002. Problem Statement: Same as Amendment 64.

This amendment is consistent with the NPFMC goal toward comprehensive rationalization. Amendment 67 added an endorsement to the LLP license based on minimum landing requirements for all freezer longliners and pot and longline CVs > 60'. Catcher vessels under 60' were exempted from the minimum landing requirements. This amendment limited the participants in the BSAI fixed gear cod fisheries to those vessels with recency and catch history.

VII.) Amendment 77: BSAI Fixed Gear Allocations (II): Final action scheduled for June 2003. Implementation scheduled for December 2003.

Problem statement: *"The fixed gear fisheries for p-cod in the BSAI are fully utilized. The fishermen who hold licenses in the BSAI p-cod fisheries have made substantial investments and are significantly dependent on BSAI p-cod. The longline and pot gear*

allocations currently in place for the BSAI p-cod fishery under Amendment 64 expire Dec. 31, 2003. Without action by the NPFMC, serious disruption to the BSAI fixed gear p-cod fishery will occur. Prompt action is required to maintain stability in the BSAI fixed gear p-cod fishery until comprehensive rationalization is completed. [emphasis added].

Amendment 77 has three alternatives in regards to allocations along with one alternative regarding pot allocation (between CV & CP). There are different options regarding the "funding" of the <60' CV sector (i.e. allocations above catch history must de facto come from some other sectors' catch history). There are also suboptions in regards to rollovers.

Prior to and since Amendment 64 (and 67), the CP H&L fleet has caught a consistent portion of the fixed gear catch (including rollover quota). Since Amendment 64, all the >60' sectors (CP H&L, CV H&L, and pot) have caught their allocations except pot in 2002. The <60' CV has increased its proportion from previous negligible amounts and caught its allocation for the first time in 2002. The fixed gear catch is below:

YEAR	CP H&L	CV H&L (BOTH < & > 60')	POT (< & > 60')	CV<60' ONLY	JIG ROLL- OVERS	TRAWL ROLL- OVERS
1995	96,546 (81.6%)	797 (0.7%)	20,980 (17.8%)	Conf.	4,000	10,000
1996	91,113 (74.1%)	187 (0.15%)	31,727 (25.8%)	172 (0.14%)	4,400	15,000
1997	120,068 (84.3%)	206 (0.14%)	22,101 (15.5%)	Conf.	5,000	10,000
1998	94,879 (88.2%)	17 (0.02%)	12,634 (11.8%)	Conf.	3,500	8,000
1999	77,121 (83.2%)	217 (0.23%)	15,380 (16.6%)	174 (0.19%)	2,800	9,000
2000	81,494 (80.0%)	358 (0.36%)	19,963 (19.6%)	564 (0.55%)	3,000	9,000
2001	94,463 (83.5%)	613 (0.54%)	18,055 (16.0%)	1,046 (0.92%)	3,000	24,000
2002	89,399 (84.3%)	404 (0.4%)	14,878 (14.1%)	1,423 (1.3%)	3,400	8,500
1995- 99	82.3%	0.25%	17.5%	Conf.		
2000- 02	82.6%	0.43%	16.6%	0.92%		

Table 4: BSAI fixed gear cod catch and rollovers in directed cod fisheries in mt, 1995-02. Catch includes reallocated quota. Does not include incidental catch or discards (except for 2002). From Amendment 77 EA/RIR/IRFA, Tables 3.3, 3.26, and 3.27.

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June 3, 2003

Mr. Dave Benton
Chairman
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N.P.F.M.C

Re: IRIU, BSAI Amendment 79 (Minimum Groundfish Retention Standards)

Dear Chairman Benton,

On behalf of the membership of Groundfish Forum I would like to express our approval of the decision by NMFS regarding Amendment 75, delaying the implementation of Amendment 49 (IRIU) for rock sole and yellowfin sole indefinitely. As expressed in our letter of April 29, 2003 (attached) we believe that this action is justified and appropriate. Requiring full retention of these species would produce no significant benefit while imposing very high costs on sectors of the industry identified in the IRIU analysis.

This industry has done an admirable job of reducing discards even without regulations in place. As the Council examines options to further improve retention, we encourage you to keep in mind the goal of providing the greatest benefit to the Nation, and to avoid actions which are merely intended to re-allocate resources or to 'punish' some sectors of the industry. Your responsibility is to provide the means to increase retention in the most reasonable way. As stated in National Standard 9 of the Sustainable Fisheries Act, this must be done 'to the extent practicable.' Congressman Don Young clarified the meaning of 'practicable' in the Congressional Record of September 27, 1996, by stating explicitly that "Congress does not intend that this provision will be used to allocate among fishing gear groups..." A transcript of Congressman Young's comments is attached.

Amendment 79 to the BSAI FMP would establish minimum Groundfish Retention Standards. We support the development of a reasonable retention standard applied across all species and managed at a fleet level, with accounting standards which do not excessively burden the industry. (Again, citing Congressman Young, the Sustainable Fisheries Act was not intended "to impose costs on fishermen and processors that cannot reasonably be met.") Measuring retention across the fleet and across all species allows us to realize significant improvements in the fishery without disadvantaging individual participants.

The EA/RIR/TRFA for Amendment 79 shows that IRIU flatfish are not actually the largest component of discards in the non-AFA CP fleet. The greatest 'bang for the buck' comes, instead, from addressing regulatory discards. Regulatory discards occur when fish which can be produced economically must be thrown away. According to this analysis, regulatory discards accounted for an estimated 44% of all of the non-AFA CP discards in 2002 (page 36). By contrast, IRIU flatfish which were the original target of Amendment 49 (fish that the analysis demonstrates cannot be produced economically) account for only about 22.5% of the discards in the same year.

Pollock is single largest component by species in non-AFA CP discards, accounting for almost as much as the combined IRIU flatfish discards. Since federal groundfish fisheries are required to retain 100% of pollock landings, the only reason pollock discards occur is because the Maximum Retainable Allowance (MRA) has already been reached when the fish are landed. Increasing this allowance and adjusting the period over which it is measured (suboption 6.1.2) could result in an immediate increase of up to 5% in groundfish retention in the non-AFA CP sector (Amendment 79 EA/RIR/TRFA, page 63). *This is a real and meaningful change.*

Further analysis would show the best combination of MRA and reporting period to allow the non-AFA trawl CPs to harvest and retain their total historical pollock catch, which is a goal agreed to by both the AFA and non-AFA trawl sectors. ("North Pacific Groundfish fishermen and processors have agreed to work together on a proposal... for non-AFA catcher/processors to maximize utilization of their historic pollock catch." From the "Department of Commerce and Related Agencies Act, 2002." Full citation is attached.)

The system for reporting and monitoring MRAs is already in place and would not have to be developed. Monitoring compliance could actually be easier on a trip basis than on the current daily basis, since the MRA could be verified when the vessel offloads rather than during an at-sea boarding. In fact, NMFS Enforcement has indicated that monitoring at offloads is their preferred alternative (page 58 of the EA/RIR/TRFA for Amendment 79). In the end, the non-AFA CP fleet could increase overall retention of pollock, a fish which will be used as food, with relative ease and minimal cost. Clearly this is preferable to retaining unmarketable products which may wind up in landfills.

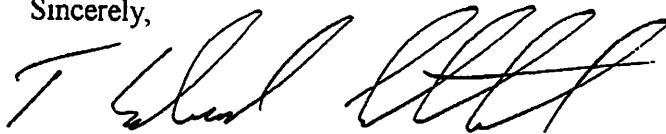
The Council has recognized that ultimately, the best retention and utilization will be achieved through rationalization of the resource. This is addressed in IRIU Amendment A, which allows the non-AFA CP sector to form multi-species coops. Of course, this process necessitates dividing the TAC between sectors and raises serious issues regarding the 'proper' way of doing this. We encourage the Council to stand by the traditional value you have placed on recency and economic dependence. The non-AFA CP fleet relies on Pacific cod, Atka mackerel, rockfish and flatfish for its livelihood; these species comprise 99% of the value of our catch.

There are a multitude of options in front of the Council to address IRIU issues. We request that you immediately reject those which are simply punitive or reallocative in nature or result. There are three steps which you can take to truly improve the fishery while protecting both the resource and those who depend on it:

- Support the decision by NMFS to indefinitely delay implementation of Amendment 49 for flatfish.
- Increase the Maximum Retainable Allowance of pollock in the non-AFA CP fleet to a level not to exceed our historic pollock catch, and adjust the reporting period to assure that this sector not only can, but *must* utilize this fish (Option 6.1.2).
- Proceed with rationalization of the non-pollock trawl fisheries using the most recent five years of catch history, which when combined with a reasonable Groundfish Retention Standard will allow and require those who depend on these fisheries to harvest them as efficiently as possible.

Thank you for the opportunity to comment. We remain committed to minimizing bycatch and we support the Council's continuing efforts to satisfy all of the standards of the Sustainable Fisheries Act.

Sincerely,



T. Edward Luttrell
Executive Director

Attachments:

1. April 29, 2003 letter from Groundfish Forum to Sue Salveson
2. Excerpts from the Sustainable Fisheries Act (National Standard 9) and comments on bycatch provisions by Congressman Don Young (Congressional Record, September 27, 1996)
3. Excerpts from the "Department of Commerce and Related Agencies Act, 2002" (H.R. 2500)

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April 29, 2003

Ms. Sue Salveson
Assistant Regional Administrator
Sustainable Fisheries Division
NMFS, Alaska Region
P.O. Box 21668
Juneau, AK 99802-1668

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JUN - 3 2003
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Re: Comments on BSAI FMP Amendment 75

Dear Ms. Salveson,

Groundfish Forum is a trade organization representing 15 head-and-gut (H&G) trawlers operating in the BSAI and GOA trawl fisheries. We are taking this opportunity to comment on Amendment 75 to the BSAI FMP to delay implementation of the 100-percent retention requirements for yellowfin sole and rock sole (Amendment 49) until June of 2004.

We understand that this action is being taken to allow more time for the Council and the industry to develop alternative programs to increase utilization of all species. As such, we appreciate the recognition by the Council and the Agency that the industry has been working very hard to reduce bycatch, and that the 100% retention requirements in Amendment 49 are not realistic. The question now is whether this regulation will *ever* be realistic or even beneficial to enforce.

The Council's stated intent when passing Amendment 49 was, among other things, to "promote improved retention and utilization... *to achieve long term sustainable economic benefits to the nation.*" (62 FR 34430, emphasis added). However, the Council's analysis of the effects of full implementation (Northern Economics, April 2003) shows under a full retention regulation for yellowfin and rock sole, "overall net benefits to the Nation may be only slightly affected, if at all."

National Standard 9 requires that "Conservation and management measures shall, to the extent practicable, minimize bycatch..." Trawlers have already made dramatic improvements in retention and utilization since Amendment 49 was passed. Using NMFS statistics comparing averages from 1995-1997 with 2000-2001, rock sole retention has improved by 59% and yellowfin sole retention by 74%. This is a real and significant change that deserves recognition.

When this standard was added to the Magnuson-Stevens Act, Congressman Don Young clarified the intent of the language as follows:

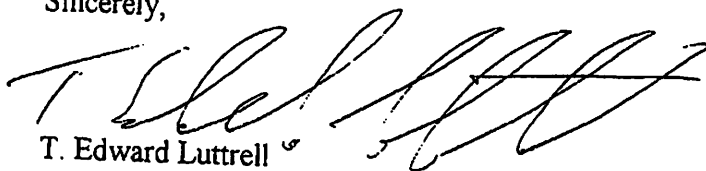
"The use of the term 'to the extent practicable' was chosen deliberately.... 'Practicable' requires an analysis of the cost of imposing a management action; the Congress does not intend that this provision will be used to allocate among fishing gear groups, nor to impose costs on fishermen and processors that cannot reasonably be met."
(Congressional Record [House], September 27, 1996)

The 2003 Northern Economics analysis cited above finds that "a requirement to retain all IR/TU flatfish will impose a significant economic hardship on certain segments of the fishing industry..." and even goes on to say that "one could argue that the IR/TU flatfish ...should continue to be discarded, because they have little instrumental value to current members of society [while] the costs to certain sectors [of implementing full retention] are substantial."

We question why it is necessary to continue to delay implementation of a regulation which clearly does not meet its stated intent, and which both the Council and NMFS have determined is not reasonably implementable. If it is not possible to rescind this portion of Amendment 49 altogether, we encourage NMFS to delay implementation indefinitely and strongly encourage the NPFMC to concentrate on developing an alternative program (such as industry cooperatives) which would allow for continued real improvements in the fishery.

In summary, we support the Council's preferred alternative to delay full implementation of 100% retention requirements for yellowfin sole and rock sole. However, we believe that the stated time frame (through June of 2004) does not adequately address the fact that it is simply not feasible for this regulation to be put in place at any time. We encourage NMFS to make the delay indefinite until such time as the NPFMC can create a reasonable and fair IRIU standard along with the rationalization process needed to implement the standard.

Sincerely,



T. Edward Luttrell
Executive Director

**Excerpts from the Sustainable Fisheries Act regarding bycatch
(National Standard 9):**

SEC. 301. NATIONAL STANDARDS FOR FISHERY 16 U.S.C. 1851

CONSERVATION AND MANAGEMENT

(a) **IN GENERAL.**--Any fishery management plan prepared, and any regulation promulgated to implement any such plan, pursuant to this title shall be consistent with the following national standards for fishery conservation and management:

(9) Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

Comments on Bycatch Provisions in the Sustainable Fisheries Act

Representative Don Young, AK
Congressional Record (House)
September 27, 1996

"In order to avoid confusion on the part of those affected by these provisions -- including the National Marine Fisheries Service, the regional councils, and the seafood industry -- I will take this opportunity to clarify in legislative history the intent of these parts of the bill.....

Section 106 of S. 39 establishes a new national standard regarding bycatch... The use of the term 'to the extent practicable' was chosen deliberately by both the Senate and the House. Both bodies recognized that bycatch can occur in any fishery, and that complete avoidance of mortality is impossible. Councils should make reasonable efforts in their management plans to prevent bycatch and minimize its mortality. However, it is not the intent of the Congress that the councils ban a type of fishing gear or a type of fishing in order to comply with this standard. "Practicable" requires an analysis of the cost of imposing a management action; the Congress does not intend that this provision will be used to allocate among fishing gear groups, nor to impose costs on fishermen and processors that cannot reasonably be met."

Excerpt from H.R. 2500, the "Department of Commerce and Related Agencies Act, 2002," page 140:

"Sec. 211.—The conference agreement includes a new section 211 that amends section 213 of Public Law 105-277, the American Fisheries Act. This change would delete a sunset provision and instead authorize an annual appropriation, making permanent the prohibition on direct pollock fishing by non-American Fisheries Act (AFA) catcher/processors, even though this sector has some pre-AFA pollock history. The conferees understand that North Pacific groundfish fishermen and processors have agreed to work together on a proposal for consideration by the North Pacific Fishery Management Council for non-AFA catcher/processors to maximize utilization of their historic pollock catch. The conferees request that the appropriate Committees be notified immediately should the Secretary determine that the AFA statute precludes the Council from developing a regulation and implementing the aforementioned agreement..."



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Delivered via Facsimile and First Class Mail

Mr. David Benton, Chairman
North Pacific Fishery Management Council
605 West 4th, Suite 306
Anchorage, AK 99501-2252

Dr. James Balsiger, Regional Administrator
NOAA Fisheries, Alaska Region
709 W. 9th St.
Juneau, AK 99802-1668

June 3, 2003

RE: Improved Retention/Improved Utilization (IR/IU)

Dear Chairman Benton and Dr. Balsiger:

We are concerned that the National Marine Fisheries Service and North Pacific Fishery Management Council have failed to take action sufficient to minimize and curtail the bycatch of fish and other marine life in the waters off Alaska. As you know, the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) contains several provisions that require NMFS to address bycatch. Specifically, all FMPs and regulations must meet the National Standard 9 (16 U.S.C. 1851(a)(9)):

(9) Conservation measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

The Act defines "bycatch" as "fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards." 16 U.S.C. 1802(2). "Fish" is defined broadly, to include "finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals and birds." 16 U.S.C. 1802(12). Thus, the Act requires NMFS and the Council to take measures to first minimize the catch of all forms of marine animal and plant life other than marine mammals and birds, and second to minimize the mortality of such animal and plant life whose catch cannot be avoided. See also 16 U.S.C. 1853(a)(11) (bycatch requirements in Fishery Management Plans).

While we commend the industry's efforts to retain more fish, none of the IR/IU Amendments currently being considered by the Council at this meeting are sufficient to

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IR/IU
June 3, 2003

satisfy the statutory bycatch requirements in the MSA for several reasons, including the following:

- 1) The amendments only apply to bycatch of species defined as "groundfish";
- 2) The amendments only apply to specific fishing sectors and fisheries;
- 3) The amendments do not include any measures designed to avoid bycatch; and
- 4) The amendments are many years overdue.

As we have repeatedly said to the Council and through our involvement on the IR/IU Technical Committee, NMFS and the Council must establish, at a minimum, hard bycatch caps applied at a species by species basis that reduce bycatch over time to acceptable target levels to meet legal requirements. This Council has already set precedent for this type of bycatch management through Prohibited Species Catch (PSC) limits. We strongly urge NMFS and the Council to establish and implement hard bycatch limits in all fisheries.

Such actions are long overdue by statutory standards, as well as by your own assurances. In a June 14, 2002 letter from Chairman Benton to Dr. William Hogarth, you stated, "We are also establishing a Bycatch Committee, with representatives of fishing and non-fishing interests, to work this summer and fall to develop alternative approaches to better manage and reduce bycatch in all fisheries." One year has now passed and this Bycatch Committee has still not been formed. We request that you appoint this committee at the June Council meeting, and establish an expeditious schedule for their work with fishing and non-fishing interests so bycatch management measures for all fisheries can be developed in an open public process in a reasonable timeframe.

Sincerely,



Jim Ayers
Pacific Regional Director



June 3, 2003

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Mr. David Benton, Chairman
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
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Re: Agenda Items C-5(b)

Dear Mr. Benton:

I am writing on behalf of the At-Sea Processors Association (APA) to comment on certain aspects of Agenda Item C-5(b), the Minimum Groundfish Retention Standards (IR/IU Trailing Amendment C). As will be explained more fully below, APA supports the concept of revising the pollock maximum retainable bycatch allowance (MRA) so that the head and gut (BSAI HT-CP) fleet can more fully utilize the pollock that it has traditionally taken as bycatch when fishing for non-pollock species in the BSAI. We are concerned however, that care must be taken to ensure that increased retention opportunities do not result in higher bycatch rates of pollock and/or an increase in the total amount of pollock that the BSAI HT-CP fleet takes as bycatch on an annual basis.

Of the MRA options presented in the May 20, 2003, EA/RIR/IRFA for Amendment 79, APA favors an approach that combines sub options 6.1.1 and 6.1.2. Under such an approach, NMFS would have in-season authority to adjust the MRA rates for pollock up or down so as to minimize the amount of regulatory discards on the one hand while ensuring that the overall level of pollock bycatch by the BSAI HT-CP fleet stays within its historical levels on the other. Our preferred approach would involve three steps:

- (1) Establishment of an ICA based on historical annual bycatch levels. At the beginning of each year, NMFS would calculate and set aside an Incidental Catch Allowance (ICA) of pollock that is sufficient to accommodate a level of bycatch by the BSAI HT-CP fleet that is consistent with the historical



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annual pollock bycatch levels experienced by that fleet.¹ In making this set aside, it must be remembered that the ICA has never been intended as a quota, but rather as a bycatch reserve designed to reflect the actual bycatch needs of the BSAI HT-CP fleet. It should, therefore, be based on that fleet's legitimate bycatch needs as reflected in the historical bycatch data. If NMFS determines that there is a surplus of pollock in the ICA at some point during the year, that surplus would be reallocated to the directed pollock fishery as has been the practice in the past.

- (2) **Intra-annual adjustments of MCA rates.** NMFS would set pre-season MRA rates based on historical use patterns by the BSAI HT-CP fleet during the first part of each fishing year. NMFS would then monitor actual bycatch rates closely during the year and adjust pollock MRA levels (up or down) for the BSAI HT-CP fleet on a monthly or other regular basis throughout the year so as to minimize unnecessary discards of pollock taken as legitimate bycatch in the various non-pollock groundfish fisheries. In making such adjustments NMFS should be careful not to reward unnecessary or artificial increases in pollock bycatch rates that might simply reflect surreptitious targeting of pollock. A monitoring protocol could look like this:

Step 1: A projection of the cumulative average percentage of pollock catch by the HT-CP sector, would be determined for the upcoming fishing year on a week by week basis. This would need to be based on an average over the last 3 or 4 years. (Note: The point percentage use goals might actually need to be slightly larger than the actual mean of the last 4 years to allow for natural variation between years that could lead

¹ For example, Table 34 of the EA/RIR indicates that between 1999 and 2002, the BSAI HT-CP's total bycatch of pollock (retained plus discarded) equaled somewhere between 29,000 and 34,000 mt. on an annual basis. This represented between 10.9 % and 11.8% of that sector's total harvest of groundfish over the years in question. It is this sort of calculation that we would like to see used to calculate the amount of pollock bycatch that would be set aside in the ICA at the beginning of the fishing year so as to accommodate the BSAI HT-CP's realistic annual pollock bycatch needs.

to increased bycatch early in the year. This is the "on average half of the years will be less than the mean" phenomena).

- Step 2: NMFS would use the weekly data from step 1 to determine as point goals the expected cumulative percentage use of the HT-CP sector's ICA at various points in the year. These might be at weeks that correspond to roughly the first of each month or the middle of each month, starting in March (there is too little fishing by the start of February to make a retention test reasonable that early in the year).
- Step 3: During the season, if the sector's percentage use of the ICA exceeded the point goals, MRA standards would revert to either the current standards or more restrictive standards.
- Step 4: The ICA percentage should only change if the agency produces an analysis of pollock bycatch rates in flatfish tows that indicate an increasing (or decreasing) percentage of pollock in such tows. (Note that pollock target tows should be excluded from such an analysis). This safeguard is needed to prevent ICA "creep" that could result from new or surreptitious targeting of pollock.
- Step 5: Unused ICA rollover to the directed fleet continues.
- Step 6: The agency should add a weekly ICA catch row to its weekly reporting. The total ICA catch is shown, but not the catch attributed solely to this sector. It could also add the cumulative percentage of the sector's use (i.e. the cumulative percentage test value that will be used at various calendar points), so that the vessels in the sector will be able to work together to remain under the ICA usage targets.

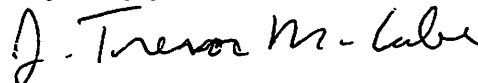
- (3) **Change the MCA enforcement period.** The accounting period for determining compliance with the applicable MRA rates should be changed from the current "any point in time" approach (which, according to the EA/RIR, only serves to unnecessarily increase the amount of

discards over the course of a season) to a "trip by trip" basis. This will give vessels the opportunity to adjust fishing practices during the course of a trip to ensure that they stay within the applicable MRA limits. To ensure that vessels are not taking advantage of this procedure to increase their overall pollock catch by surreptitiously targeting on pollock over the course of a trip (e.g., by "topping off" at the end of a trip) any increase in the total amount of pollock taken as bycatch in the non-pollock fisheries over the course of any given year could be deducted from the following year's ICA set aside.

The above described approach should accomplish the dual objectives of reducing overall discards of pollock in the non-pollock groundfish fisheries without unduly increasing the amount of pollock needed to fund the legitimate bycatch needs of the HT-CP fleet as it prosecutes its fisheries in the BSAI.

Thank you for the opportunity to submit these comments. If you or any of the other council members have any questions about APA's position on this issue we will be happy to address them at the upcoming council meeting in Kodiak.

Very truly yours,



At-sea Processors Association
Trevor McCabe, Ex. Director

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**ARCTIC STORM MANAGEMENT GROUP, LLC**

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June 3, 2003

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RE: IRIU Amendments C & D

Dear Chairman Benton:

Arctic Storm would like to comment on proposed IRIU Amendments C and D. Arctic Storm is a fishing company that manages vessels in the pollock, yellowfin sole and cod fisheries and so will be directly impacted by these proposed amendments. As a member of the Council's IRIU Committee, I have participated in crafting the options currently under consideration.

Amendment C: Minimum Groundfish retention Program (GFS)

Amendment C was developed to replace the flatfish IRIU program with a less costly, but potentially more effective, Minimum Groundfish Retention Standard Program (GFS). Arctic Storm supports implementation of this program which seeks to reduce discards and avoid incidental catch of non-target species. We recognize that effective implementation and enforcement of this program will be greatly enhanced by linkage with Amendment A which would enable rationalization of the non-pollock fisheries.

Which fleets are required to comply with the GFS?

Component 2 specifies the vessels required to comply with the GFS program. The Amendment D analysis exempted all but four fisheries from the flatfish IRIU program based on retention of IRIU flatfish species that met or exceeded 95%. Those fisheries that did not meet the exemption standard included: the BSAI non-AFA CP trawl P.cod, the BSAI non-AFA CP yellowfin, the BSAI rocksole and flathead fisheries - fisheries, for the most part, make up the Non-AFA CP (H&G) trawl sector.

Based on the analysis in Amendment C, the Non-AFA CP trawl accounted for 67% of all BSAI discards in 2001. All other sectors were exempted from IRIU based on retention rates described above. In most cases the remaining fleets retention of total groundfish

exceeds 90%. The AFA catcher processor and catcher vessel retention rates of total groundfish exceed 99%. The bycatch of these other fleets is managed under other management programs that have been successful in significantly reducing bycatch.

The GFS program was designed with the non-AFA CP trawl fleet in mind for the above described reasons and because a one-size-fits-all program simply does not work. However, the final decision on its application was left to the Council. Arctic Storm supports application of the program to the non-AFA CP trawl sector only as was intended in the IRIU Committee process.

Adjustments in Pollock Maximum Retainable Bycatch Allowance:

Arctic Storm vessels primarily engage in pollock fishing so the primary focus of our comments will pertain to the proposed change in the Maximum Retainable Bycatch Allowance (MRA) of pollock as well as a proposed change in MRA accounting periods. (Option 6.1.1 and 6.1.2 on pages 60-63 of the Amendment C document.)

As a member of the IRIU Committee I helped draft the proposed language in suboption 6.1.1. It was carefully crafted by all participants to encourage increased retention of regulatory discards without increasing historical incidental catch of pollock. To accomplish that we included language that would reward and, potentially, penalize the non-pollock fleet based on its use or abuse of increased MRAs. The language reads as follows:

- **Supoption 6.1.1: Status Quo Plus: NMFS manages the ICA for pollock as it does now, but adjusts MRA rates to insure that historical bycatch requirements of pollock in the non-pollock fisheries are not exceeded. The MRA rate adjustments can be made by NMFS managers either in-season or inter-annually to discourage increased bycatch (incidental catch) of pollock should pollock harvest amounts indicate that this is occurring. MRA rate adjustments could be made between 0 and 49% subject to the stipulation that non-AFA vessels are not engaged in directed fishing for pollock at any point in their trip. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries.”**

Arctic Storm supports efforts to decrease regulatory discards as long as there are safeguards in place to prevent increased targeting of pollock in the non-pollock fisheries. We are concerned that the Incidental Catch Allowance seems characterized in the document as an allocation set aside of pollock. The Incidental Catch Allowance is *not* an allocation but, rather, an annual “best guess” by fishery managers of bycatch needs of pollock in the non-pollock fisheries based on annual TAC amounts. These estimates started out high but have since been ratcheted down to more closely anticipate actual incidental catch needs. This is why historical incidental catch requirements should be calculated based on *actual catches* rather than ICA amounts. The ICA amounts started

out at 5% and have since been reduced to 3.5% with still enough margin to return pollock to the directed fishery at the end of the year.

Based on the goals of increasing the MRA as articulated by the IRIU Committee in 6.1.1, additional guidance is required by the Council on how to best ensure that historical incidental catch rates of pollock are maintained. We recommend the following:

- Ramp up the increased MRA rate over a three year period to better adapt to unforeseen consequences. During the first year, the MRA should be increased to no more than 30%.
- Provide specific guidance to the fishery managers on how to calculate use or abuse of the increased MRA. We recommend the following method:
 - 1) Calculate the cumulative percentage of incidental *catch* of pollock by week as an average over the past three-years. (not the ICA set aside in 99-02).
 - 2) Use the weekly data from step one to determine the point goals for incidental catch of pollock on a monthly basis.
 - 3) The catch rate will be monitored by the inseason fishery managers. If the sector's percentage use of the ICA exceeded the approximate point goals that take into consideration significant changes in ABC and TAC, the MRA would be reduced to 15% for the remainder of the year.
 - 4) The agency could add a weekly H&G ICA catch row to its weekly reporting so that the sector can work together to remain under the ICA usage targets.
 - 5) The ICA percentage of the pollock TAC is currently 3.5% and should only change if the pollock biomass changes significantly causing increased (or decreased) bycatch of pollock in non-pollock fisheries.

Expanded Catch Accounting Periods

The other proposed suboption to decrease regulatory discards of pollock and other species is to change the accounting periods so that enforcement timing would allow for longer periods to accumulate the MRA amount. Presently boats may be checked at any time for to determine if MRA amounts have been exceeded. Unfortunately, the language in the document again seems to mischaracterize the ICA as an allocation. It proposes weekly, monthly and yearly accounting periods to provide increase ability for the H&G sector to retain its "pollock allocation." This language should be corrected because it makes those dependent on the directed pollock fishery very nervous!

Nevertheless, because Arctic Storm supports actions that will increase retention of natural amounts of bycatch, it may support extension of catch accounting periods. But, it cannot support a change in regulation that would encourage "topping-off" behavior that will increase pollock catches. However, if pollock incidental catch amounts are monitored on a monthly basis and adjusted as described above, we would likely support increasing the length of the accounting period to either a 1) weekly reporting period, 2) trip basis as described in regulation, or 3) trip basis that matches offload periods.

Amendment D: Exemptions

At its April meeting the Council took final action in approval of Amendment D which exempted all fisheries with a retention rate of IRIU flatfish species that met or exceeded 95%. As described above the total groundfish retention rate for the exempted fisheries, for the most part, exceeds 90% and often 99%. As part of the Amendment D motion, the Council required an annual review of IRIU flatfish retention rates to see if the exempted fleets maintained their high performance rate. However, the Council was unclear about how such a review might interface with the program. Specifically, if the exemption were lost would that fleet be subject to the full retention requirements of the IRIU flatfish program or to Amendment C's, Minimum Groundfish Retention Standard?


Even if the Secretary had not disapproved the implementation date of IRIU flatfish and delayed it indefinitely, the exempted fleets should not be asked to comply with a more punitive retention program than those fleets unable to meet the exemption threshold. In other words, why should a fleet with a retention rate of, say, 93% be penalized with 100% retention of IRIU flatfish when a fleet with 70% retention is to comply with a lesser, total groundfish retention standard.

In comments above, we asked that the GFS program apply only to the Non-AFA CP trawl fleet for which it was originally intended. We ask that exempted fleets, based on their overall high retention rates of managed species as documented in the analysis be exempt from the GFS program as well, even if their retention of IRIU flatfish species drops to less than 95%. If they are not, some fleets (though their groundfish retention rates are already very high) will be unable to comply with the observer and monitoring requirements of that program which may derail the whole the GFS.

In other words, we ask that the exemption be permanent. Or, put another way, we simply ask that the new GFS program not apply to the exempted fleets which have already achieved significant bycatch reductions.

Increased retention and increased utilization is a complex but significant issue. We appreciate the Council's continued efforts to sort out these issues in its continuing effort to reduce bycatch.

Sincerely,


Donna Parker

PUBLIC TESTIMONY SIGN-UP SHEET FOR AGENDA ITEM C-5 IR/IO

PLEASE SIGN ON THE NEXT BLANK LINE.
LINES LEFT BLANK WILL BE DELETED.

	NAME	AFFILIATION
1.	Dave Wood	W.S. Sea Foods
2.	TERESSA KANDIGANIS	Kodiak Fish Company
3.	BRENT PAINTÉ	UCB
4.	Keith Bruton	O'HARA CORP.
5.	Juan Robinson	Fishermen's First
6.	Azari Thomson	ACC
7.	GERY MERIGIAN <i>with</i>	PROWLER FISHERIES
8.	Steve Minner	City of St. Paul
9.	MIKE SZYMAUSKI/ERIC HOLLIS	Fishing Co of Alaska
10.	Paul May Guyer	APA.
11.	ED LUTTRELL/LORI SWANSON	GROUNDFISH FORUM
12.	Robert Williams	Coastal Village Regional Fund
13.	Julie Panney	AGDB
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C-5
Arni Thomson

Alaska Crab Coalition

3901 Leary Way N.W. Ste. 6
Seattle, WA 98107
206 547 7560
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June 3, 2003

Mr. David Benton, Chairman
North Pacific Fishery Management Council
605 West 4th St. Ste. 306
Anchorage, Alaska 99501-2252

RE: AGENDA ITEM C-5(a) IR/IU, MULTI-SPECIES CO-OPS
CRAB BYCATCH REDUCTION PROPOSALS FOR BSAI GROUND FISH
RATIONALIZATION

Dear Mr. Benton:

The ACC has a long history of involvement with the development of bycatch reduction measures in the BSAI multi-species groundfish fisheries. The ACC was involved in the initial development of Prohibited Species Caps (PSCs) for king and tanner crab and halibut in the Eastern Bering Sea dating back to 1985 and subsequent bycatch reduction measures during the 1990s. The following are proposed crab bycatch reduction proposal options that the ACC requests the NPFMC consider within the framework of BSAI groundfish rationalization proposals.

The ACC is well aware, that with the onset of rationalization of the multi-species groundfish fisheries that the groundfish industry, by its own statements as part of the NPFMC administrative record in 1997 and 1998 and the now demonstrated reduction of king and tanner bycatch by the rationalized AFA inshore and offshore pollock fleets, that the industry is fully capable of reducing its bycatch of crab and halibut by at least 30 per cent of existing levels with an individual vessel quota-based rationalization program.

The ACC wishes to submit these options for analysis:

1. Zone 1, bairdi and red king crab cap reduction options:

- All at once discount option: 35% reduction, based on average actual bycatch for period 1995-2002, in CV and CP trawl rock sole, yellowfin sole and Pacific cod on day one. Allow open trades between co-ops thereafter.
- Ratchet down phase-in option: overall phase-in 40% reduction, based on average actual bycatch for period 1995-2002, CV and CP trawl in rock sole, yellowfin sole and Pacific cod. 8% per year PSC reduction over 5 years, with first year free.
- Combination: For open access fishers, CV and CP trawl in rock sole, yellowfin sole, Pacific cod, 10% reduction per year based on average actual bycatch for period 1995-2002, reduction each year for 5 years. For co-op fishers, add ratchet down option, 40% phase-in option.

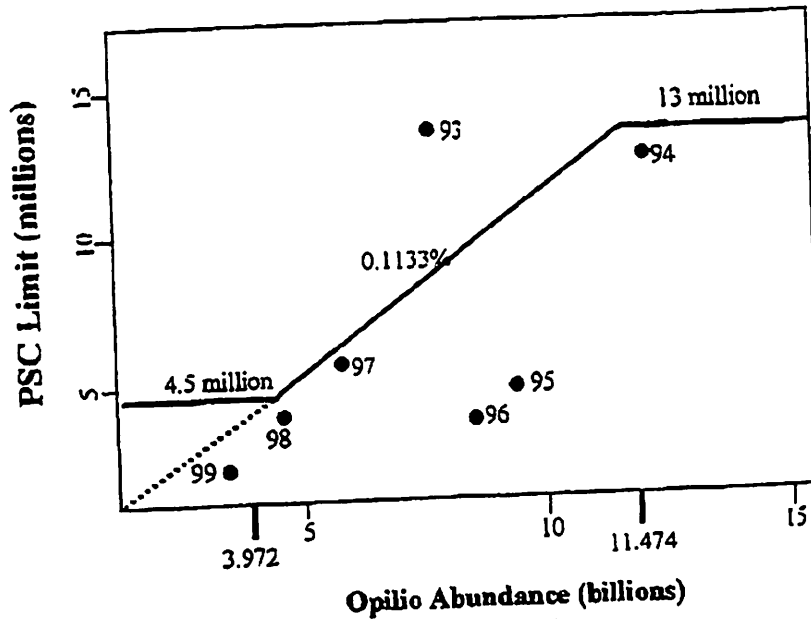
2. Zone 2, bairdi and c.opilio cap reduction:

- Reduce minimum threshold caps for bairdi and c.opilio in Zone 2 to the average actual bycatch for the period 1995-2002, in CV and CP trawl rock sole, yellowfin sole and Pacific cod.

Sincerely,


Arni Thomson, Executive Director

With regards to the option to eliminate the 4.5 million "floor", trawl industry representatives have been concerned about the potential for a large year class to recruit as bycatch into to trawl fisheries before they recruit to the survey. In other words, a lot of little crabs taken as bycatch in year $x+1$ would count towards a PSC limit established on survey data in year x . Analysis of length frequency data from snow crab taken as bycatch in trawl fisheries, albeit based on limited sampling, suggests that such an event may be unlikely. Trawl bycatch appeared to consist of relatively large snow crabs (average size was about 70 mm cw), even when the population had a near record of small crabs (e.g., 1993). See Section 1.5 for more information on bycatch of snow crabs in trawl fisheries. Small crabs are taken in the trawl survey due to net design (low profile footrope, small mesh) and survey locations; the trawl fisheries use larger mesh sizes (thereby letting out smaller crabs, fish, etc.) and fish in areas where the smaller snow crabs are not found (see figure on survey distribution of small crabs and trawl effort distribution). Molting to average bycatch size would probably require about 2 years (on average) after a year class is detected by the survey (year class strength appears to be well estimated when a mode reaches about 45 mm. See Figure 2). Barring major distributional changes or the crabs or the fishery, a large year class would not be expected to be encountered in groundfish trawl fisheries before being incorporated into the total survey abundance estimate (and consequently the PSC limit).



Snow crab bycatch and PSC limits relative to observed levels. Data points show abundance when specifications were set and the number of crabs taken the following year. Note: The actual PSC limit is reduced by 150,000 crabs per BSAI Amendment 57.

Concern has been raised about the unknown mortality of crabs caused by trawling, and reducing PSC limits may exacerbate these unobservable impacts. In an attempt to catch less crabs (via reduced bycatch limits, VIP regulations, AFA pooling, or proposed measures such as VBAs, etc.), trawl fishermen may modify their gear. Modifications to footrope design, roller size, and mesh size can result in fewer crabs being retained and counted by observers (NRC 1988). For trawl fisheries historically limited by bycatch limits, reduced bycatch rates of PSC species may result in increased effort (at least until limited by TAC of targets). In turn, increased trawl effort could result in increased unobservable impacts on crab resources, simply because more crab are encountered by trawl gear. This possibility was also raised during the Council's 1993 deliberations over trawl codend mesh size, but the benefits of reduced bycatch were felt to outweigh the possible costs of unobserved mortality due to non-retention.

measures that limit crab bycatch and whether or not new measures to reduce bycatch are required to rebuild the Tanner crab stock. Based on 1994-97 data from Section 4.0, an estimated 2.2 million to 6.3 million Tanner crabs were killed incidentally in Bering Sea crab and groundfish fisheries. This equates to about 1.4% to 3.3% of the total abundance of Tanner crab as measured by the NMFS trawl surveys.

Groundfish Fisheries

Bycatch mortality due to groundfish fisheries has ranged between 1.2 million and 2.0 million Tanner crabs during the 1994-98 period. This equates to 0.77% to 1.0% of the total stock. From a mortality standpoint, this is similar to mortality associated with other groundfish fishery PSC species such as herring (1%), halibut (1.3% trawl and longline combined) and chum salmon (<1%), but is more than red king crab (0.1%) and C. opilio crab (0.1%), yet less than chinook salmon (2%-4%) (Witherell et al., 2000).

The current Tanner crab bycatch limits were negotiated by an industry committee in 1996 and adopted as Groundfish Plan Amendment 41. As part of the industry agreement (Appendix 1), PSC limits were to be reviewed in 3 years (in 1999), so a review in this amendment package is timely.

Close examination of Tanner crab bycatch limits suggests that the Zone 2 PSC limit could be reduced somewhat as preventative control measure, without unduly impacting trawl fisheries. For example, the total bycatch of Tanner crab in Zone 2 has never come close to the allowable limit. In fact, the only time Zone 2 has been closed in recent years was once in 1994, when the rock sole/other flatfish fishery reached its allocated PSC limit. In hindsight, this was due to a gross mis-allocation of too much PSC to the pollock fishery (see table in Section 4.3.1).

A Zone 2 PSC limit set at 0.75% of abundance may not be constraining if PSC was properly allocated, based on past history. The largest number of Tanner crab ever taken in Zone 2 was 2.7 million in 1992, when the stock was abundant (equated to about 0.35% of the stock). By 1993, the Zone 2 bycatch dropped to 2.3 million crabs, concurrent with declining stock abundance.

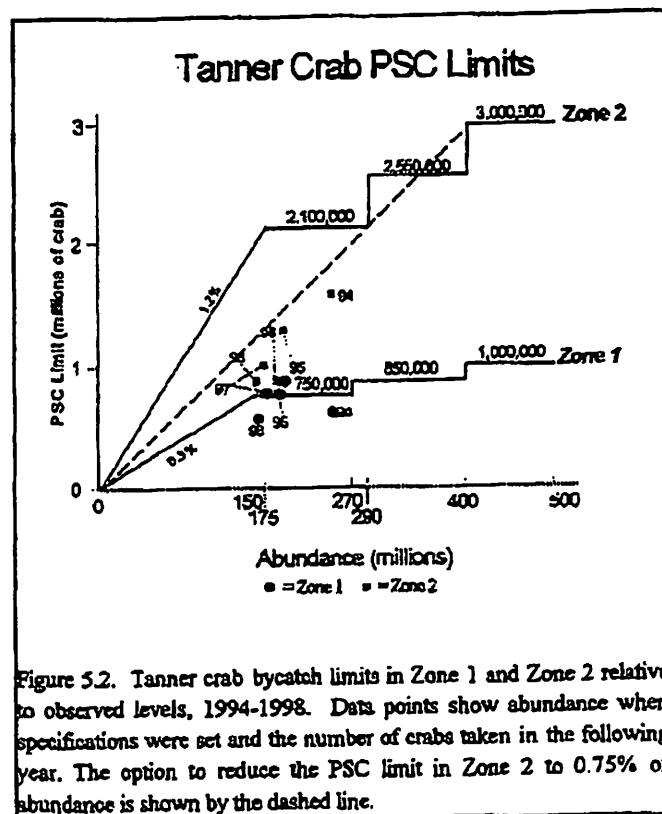


Figure 5.2. Tanner crab bycatch limits in Zone 1 and Zone 2 relative to observed levels, 1994-1998. Data points show abundance when specifications were set and the number of crabs taken in the following year. The option to reduce the PSC limit in Zone 2 to 0.75% of abundance is shown by the dashed line.

PSC limits for Zone 2 *bairdi* under proposed bycatch limit set at 0.5% of abundance, compared with observed bycatch.

Year	Observed	Proposed	Difference	% Diff
1994	1,709,724	960,000	-749,724	43.9%
1995	1,288,895	945,000	-343,895	26.7%
1996	969,103	878,000	-91,103	9.4%
1997	1,062,618	795,000	-267,618	25.2%

9/30/1998

What is VBA?

A Vessel Bycatch Account (VBA) program is an IFQ program for PSC bycatch species.

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.

VBA Species

Halibut (BSAI, GOA)
Crab (BSAD)

Fisheries

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

VBA Pools

individual vessels
pooled vessels
default pool

Fishery Specific VBAs

- Option 1: VBAs can be used in any target fishery
- Option 2: VBAs target fishery specific.
- Option 3: A portion of VBAs be target fishery specific for a period of time.

Use of VBA

Option 1: VBAs remain gear specific.

Option 2: VBAs not gear specific after allocation, hence VBA based on trawl history could be used for longline fishery.

Transfers of VBA

Among vessels within/across pools
Vessel-sale related transfers.

Retention of VBA Species

Option 1: no retention allowed

Option 2: careful release; then retention allowed.

Monitoring

- Option 1: status quo coverage, with extrapolation of data.
- Option 2: full observer coverage; every haul sampled.
- Option 3: coverage as deemed necessary ; other appropriate sampling design.

Initial Allocation of VBAs

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

*Committee suggests history prior to August 22, 1997.

Specific GOA Issues

Halibut only; no crab caps.
Economics of observer coverage.
Mixed fisheries.
Effort shifts to GOA from BSAI.

Eligibility and Thresholds

1. The vessel must be moratorium qualified.
2. The vessel must qualify under the license limitation program.
3. Landings using trawl gear made during VBA catch history: 1995, 1996, and 1997.
4. Vessels fall into a default category (below)
 - < 60', any amount of catch with trawl gear
 - > 60', catch < 30 mt in GOA, < 100 mt in BSAI
 - > 60', catch > 30 mt in GOA, > 100 mt in BSAI- note that this last category could be further subdivided into vessel categories

Pilot Program Recommended

The Committee recommends moving ahead with a pilot program using a few vessels per fishery category, issued specific size class of vessels, volunteers, or by lottery.

A pilot program should not be done for one fishery only (no benefit), or one PSC species only (too many vessels for pilot program)

Annual Allocation of VBAs

Target specific, with options

Option 1: Based on rolling 3-year catch history.

Option 2: Based on pro-rated share of PSC cap by target species.

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

Subject: BYCATCH PSCs ANNUAL SUMMARIES IN BSAI TRAWL FISHERIES

NMFS ANNUAL BSAI TRAWL PSC BYCATCH SUMMARIES FOR CRAB, 2002 - 1995.

SPECIES NUMBERS, ARE OBSERVER-BASED ESTIMATED NUMBERS OF CRAB CAUGHT IN TRAWL FISHERIES, CAPS ARE THE REGULATION CAPS PER FISHERY AND THE % REPRESENTS THE PER CENT OF CRABS CAUGHT RELATIVE TO THE CAP. IN THE CASE OF BAIRDI AND OPILIO CRABS IT ILLUSTRATES THE NON-CONSTRAINING NATURE OF THE CAPS, WHICH ARE DESIGNED IN THEORY TO RESTRICT BYCATCH IN FISHERIES. ONLY THE BRISTOL BAY KING CRAB CAP IS CONSTRAINING. THE OTHER CRAB CAPS HAVE SUBSTANTIAL SURPLUS CUSHIONS. ALL THE CRAB CAPS ARE LINKED TO SURVEY BIOMASS ESTIMATES AND THEY ARE ADJUSTED AT THRESHOLD POINTS. THE BBRKC CAP WAS REVISED IN 1997 FROM 200,000 TO 100,000. THE OPILIO CAP WAS IMPLEMENTED IN 1998. THERE IS AN OPPORTUNITY TO REDUCE THESE CAPS WITH RATIONALIZATION OF THE BSAI GROUND FISH FISHERIES WITH COOPERATIVES. OTHERWISE THE CAPS COULD BECOME INSTITUTIONALIZED AS TRANSFERRABLE COOP OR ITQ PSC QUOTAS ALONG WITH TARGET FISHERY QUOTAS IN THE TRAWL FISHERIES. THE SAME WILL APPLY FOR HALIBUT.

NMFS/AKR
01/23/03
14:51:01

2002 BERING SEA/ALEUTIAN ISLANDS FISHERIES
PROHIBITED SPECIES BYCATCH
Week Ending: 12/31/02

TRAWL BAIRDI TANNER CRAB	ZONE 1			ZONE 2		
	Crabs (#'s)	Cap (#'s)	%	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	286,732	365,320	78%	262,602	596,154	44%
Pacific cod	143,754	183,112	79%	88,502	324,176	27%
Yellowfin sole	26,014	340,844	8%	268,490	1,788,459	15%
Pollock/AMCK/Other species	1,464	17,224	8%	860	27,473	3%
Rockfish	0	0	0%	49	10,988	0%
GTRB/ARTH/SABL	0	0	0%	5,291	0	0%
Total	457,964	906,500	51%	625,793	2,747,250	23%

TRAWL C. OPILIO TANNER CRAB in the COBLZ AREA (C OPILIO BYCATCH LIMITATION ZONE)

Fishery group	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	106,763	969,130	11%
Pacific cod	93,923	124,736	75%
Yellowfin sole	680,476	2,776,981	25%
Pollock/AMCK/Other species	1,636	72,428	2%
Rockfish	0	40,237	0%
GTRB/ARTH/SABL	170	40,238	0%
Total:	332,967	4,023,750	22%

TRAWL RED KING CRAB

ZONE 1

Fishery group	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	62,073	59,782	104%
Pacific cod	12,735	11,664	109%
Yellowfin sole	15,146	16,664	91%
Pollock/AMCK/Other species	1	1,615	0%
Total:	89,955	89,725	100%

NMFS/AKR
04/03/02
09:21:00

2001 BERING SEA/ALEUTIAN ISLANDS FISHERIES
PROHIBITED SPECIES BYCATCH
Week Ending: 12/31/01

TRAWL BAIRDI TANNER CRAB

ZONE 1

ZONE 2

Fishery group	ZONE 1			ZONE 2		
	Crabs (#'s)	Cap (#'s)	%	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	146,255	272,126	54%	399,608	415,501	96%
Pacific cod	44,842	136,400	33%	25,417	225,941	11%
Yellowfin sole	122,383	253,894	48%	202,292	1,246,502	16%
Pollock/AMCK/Other species	4,705	12,830	37%	196	19,148	1%
Rockfish	0	0	0%	0	7,658	0%
GTRB/ARTH/SABL	0	0	0%	4,633	0	0%
Total:	318,185	675,250	47%	632,146	1,914,750	33%

TRAWL C. OPILIO TANNER CRAB in the COBLZ AREA

Fishery group	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	483,235	469,130	103%
Pacific cod	8,330	524,736	2%
Yellowfin sole	799,646	2,876,981	28%
Pollock/AMCK/Other species	1,932	72,428	3%
Rockfish	0	40,237	0%
GTRB/ARTH/SABL	0	40,238	0%
Total:	1,293,143	4,023,750	32%

TRAWL RED KING CRAB

ZONE 1

Fishery group	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	26,105	64,782	40%
Pacific cod	1,742	11,664	15%
Yellowfin sole	30,601	11,664	262%
Pollock/AMCK/Other species	104	1,615	6%
Total:	58,552	89,725	65%

NMFS/AKR
01/05/01
09:05:49

2000 BERING SEA/ALEUTIAN ISLANDS FISHERIES
PROHIBITED SPECIES BYCATCH
Week Ending: 12/31/00

TRAWL BAIRDI TANNER CRAB

ZONE 1

ZONE 2

Fishery group	ZONE 1			ZONE 2		
	Crabs (#'s)	Cap (#'s)	%	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	192,852	309,326	62%	200,639	504,894	40%
Pacific cod	55,379	154,856	36%	26,484	275,758	10%
Yellowfin sole	82,124	288,750	28%	422,348	1,514,683	28%
Pollock/AMCK/Other species	69	14,818	0%	1,464	25,641	6%
Rockfish	0	0	0%	28	10,024	0%
GTRB/ARTH/SABL	0	0	0%	7,633	0	0%
Total:	330,424	767,750	43%	658,597	2,331,000	28%

TRAWL C. OPILIO TANNER CRAB in the COBLZ AREA

Fishery group	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	224,124	869,934	26%
Pacific cod	50,245	123,529	41%
Yellowfin sole	1,927,702	2,876,579	67%
Pollock/AMCK/Other species	5,208	71,622	7%
Rockfish	0	41,043	0%
GTRB/ARTH/SABL	0	41,043	0%
Total:	2,207,279	4,023,750	55%

TRAWL RED KING CRAB

ZONE 1

Fishery group	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	53,389	64,755	82%
Pacific cod	4,379	11,656	38%
Yellowfin sole	13,020	11,655	112%
Pollock/AMCK/Other species	0	1,660	0%
Total:	70,787	89,726	79%

NMFS/AKR
04/19/00
12:13:48

1999 BERING SEA/ALEUTIAN ISLANDS FISHERIES
PROHIBITED SPECIES BYCATCH
Week Ending: 12/31/99

TRAWL BAIRDI TANNER CRAB

ZONE 1

ZONE 2

Fishery group	ZONE 1			ZONE 2		
	Crabs (#'s)	Cap (#'s)	%	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	132,217	279,528	47%	178,235	376,274	47%
Pacific cod	79,148	139,950	57%	34,789	205,528	17%
Yellowfin sole	148,515	260,894	57%	284,131	1,128,824	25%
Pollock/AMCK/Other species	665	13,378	5%	3,204	19,146	17%
Rockfish	0	0	0%	0	7,378	0%
GTRB/ARTH/SABL	0	0	0%	1,381	0	0%
Total:	360,546	693,750	52%	501,741	1,737,150	29%

TRAWL C. OPILIO TANNER CRAB in the COBLZ AREA

Fishery group	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	256,443	766,552	33%
Pacific cod	22,390	127,758	18%
Yellowfin sole	378,964	3,108,786	12%
Pollock/AMCK/Other species	1,370	74,234	2%
Rockfish	0	42,585	0%
GTRB/ARTH/SABL	0	42,585	0%
Total:	659,167	4,162,500	16%

TRAWL RED KING CRAB

ZONE 1

Fishery group	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	62,456	103,950	60%
Pacific cod	7,752	14,850	52%
Yellowfin sole	12,774	19,800	65%
Pollock/AMCK/Other species	91	1,850	5%
Total:	83,073	140,450	59%

NMFS/AKR
08/14/00
14:05:23

1998 BERING SEA/ALEUTIAN ISLANDS FISHERIES
PROHIBITED SPECIES BYCATCH
Week Ending: 12/26/98

TRAWL BAIRDI TANNER CRAB

ZONE 1

ZONE 2

Fishery group	ZONE 1			ZONE 2		
	Crabs (#'s)	Cap (#'s)	%	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	247,263	273,848	90%	199,613	330,225	60%
Pacific cod	65,205	123,232	53%	38,633	180,375	21%
Yellowfin sole	233,743	255,592	91%	616,507	990,675	62%
Pollock/AMCK/Other species	17,816	41,077	43%	37,461	434,750	9%
Rockfish	0	0	0%	699	6,475	11%
GTRB/ARTH/SABL	0	0	0%	1,900	0	0%
Total:	564,028	693,749	81%	894,814	1,942,500	46%

TRAWL C. OPILIO TANNER CRAB in the COBLZ AREA

Fishery group	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	408,997		
Pacific cod	49,780		
Yellowfin sole	2,057,426		
Pollock/AMCK/Other species	81,986		
Rockfish	0		
GTRB/ARTH/SABL	324		
Total:	2,598,512	4,304,950	60%

TRAWL RED KING CRAB

ZONE 1

Fishery group	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	15,008	69,375	22%
Pacific cod	3,015	6,938	43%
Yellowfin sole	6,194	9,250	67%
Pollock/AMCK/Other species	13,950	6,938	201%
Total:	38,167	92,501	41%

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01/08/98
18:06:30

1997 BERING SEA/ALEUTIAN ISLANDS FISHERIES
PROHIBITED SPECIES BYCATCH
Week Ending: 12/31/97

TRAWL BAIRDI TANNER CRAB

ZONE 1

ZONE 2

Fishery group	ZONE 1			ZONE 2		
	Crabs (#'s)	Cap (#'s)	%	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	341,768	296,052	115%	131,779	357,000	37%
Pacific cod	189,577	133,224	142%	86,758	195,000	44%
Yellowfin sole	278,973	276,316	101%	830,980	1,071,000	78%
PLCK/AMCK/OTHER	10,854	44,408	24%	12,749	470,000	3%
Rockfish	0	0	0%	352	7,000	5%
GTRB/ARTH/SABL	0	0	0%	0	0	0%
Total:	821,173	750,000	109%	1,062,618	2,100,000	51%

TRAWL RED KING CRAB

ZONE 1

Fishery group	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	33,249	48,750	68%
Pacific cod	6,769	7,500	90%
Yellowfin sole	6,763	10,000	68%
PLCK/AMCK/OTHER	137	7,500	2%
Total:	46,918	73,750	64%

NMFS/AKR
 05/14/97
 14:12:24

1996 BERING SEA/ALEUTIAN ISLANDS FISHERIES
 PROHIBITED SPECIES BYCATCH MORTALITY
 Week Ending: 12/31/96

TRAWL BAIRDI TANNER CRAB

Fishery group	ZONE 1			ZONE 2		
	Crabs (#'s)	Cap (#'s)	%	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	341,178	345,000	99%	128,695	510,000	25%
Pacific cod	128,364	250,000	51%	38,435	260,000	15%
Yellowfin sole	292,023	330,000	88%	788,173	1,530,000	52%
PLCK/AMCK/OTHER	78,824	75,000	105%	11,901	690,000	2%
Rockfish	0	0	0%	0	10,000	0%
Rockfish	0	0	0%	430	10,000	4%
GTRB/ARTH/SABL	0	0	0%	0	0	0%
GTRB/ARTH/SABL	0	0	0%	1,470	0	0%
Total:	840,389	1,000,000	84%	969,103	3,010,000	32%

TRAWL RED KING CRAB

Fishery group	ZONE 1		
	Crabs (#'s)	Cap (#'s)	%
Rock sole/Other flatfish	8,971	110,000	8%
Pacific cod	2,918	10,000	29%
Yellowfin sole	689	50,000	1%
PLCK/AMCK/OTHER	5,872	30,000	20%
Total:	18,449	200,000	9%

Yellowfin Sole Fishery Seasons/Quotas:

Red King Crab

Jan 20 - Mar 31	=	5,000
Apr 01 - May 10	=	15,000
May 11 - Aug 14	=	10,000
Aug 15 - Dec 31	=	20,000
Annual Total		50,000

Bairdi Tanner Crab - Zone 1

Jan 20 - Mar 31	=	50,000
Apr 01 - Dec 31	=	200,000
Annual Total		250,000

NMFS/AKR
05/21/96

1995 BERING SEA/ALEUTIAN ISLANDS FISHERIES
PROHIBITED SPECIES BYCATCH MORTALITY

TRAWL BAIRDI TANNER CRAB

Fishery group	ZONE 1			ZONE 2		
	Crabs (#'s)	Cap (#'s)	%	Crabs (#'s)	Cap (#'s)	%
Pacific cod	195,849	225,000	87%	44,485	260,000	17%
Rock sole/Other flatfish	338,347	475,000	71%	80,122	510,000	16%
Yellowfin sole	260,019	225,000	116%	1,116,051	1,525,000	73%
PLCK/AMCK/OTHER	105,821	75,000	141%	48,171	690,000	7%
Rockfish	0	0	0%	0	10,000	0%
GTRB/ARTH/SABL	0	0	0%	66	5,000	1%

TRAWL RED KING CRAB

Fishery group	ZONE 1		
	Crabs (#'s)	Cap (#'s)	%
Pacific cod	2,450	10,000	25%
Rock sole/Other flatfish	20,523	110,000	19%
Yellowfin sole	6,054	50,000	12%
PLCK/AMCK/OTHER	3,588	30,000	12%

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Amendment C (GRS) Preferred Alternatives

Groundfish Forum agrees with the Advisory Panel's decision that Amendment C is not ready for final action, but that a first step toward improving retention can be accomplished by adjusting the reporting period for pollock MRAs. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries.

We support phased-in implementation of a Groundfish Retention Standard after the IRIU technical committee, with the addition of a NMFS enforcement representative, is able to resolve enforcement concerns and other issues listed in the AP motion, such as an analysis of the Crapo PRR study. We support the expeditious resolution of these issues so as to not delay implementation of all parts of Amendment A (A1 and A2) and Amendment C.

Once the issues flagged by the AP have been suitably addressed, we support the following options for the GRS program.

Component 1 Establish the GRS percentage

Option 1.1 65 percent of all groundfish caught in non-pollock fisheries must be retained **prior to passage of both Amendments A-1 and A-2.**

Option 1.2 70 percent of all groundfish caught in non-pollock fisheries must be retained **following passage of both Amendments A-1 and A-2.**

Component 2 Specifies the vessels required to comply with the GRS

Option 2.6 Trawl Catcher Processors that are not AFA-eligible with exemptions for vessels less than 125 ft LOA that meet specified production limits **with the option to decline the exemption.**

Suboption 2.6.4 (Production limits) Total catch for the year shall not exceed 17,000 mt.

Component 3 Sets the period over which the retention rate is calculated.

Option 3.7 At the end of each year

Component 4 Defines the seasonality of the GRS

Option 4.1 A year-round standard

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Component 5 Determines at which level of aggregation the GRS is applied

Option 5.1 The GRS applies to ~~the vessel pools or~~ the fleet as a whole

Component 6 Considers revision of the maximum retainable bycatch allowance (MRA) for pollock

Option 6.1 Use the current MRA whereby a predetermined percentage of the pollock TAC is set aside as the incidental catch allowance (ICA). Up until the point the ICA has been caught, all pollock must be retained up to the MRA – currently set at 20 percent. After the ICA has been caught, pollock cannot be retained by vessels that are not AFA-eligible.

Suboption 6.1.1 NOAA Fisheries manages ICA for pollock as it does currently (i.e. 6.1), but MRA rates are adjusted to insure that the historical bycatch requirements of pollock in the non-pollock fisheries are not exceeded. MRA rate adjustments can be made by NOAA Fisheries either in-season or inter-annually to discourage increased bycatch (incidental catch) of pollock should pollock harvest amounts indicate that this is occurring (**note that in-season adjustments may not be possible under the regulatory structure**). The MRA rate could be adjusted between 0 – 49%, subject to the stipulation that non-AFA vessels not engage in directed fishing for pollock at any point in the trip. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries.

Suboption 6.1.2 In addition to the above suboption, the Council considers changing the way MRA compliance is accounted for in fishing trips. Currently, it is enforced at any point in the trip. Other options for consideration would be enforcement of MRA compliance on other time periods. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries. Other periods to be analyzed would include trips as defined by NOAA Fisheries, weekly reporting periods, or trips as defined as the period of time between port calls.

Component 7 Determines how total catch is measured under GRS regulations (GRS is defined as the percentage of total groundfish catch retained.)

Option 7.3 All regulated vessels are required to use NOAA Fisheries-certified scales to determine total catch and either maintain 200 percent observer coverage for verification that all fish are being weighed or use an alternative scale-use verification plan approved by NOAA Fisheries.

Component 8 Determines how retained catch is measured

Option 8.3 Retained catch is calculated using a new set of minimum acceptable PRRs specifically developed for implementation of the GRS.

Question 2: Determine in which level of aggregation the FOMC is operating.

Option 1: The FOMC applies to the second passage of the law.

Question 3: Determine in which level of aggregation the FOMC is operating.

Option 4: In the current MUA, the FOMC is operating in the second passage of the law. The FOMC is not in the first passage of the law. The FOMC is not in the third passage of the law. The FOMC is not in the fourth passage of the law. The FOMC is not in the fifth passage of the law.

Question 5: Determine in which level of aggregation the FOMC is operating. The FOMC is operating in the second passage of the law. The FOMC is not in the first passage of the law. The FOMC is not in the third passage of the law. The FOMC is not in the fourth passage of the law. The FOMC is not in the fifth passage of the law.

Question 6: Determine in which level of aggregation the FOMC is operating. The FOMC is operating in the second passage of the law. The FOMC is not in the first passage of the law. The FOMC is not in the third passage of the law. The FOMC is not in the fourth passage of the law. The FOMC is not in the fifth passage of the law.

Question 7: Determine in which level of aggregation the FOMC is operating. The FOMC is operating in the second passage of the law. The FOMC is not in the first passage of the law. The FOMC is not in the third passage of the law. The FOMC is not in the fourth passage of the law. The FOMC is not in the fifth passage of the law.

Option 8: The FOMC is operating in the second passage of the law. The FOMC is not in the first passage of the law. The FOMC is not in the third passage of the law. The FOMC is not in the fourth passage of the law. The FOMC is not in the fifth passage of the law.

Question 9: Determine in which level of aggregation the FOMC is operating.

Option 9: The FOMC is operating in the second passage of the law. The FOMC is not in the first passage of the law. The FOMC is not in the third passage of the law. The FOMC is not in the fourth passage of the law. The FOMC is not in the fifth passage of the law.

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Amendment A-1 (Sector Allocations)

Issue 1: Sector Definitions

Component 1 Determines whether a vessel because of its use of multiple gears over time may be part of more than one sector.

Component 2 Vessels will be determined to be eligible for a given sector if they meet minimum landings requirements (see the next components) in the years selected from the following:

- Option 2.3 1997-2002
- Option 2.4 1998-2002
- Option 2.6 2000-2002

Component 3 Vessels will be determined to be eligible for a given sector if, during the previously specified sets of years, the vessel meets the minimum landings criteria selected from the following:

- Option 3.2 500 mt

Issue 2: Sector Allocations of Groundfish in the BSAI

Component 4 For species other than pollock (allocated under AFA) and Pacific cod (see component 6), each sector shall be allocated the percentage of the TAC – After CDQ allocations have been deducted from the TACs – of each allocated species that is equal to the average over the years – specified in the options below – of the annual percentage of harvest by vessels in the sector, relative to the amount of that species harvested by all vessels in all sectors.

- Option 4.4 The average annual catch percentages from 1998-2002 will be used.
- Option 4.6 The average annual catch percentages from 2000-2002 will be used.

Component 5 For purposes of apportionments, annual catch percentages will be defined using one of the following:

- Option 5.2 Retained catch of the sector over retained catch by all sectors

Component 6 Pacific cod allocations will be determined as follows:

Option 6.2 Pacific cod shall be allocated based on apportionments in regulation with an additional split of the trawl CP apportionment as follows:

- Non-AFA Trawl CPs will be allocated 18.3 percent of the Pacific cod TAC available after deduction for the CDQ program.

Component 7 CDQ allocations shall be removed from the TACS prior to allocation to sectors at percentage amounts equal to one of the following (**different percentages may be chosen for different species**)

Option 7.1 7.5% of the TAC

Option 7.2 10% of the TAC

Issue 3: Sector Allocations of Prohibited Species Catch Limits in the BSAI

Component 8 Prohibited species bycatch allowances shall be initially assigned to fishery groups (e.g. the rock sole/flathead sole/other flatfish group) based on the relative bycatch apportionments for the years used to determine the Groundfish sector apportionments, expressed as a percentage of the total PSC allowance.

Option 8.1 Each sector shall be initially assigned an amount of each PSC allowance by fishery group based on each sector's historic rates during the period used to determine Groundfish apportionments, relative to the total use of the PSC allowance during that same period. For example, if the Non-AFA Trawl CPs used 40 percent of the halibut PSC used by the trawl fleet in the Pacific cod fishery during the period used to determine Groundfish apportionments, the Non-AFA Trawl CPs would be initially assigned 40 percent of the halibut PSC initially assigned to Pacific cod trawl fisheries. The overall PSC allocations could be reduced or kept at current levels by applying the following percentages to the overall PSC limit.

Suboption 8.1.4 100%

Amendment A-2 (Establishment of a Non-AFA Trawl CP Cooperative Program)

Component 1 Identifies which species will be allocated to the non-AFA trawl catcher processor sector.

Option 1.1 Include all Groundfish species for which trawling is allowed, except pollock already allocated to AFA fisheries cooperatives.

Suboption 1.1.1 Exclude certain species to prevent allocations that are so small that they preclude persons from harvesting their allocation of species that are typically taken in directed fisheries. Allocations of Groundfish species that are excluded would be regulated as they are under the status quo.

Option 1.3 Include only PSC species. All groundfish species allocations would be regulated as in the status quo.

Component 2 Determines the disposition of incidental catch allowances of pollock for the Non-AFA Trawl CP Sector.

Option 2.3 A predetermined percentage of the pollock TAC is set aside for use as incidental catch. Up until the point the incidental catch set-aside has been caught, all pollock must be retained up to the MRB amount. After the incidental catch set-aside has been caught, pollock can not be retained by non-AFA vessels. In addition, NOAA Fisheries manages ICA for pollock as it does now but adjusts the MRB percentage to insure that the historical bycatch requirements of pollock in the non-pollock fisheries are not exceeded. MRB percentage adjustments can be made by NOAA Fisheries either in-season or inter-annually to discourage increased bycatch (incidental catch) of pollock should pollock harvest amounts indicate that this is occurring. The MRB percentage could be 0-49% subject to the stipulation that non-AFA vessels are not engaged in directed fishing for pollock at any point in their fishing trips. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries. In addition, the way MRB compliance is accounted for in fishing trips could be modified. Currently, it is enforced at any point in a trip. Alternatively, enforcement of MRB compliance could occur at other time periods. The intent of this approach is to allow increased retention of pollock without increasing the relative bycatch requirements of the non-pollock fisheries.

Component 3 Established procedures for reducing prohibited species catch limits for the non-AFA Trawl CP sector.

Option 3.1 No change in overall amount of the current PSC limits

Component 4 Determines how a GRS (Amendment C) is applied.

Option 4.1 Impose a GRS on the cooperative as an aggregate and on the open access vessels as individuals. If the cooperative cannot meet the standard in the aggregate over a period of two years then the standard would be imposed on individual vessels within the cooperative.

Component 5 Identifies vessels in the non-AFA trawl CP sector. Owners of each qualified Vessel would be issued a Sector Eligibility Endorsement that will be attached to the vessel's LLP identifying it as a member of the non-AFA Trawl CP Sector.

Option 5.1 Non-AFA Fishing vessels registered under MarAd regulations and any other vessels eligible to participate in fish harvesting in the Alaska EEZ

Suboption 5.1.1 In addition, vessels must have caught with trawl gear and processed between 1998-2002

5.1.1.1 500 mt

5.1.1.2 1000 mt

Suboption 5.1.2 In addition, vessels must have caught with trawl gear and processed between 1997-2002

5.1.2.1 500 mt

5.1.2.2 1000 mt

Component 6 Establishes the percentage of eligible non-AFA Trawl CPs that must join the cooperative before the cooperative is allowed to operate. No later than December 1 of each year, an application must be filed with NOAA fisheries by the cooperative with a membership list for the year. In order to operate as a cooperative, members, as a percent of eligible non-AFA Trawl CPs, must be

Option 6.2 At least 67 percent

Option 6.3 At least 75 percent

Option 6.4 At least 80 percent

Component 7 Determines the method of allocation of PSC limits and groundfish between the cooperative and open access pools.

Option 7.2 Catch is based on total retained catch

Component 8 Determines which years of catch history are used in the calculation. The allocation of groundfish between the cooperative and open access pool is proportional to the catch history of groundfish in the vessels included in each pool. Applicable PSC limits are allocated between the cooperative and the open access pool in same proportions as those species that have associated PSC limits. The catch history as determined by the option selected under this component will be indicated on the Sector Eligibility Endorsement which indicates the vessel's membership in the Non-AFA Trawl CP Sector. The aggregate histories will then be applied to either the cooperative or the open access pool.

- Option 8.3 1998-2002
- Option 8.4 1998-2002 but each vessel drops its lowest annual catch during this period
- Option 8.5 1999-2002
- Option 8.6 1999-2002 but each vessel drops its lowest annual catch during this period
- Option 8.7 2000-2002
- Option 8.8 2000-2002 but each vessel drops its lowest annual catch during this period

Component 9 Established restrictions on permanent transfers of Sector Eligibility Endorsements.

- Option 9.1 Sector Eligibility Endorsements are transferable with the associated Groundfish LLP. All transfers must be reported to NOAA Fisheries in order to track who owns endorsements for purposes of determining cooperative and open access pool sizes.

Component 10 Determines who may purchase a Sector Eligibility Endorsement.

- Option 10.1 The purchaser must be eligible to own a fishing vessel under MarAd regulations or any person who is currently eligible to own a vessel.

Component 11 Determines if excessive share limits are established in the non-AFA trawl catcher processor sector.

- Option 11.1 There is no limit on the consolidation in the non-AFA trawl catcher processor sector.

Component 12 Establishes measures to mitigate negative impacts of the cooperative on fisheries not included in the cooperative program (e.g. fisheries in the GOA).

- Option 12.2 The cooperative is required to prohibit members in the aggregate from exceeding their maximum percent of harvests in other target fisheries. Sideboards would not be established by regulation. This restriction would be discussed in the annual report of the cooperative submitted to the Council and NOAA Fisheries.