

Bering Sea Aleutian Islands Pacific cod Allocations

April 2005 Staff Discussion Paper

In December 2004, the Council approved a draft problem statement and preliminary alternatives and options for a new fishery management plan amendment to modify the current Bering Sea/Aleutian Islands (BSAI) Pacific cod allocations to the various gear sectors. The Council also directed staff to produce a discussion paper addressing the analytical components and any necessary clarifications. Upon review of that paper in February 2005, the Council further revised the components and options for analysis and requested a subsequent discussion paper for the April meeting. The current Council motion is provided as **Attachment 1** to this paper.

The BSAI Pacific cod amendment package focuses on two primary issues:

- 1) BSAI Pacific cod allocations to all gear sectors (trawl, jig, hook-and-line, and pot); and
- 2) apportionment of the BSAI Pacific cod sector allocations between the BS and AI subareas.

The first part of the problem statement (see Attachment 1) notes the annual inseason reallocations of TAC among gear sectors and concerns that the current BSAI Pacific cod allocations do not adequately reflect actual use by sector. The second part of the problem statement addresses the need to establish a methodology by which to maintain sector allocations and minimize competition among gear groups, should the BSAI Pacific cod TAC be apportioned between the BS and AI subareas during a future specifications process.

The Council's current motion proposes BSAI Pacific cod allocations for the following sectors:

- AFA Trawl CPs
- Non-AFA Trawl CPs
- AFA Trawl CVs
- Non-AFA Trawl CVs
- Hook-and-line CPs
- Hook-and-line CVs $\geq 60'$
- Pot CPs
- Pot CVs $\geq 60'$
- Hook-and-line and pot CVs $< 60'$
- Jig CVs

Action for this Council Meeting

The purpose of this paper is to facilitate further refinement of the components and options for analysis, as well as provide preliminary calculations of the sector allocations under the current options. There are three parts to the paper. At the end of each part is a summary of the decision points that could be made relevant to each issue. The paper focuses on three main components of the motion:

- Part I: Eligibility criteria for the non-AFA trawl CV sector (Component 1, Option 1)**
- Part II: Sector allocations (Component 4)**
- Part III: Management of the sector allocations (Component 5)**

The action at the April meeting is to review this discussion paper and revise the current suite of elements and options as necessary. Initial Council review of the analysis has been tentatively scheduled for October 2005.

Background and Current Regulations

The BSAI Pacific cod fishery is targeted by multiple gear types, primarily by trawl gear and hook-and-line catcher processors, and smaller amounts by hook-and-line catcher vessels, jig, and pot gear. This is a fully prosecuted fishery, with a 2005 TAC of 190,550 mt and a 2006 TAC of 180,375 mt (excluding the 7.5% CDQ reserve each year).

The BSAI Pacific cod TAC has been apportioned among the different gear sectors since 1994 (trawl, fixed, and jig gear split), and a series of amendments have modified or continued the allocation system. Thus, the current BSAI Pacific cod allocations were established using a step-wise approach. Table A-1 in **Attachment 2** provides a reference sheet for each of the past amendments and its primary provisions, including the basis for the allocations and the hierarchy for reallocating unused quota between and among gear sectors.

Currently, Federal regulations at 50 CFR 679.20(a)(7)(i) authorize distinct BSAI Pacific cod allocations for the following sectors:

- **51% fixed gear**
(80% hook-and-line catcher processors)
(0.3% hook-and-line catcher vessels)
(3.3% pot catcher processors)
(15.0% pot catcher vessels)
(1.4% hook-and-line/pot vessels <60' LOA)
- **47% trawl gear**
(50% trawl catcher vessels)
(50% trawl catcher processors)
- **2% jig gear**

Note that while the <60' fixed gear (hook-and-line and pot) catcher vessels receive a separate allocation of BSAI Pacific cod, these vessels currently fish off the general hook-and-line catcher vessel and pot catcher vessel allocations, respectively by gear type, when those fisheries are open. In addition, Federal regulations outline a system for reallocating quota that is projected to remain unused by a particular sector.¹ With the exception of the jig sector, any unused seasonal apportionment to a particular sector is reallocated to the next seasonal allowance for that sector.

- Reallocations between the trawl gear sectors (e.g., trawl CV to trawl CP) are considered prior to reallocating to another gear type (e.g. trawl to fixed gear)
- Unused pot CP or pot CV quota is reallocated to the other pot sector before it is reallocated to the other fixed gear sectors.
- Unused portions of a seasonal jig allocation are reallocated to the <60' fixed gear CV sector.
- Unused hook-and-line CV sector and <60' fixed gear sector quota is reallocated to the hook-and-line CP sector
- Unused trawl quota is reallocated 95% to hook-and-line CP sector; 4.1% to pot CV sector; 0.9% to pot CP sector.

¹50 CFR 679.20(a)(7)(i)

PART I: Eligibility Criteria for the Non-AFA Trawl CV Sector (Component 1, Option 1)

Component 1, Option 1

Eligibility criteria for non-AFA trawl catcher vessels to be included in the AFA catcher vessel sector for purposes of the cod allocations.

Option 1. A non-AFA trawl catcher vessel must have made minimum cod landings of 100 mt during the years 1995 – 1997 with a valid LLP.

This option was added at the February Council meeting in order to establish a threshold by which a non-AFA trawl CV could qualify to be in the AFA trawl CV sector for purposes of the BSAI Pacific cod allocations. This means that the history of a qualifying non-AFA trawl CV would be attributed to the AFA trawl CV sector's history for the purpose of determining the AFA trawl CV sector's allocation, and the qualifying non-AFA vessels would fish off of the allocation to the AFA trawl CV sector. At the time this option was added, it was noted that a subsequent decision would need to be made regarding the number of years during 1995 – 1997 that a vessel must have landed 100 metric tons. Additional data was requested to make this decision.

This option could be clarified such that a non-AFA trawl catcher vessel must have made 100 mt of cod landings: A) in one of the years 1995 – 1997; B) in two of the years 1995 – 1997; or C) in each of the years 1995 – 1997. Staff assumes that the criteria does not mean that a vessel must have made 100 mt in aggregate, over the three year period 1995 – 1997.

Table 1 provides estimates of the number of non-AFA trawl catcher vessels that meet the criteria in Option 1 under the three different interpretations defined above. Under the most restrictive interpretation of the criteria, three vessels would qualify; under the least restrictive interpretation, nine vessels would qualify.

Table 1. Estimated number of vessels that meet Option 1

Potential Criteria under Component 1, Option 1	# Non AFA CVs that meet criteria
Criteria A: 100 mt in one yr (1995 - 1997)	9
Criteria B: 100 mt in two yrs (1995 - 1997)	4
Criteria C: 100 mt in each yr (1995 - 1997)	3

Estimates are based on review of ADF&G fishticket data, 1995 – 1997.

Table 2 below shows the number of vessels participating in the non-AFA CV sector and that sector's aggregate harvest during 1995 – 2003. It also shows the amount of annual cod harvest that can be attributed to the non-AFA catcher vessels that meet the three interpretations of the criteria under Option 1, as well as the percentage of the sector's total harvest that is represented by those vessels each year. For example, in 1995, the nine vessels that qualify under interpretation A (100 mt in one year during 1995 – 1997) represent over 95% of the total non-AFA trawl CV sector harvest in that particular year. In the same year, the four vessels that qualify under interpretation B (100 mt in any two years during 1995 – 1997) represent about 86% of the total non-AFA trawl CV sector harvest. None of the harvest data for interpretation C (100 mt in each year 1995 – 1997) can be provided, as Federal confidentiality rules prevent the disclosure of aggregated data for fewer than four vessels.

Tables 1 and 2 are intended to assist the Council in clarifying the interpretation of Component 1, Option 1, by showing the impact on the non-AFA trawl CV sector and the AFA trawl CV sector in terms of the potential cod allocations established under this amendment. Once clarified, staff can provide tables in the analysis showing all of the allocation options under Component 4 in combination with this option. The application of Option 1 will result in sixteen additional allocation options under Component 4. This option only affects the non-AFA trawl CV sector and the AFA trawl CV sector allocations.

Table 2. Number and harvest (mt) of non-AFA trawl catcher vessels that qualify under Component 1, Option 1, 1995 - 2003

Non-AFA CV sector	1995	1996	1997	1998	1999
# Non AFA CVs total	12	17	9	12	11
Non AFA CV sector harvest (total mt)	3,190	3,317	3,177	1,541	1,669
Number of qualifying vessels that fished (9 qualify)*	6	8	5	3	4
Harvest (mt) of vessels that meet criteria A	conf.	3,141	conf.	conf.	1,432
% of total non AFA CV sector harvest	conf.	94.7%	conf.	conf.	85.8%
Number of qualifying vessels that fished (4 qualify)	4	4	4	3	4
Harvest (mt) of vessels that meet criteria B	2,748	2,457	2,474	conf.	1,432
% of total non AFA CV sector harvest	86.1%	74.1%	77.9%	conf.	85.8%
Number of qualifying vessels that fished (3 qualify)	3	3	3	2	3
Harvest (mt) of vessels that meet criteria C	conf.	conf.	conf.	conf.	conf.
% of total non AFA CV sector harvest	conf.	conf.	conf.	conf.	conf.

Non-AFA CV sector	2000	2001	2002	2003	total 1995 - 2003
# Non AFA CVs total	11	14	16	22	51
Non AFA CV sector harvest (total mt)	2,802	3,007	5,662	7,542	31,907
Number of qualifying vessels that fished (9 qualify)	4	4	5	4	9
Harvest (mt) of 9 vessels that meet criteria A	1,689	1,787	conf.	2,884	20,357
% of total non AFA CV sector harvest	60.3%	59.4%	conf.	38.2%	63.8%
Number of qualifying vessels that fished (4 qualify)	4	4	4	4	4
Harvest (mt) of 4 vessels that meet criteria B	1,689	1,787	2,197	2,884	conf.
% of total non AFA CV sector harvest	60.3%	59.4%	38.8%	38.2%	conf.
Number of qualifying vessels that fished (3 qualify)	3	3	3	3	3
Harvest (mt) of 3 vessels that meet criteria C	conf.	conf.	conf.	conf.	conf.
% of total non AFA CV sector harvest	conf.	conf.	conf.	conf.	conf.

Conf. = confidential data. Federal confidentiality rules prohibit the public use of data for <4 vessels. Data are also masked if confidential data could be determined using simple subtraction.

Source: ADF&G fishtickets, 1995 - 2003. 2003 data are considered preliminary.

*Because not all qualifying vessels fished in each year 1995 - 2003, some data are confidential. Because Criteria C qualifies 3 vessels, none of the harvest data can be reported.

Finally, Option 1 states that a non-AFA trawl catcher vessel must have made minimum cod landings of 100 mt during the years 1995 – 1997 *with a valid LLP*. As the LLP Program was not implemented until 2000, no vessels would have been fishing with a valid LLP prior to 2000. Also, since the LLP is a license-based program, it should be clarified that the holder of the LLP would qualify under this criteria as opposed to the vessel. Thus, Option 1 could be clarified to qualify the *holder* of an LLP that arose from a vessel/history that met the minimum cod landings requirement. This would qualify the holder of that LLP regardless of whether that LLP was earned on the vessel on which it is currently being used, or whether it was purchased by the current license holder.

If that is the intent, Option 1 could be modified to read:

Option 1. The holder of a license that arose from a vessel/history that made a minimum of 100 mt of cod landings during the years 1995 – 1997.

However, that language would not provide for vessels that met the cod threshold but purchased an LLP at some point after the LLP was implemented. If the Council would like to accommodate this circumstance, the option could be expanded such that it qualifies the holder of a license that is used on a vessel that met the minimum cod landings requirement, but did not meet the requirements for an LLP license, provided the license was transferred to the vessel by [a specific date]. See the proposed language below. Regardless of the way the option is clarified, no more than 9 vessels could qualify under this option.

The holder of a license received by [specify date] that is using that license on a vessel that made a minimum of 100 mt of cod landings during the years 1995 – 1997.

Of the nine vessels whose history qualifies under the criteria, six currently have valid and transferable LLP licenses. Of the remaining three vessels whose history qualifies under the criteria, two vessels transferred their licenses (or history that gave rise to a license) to other vessels that subsequently participated in the non-AFA trawl CV sector.² Only one vessel meets the landings requirement but does not appear to have an LLP or to have transferred history that gave rise to an LLP to another vessel. Thus, the circumstance described above, in which a vessel met the cod landings requirement but did not meet the LLP requirements and subsequently purchased an LLP, could potentially apply to one vessel.

In sum, this section is provided to:

- 1) allow the Council to clarify Component 1, Option 1 for the non-AFA trawl CV sector.** Does the criteria under Option 1 mean that a non-AFA CV must have made 100 mt of cod landings: A) in any one year during 1995 – 1997; B) in any of two years during 1995 – 1997; or C) in each year during 1995 – 1997?
- 2) understand the potential impact of Component 1, Option 1 in terms of the allocations to the non-AFA trawl CV sector and the AFA trawl CV sector.** This may spur further consideration of whether the trawl CV sector should remain one sector for purposes of the BSAI cod allocations.
- 3) allow the Council to clarify the language regarding the LLP license.** Does the criteria qualify the holder of an LLP that arose from a vessel/history that met the minimum cod landings requirement? Does it also qualify the holder of a license that is used on a vessel that met the minimum cod landings requirement, but did not meet the requirements for an LLP license, provided the license was transferred to the vessel by [a specific date]?

²Table 2 only includes catch history from the nine vessels whose history met the criteria under Component 1, Option 1. If Option 1 was selected and the two license holders that received a license/history through transfer were qualified, these vessels' subsequent history in the non-AFA trawl CV sector would also be included in the AFA trawl CV sector for purposes of determining the BSAI Pacific cod allocations.

PART II: BSAI Pacific Cod Sector Allocations (Component 4)

Part II provides preliminary calculations of the sector allocations resulting from the options in Component 4. The options establish allocations to each of the sectors listed in Component 1, and would modify the current allocations to each gear sector. Component 4 of the Council's current motion is as follows:

Component 4: Sector Catch History Years

Component is to include sets of years from which one set of years will be selected for all sectors. Note that the allocations from Amendment 46 (BSAI Pacific Cod Allocations) were implemented in January 1997.

There will be a suboption under each set of years to drop one year. Each sector would drop its worst year (smallest annual harvest share percentage for that sector). This could result in an aggregate percentage greater than 100% for a set of years for all sectors combined. If that is the case, this would be scaled back to 100%.

4.1 1995 – 2002

4.1.1 Drop one year

4.2 1997 – 2003

4.2.1 Drop one year

4.3 1998 – 2002

4.3.1 Drop one year

4.4 1999 – 2003

4.4.1 Drop one year

4.5 2000 – 2003

4.5.1 Drop one year

4.6 *The Council can select percentages for cod allocated to each sector that fall within the range of percentages analyzed.*

Note that Component 4 includes ten specific options for determining the sector allocations to the various gear sectors identified under Component 1, and one option (4.6) that makes it explicit that the Council can select any combination of cod allocations as long as the allocations are within the range analyzed. There are also two suboptions provided in Component 1 under the AFA trawl CP sector that would allow the Council to choose whether or not to include the catch history of the nine trawl catcher processors (AFA-9) whose claims to catch history were extinguished by Section 209 of the AFA.³ Because the AFA-9 vessels left the fishery in 1999, the suboptions are only relevant to the options that include catch history prior to 1999 (Options 4.1 – 4.3). **Including those suboptions results in a total of sixteen options for the sector allocations under Component 4.**

³NOAA GC provided a legal opinion (June 4, 2004) that states that the Council may consider the combined non-pollock fishing history of the 20 catcher processor vessels listed in section 208(e) of the AFA and the 9 vessels listed in Section 209 in determining non-pollock groundfish sector allocations, except that the allocations based upon the non-pollock history of the Section 209 vessels may not be made to the owners of those vessels and any allocations must comply with the overall caps set forth under Section 211(b) (sideboards in non-pollock fisheries). NOAA GC reaffirmed this opinion in a subsequent letter to the Council (February 9, 2005).

Table 3 provides a preliminary summary of the sector allocations under Component 4. Note that, as directed under Component 3, the allocations are based on retained legal catch from both LLP and non-LLP vessels. Each sector's harvest percentage was calculated as the sector's average of the annual harvest share. Note that the 2005 BSAI Pacific cod TAC (less CDQ) is 190,550 mt; thus, 1% of the BSAI Pacific cod TAC equates to 1,905.5 mt.

Table 3. BSAI Pacific cod sector allocations under Component 4, Options 4.1 - 4.5

OPTION	4.1 excluding AFA 9	4.1 including AFA 9	4.1.1 drop year excluding AFA 9	4.1.1 drop year including AFA 9	4.2 excluding AFA 9	4.2 including AFA 9	4.2.1 drop year excluding AFA 9	4.2.1 drop year including AFA 9
Years	1995 - 02	1995 - 02	1995 - 02	1995 - 02	1997 - 03	1997 - 03	1997 - 03	1997 - 03
<60 HAL/Pot CVs	0.3%	0.3%	0.3%	0.3%	0.4%	0.4%	0.5%	0.5%
AFA Trawl CPs	1.8%	2.9%	1.9%	3.1%	1.6%	2.2%	1.6%	2.3%
AFA Trawl CVs	22.0%	21.8%	22.6%	22.2%	20.7%	20.5%	21.2%	21.0%
Jig CVs	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Longline CPs	49.3%	48.7%	48.3%	47.7%	50.0%	49.7%	48.7%	48.4%
Longline CVs	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Non-AFA Trawl CPs	13.1%	13.0%	13.2%	13.1%	14.6%	14.5%	14.9%	14.8%
Non-AFA Trawl CVs	1.8%	1.8%	1.8%	1.8%	2.1%	2.1%	2.2%	2.2%
Pot CPs	2.5%	2.5%	2.6%	2.6%	1.9%	1.9%	2.0%	2.0%
Pot CVs	8.9%	8.8%	9.0%	8.9%	8.4%	8.4%	8.5%	8.5%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%
OPTION	4.3 excluding AFA 9	4.3 including AFA 9	4.3.1 drop year excluding AFA 9	4.3.1 drop year including AFA 9	4.4	4.4.1 drop year	4.5	4.5.1 drop year
Years	1998 - 02	1998 - 02	1998 - 02	1998 - 02	1999 - 03	1999 - 03	2000 - 03	2000 - 03
<60 HAL/Pot CVs	0.4%	0.4%	0.4%	0.4%	0.6%	0.7%	0.7%	0.8%
AFA Trawl CPs	1.6%	2.1%	1.7%	2.3%	1.2%	1.3%	0.9%	0.9%
AFA Trawl CVs	20.2%	20.1%	21.2%	21.0%	19.3%	20.2%	18.4%	19.5%
Jig CVs	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Longline CPs	49.8%	49.6%	48.5%	48.1%	49.4%	48.3%	50.3%	49.0%
Longline CVs	0.2%	0.2%	0.3%	0.3%	0.2%	0.3%	0.3%	0.4%
Non-AFA Trawl CPs	15.5%	15.4%	15.2%	15.2%	15.9%	15.4%	16.0%	15.6%
Non-AFA Trawl CVs	1.8%	1.8%	2.0%	2.0%	2.5%	2.7%	2.8%	3.0%
Pot CPs	2.1%	2.1%	2.2%	2.2%	1.9%	2.1%	1.4%	1.5%
Pot CVs	8.2%	8.2%	8.4%	8.4%	9.0%	9.0%	9.1%	9.2%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

Source: Percentage allocations were derived from each sector's average annual harvest share over the series of years identified under each option. The 'drop year' percentages are adjusted equally to result in an annual sum of 100%. Harvest data are retained catch from WPR reports and ADF&G fishtickets, 1995 - 2003. No 'targeting' was applied to the data. 2003 data are considered preliminary.

Note: The AFA-9 only have catch history through 1998, thus whether to include their catch history to determine the AFA trawl CP sector allocation is only a decision point under Options 4.1 - 4.3.

Note that Table 3 is based only on each sector's harvest history as specified under Component 4, and does not take into account Options 5.2.2. – 5.2.4 under Component 5. Those options provide a cap on the amount that can be allocated to the <60' hook-and-line/pot catcher vessel sector and the jig sector that is larger than those sectors' actual catch history.

Under Component 5, the allocations (whether combined or separate) to the <60' fixed gear CVs and the jig sector cannot collectively exceed: **actual catch history** (Option 5.2.1.); **2.71%** (Option 5.2.2); **3%** (Option 5.2.3); or **4%** (Option 5.2.4). Table 3 indicates that under all of the proposed options in Component 4, the combined <60' fixed gear and jig sectors' allocation would range from **0.4% - 0.9%** based on actual catch history. The allocations in Table 3 would change if any of the options under 5.2.2 – 5.2.4 were selected, which would effectively maintain allocations to the <60' fixed gear and jig gear sectors based on factors other than catch history. Note that if separate allocations to the <60' fixed gear sector and the jig gear sector are to continue, the *individual* allocations to each sector will need to be specified under Options 5.2.2 – 5.2.4.

Table 3 also does not account for Component 1, Option 1, which would allow non-AFA trawl CVs that made 100 mt of cod landings during the years 1995 – 1997 to be included in the AFA trawl CV sector for purposes of the cod allocations. See Part I for the discussion of this option. Once this option has been further clarified, Table 3 will be expanded to account for this option. Note that this will result in an additional sixteen options for the sector allocations, and will only affect the relative allocations for the non-AFA trawl CV sector and the AFA trawl CV sector.

Table 4 summarizes the range of potential BSAI Pacific cod sector allocations identified in Table 3, as well as the current allocations to each sector. This table provides the low-end and high-end allocation percentages that are possible for each sector under the options in Component 4. Note that the Council has the ability to select a specific option shown in Table 3, or it can choose percentage allocations that fall within the range provided.

Table 4. Range of proposed BSAI Pacific cod allocations by sector under Component 4, Options 4.1 - 4.5 compared to status quo

Sectors	Range of potential BSAI Pacific cod sector allocations under 4.1 - 4.5	Current allocation ¹ (% of BSAI Pacific cod TAC)
<60 HAL/Pot CVs	.3% - .8%	0.71%
AFA Trawl CPs	0.9% - 3.1%	23.5% (trawl CPs)
Non-AFA Trawl CPs	13.0% - 16.0%	
Jig CVs	.08% - 0.1%	2.0%
Longline CPs	47.7% - 50.3%	40.8%
Longline CVs	0.2% - 0.4%	0.15%
AFA Trawl CVs	18.4% - 22.6%	23.5% (trawl CVs)
Non-AFA Trawl CVs	1.8% - 3.0%	
Pot CPs	1.4% - 2.6%	1.68%
Pot CVs	8.2% - 9.2%	7.65%

Note: The <60' hook-and-line and pot CV sector currently has a direct allocation of 0.714% of the BSAI Pacific cod TAC. However, this sector can currently fish off the general hook-and-line CV and pot CV allocations when those directed fisheries are open, respectively by gear type.

¹The percentage indicates the initial allocation the sector receives at the beginning of the year. It does not reflect any quota that is reallocated inseason among gear sectors.

Tables 5 – 8 were used to derive the sector’s average under the series of years provided in each option in Table 3. **Table 5** provides each sector’s annual retained BSAI Pacific cod harvests for 1995 – 2003, excluding Pacific cod catch history from the AFA 9 vessels. **Table 6** calculates each sector’s annual harvest share as a percentage of the total retained harvest for 1995 – 2003, based on the harvests provided in Table 5. **Table 7** is the same as Table 5, except that the Pacific cod catch history from the AFA 9 vessels is included and attributed to the AFA trawl CP sector. **Table 8** then calculates each sector’s annual harvest share as a percentage of the total.

Table 5. BSAI Pacific cod annual harvest (retained mt) by sector (excluding AFA 9 catch history), 1995 - 2003

SECTOR	1995	1996	1997	1998	1999	2000	2001	2002	2003	sum 95 - 03	sum/total
<60 HAL/Pot CVs	900	131	56	38	176	251	1,018	1,537	1,741	5,849	0.38%
AFA Trawl CPs	4,300	3,228	4,556	4,354	3,686	1,709	1,432	1,287	1,409	25,961	1.68%
AFA Trawl CVs	39,919	51,269	53,285	37,579	32,946	36,099	18,691	33,921	33,562	337,270	21.87%
Jig CVs	589	247	167	191	204	79	102	169	154	1,901	0.12%
Longline CPs	87,538	82,109	108,381	83,837	65,905	76,509	86,436	79,269	89,703	759,686	49.26%
Longline CVs	19	8	42	2	107	223	1,332	170	93	1,996	0.13%
Non-AFA Trawl CPs	16,018	17,578	19,537	21,860	22,098	24,523	23,628	29,757	28,033	203,032	13.17%
Non-AFA Trawl CVs	3,190	3,317	3,177	1,541	1,669	2,802	3,006	5,662	7,542	31,907	2.07%
Pot CPs	4,406	9,166	5,169	2,857	5,578	2,468	2,991	2,059	1,530	36,224	2.35%
Pot CVs	15,996	23,531	17,046	9,242	12,200	16,800	13,916	12,465	17,176	138,372	8.97%
TOTAL	172,874	190,584	211,416	161,500	144,569	161,463	152,553	166,297	180,944	1,542,199	100.00%

Source: Harvest data are from WPR reports and ADF&G fishtickets, 1995 - 2003. 2003 data are considered preliminary.

Note: In every year, some percentage of the harvest cannot be assigned to a given catcher vessel sector due to missing fishtickets from mothership deliveries. This harvest was not attributed to any sector in this table and is excluded from the annual total. The percent of harvest that cannot be assigned varies by year and ranges from 0.03% - 2.0%. Pacific cod harvested with hand troll gear and harvest from the 3 surimi-fillet non-AFA CPs was not included.

Table 6. BSAI Pacific cod annual harvest share by sector (excluding AFA 9 catch history), 1995 - 2003

SECTOR	1995	1996	1997	1998	1999	2000	2001	2002	2003	sum 95 - 03	average
<60 HAL/Pot CVs	0.52%	0.07%	0.03%	0.02%	0.12%	0.16%	0.67%	0.92%	0.96%	3.47%	0.39%
AFA Trawl CPs	2.49%	1.69%	2.16%	2.70%	2.55%	1.06%	0.94%	0.77%	0.78%	15.13%	1.68%
AFA Trawl CVs	23.09%	26.90%	25.20%	23.27%	22.79%	22.36%	12.25%	20.40%	18.55%	194.81%	21.65%
Jig CVs	0.34%	0.13%	0.08%	0.12%	0.14%	0.05%	0.07%	0.10%	0.08%	1.11%	0.12%
Longline CPs	50.64%	43.08%	51.26%	51.91%	45.59%	47.38%	56.66%	47.67%	49.58%	443.77%	49.31%
Longline CVs	0.01%	0.00%	0.02%	0.00%	0.07%	0.14%	0.87%	0.10%	0.05%	1.28%	0.14%
Non-AFA Trawl CPs	9.27%	9.22%	9.24%	13.54%	15.29%	15.19%	15.49%	17.89%	15.49%	120.61%	13.40%
Non-AFA Trawl CVs	1.85%	1.74%	1.50%	0.95%	1.15%	1.74%	1.97%	3.40%	4.17%	18.48%	2.05%
Pot CPs	2.55%	4.81%	2.44%	1.77%	3.86%	1.53%	1.96%	1.24%	0.85%	21.00%	2.33%
Pot CVs	9.25%	12.35%	8.06%	5.72%	8.44%	10.40%	9.12%	7.50%	9.49%	80.34%	8.93%
TOTAL	1	1	1	1	1	1	1	1	1	9	100.00%

Source: Each sector's annual harvest share was calculated for the individual year as a percentage of the total retained legal catch by all sectors. Harvest data are retained catch from WPR reports and ADF&G fishtickets, 1995 - 2003. 2003 data are considered preliminary.

Table 7. BSAI Pacific cod annual harvest (retained mt) by sector (including AFA 9 catch history), 1995 - 2003

SECTOR	1995	1996	1997	1998	1999	2000	2001	2002	2003	sum 95 - 03	sum/total
<60 HAL/Pot CVs	900	131	56	38	176	251	1,018	1,537	1,741	5,849	0.38%
AFA Trawl CPs	9,206	7,295	8,571	8,321	3,686	1,709	1,432	1,287	1,409	42,916	2.75%
AFA Trawl CVs	39,919	51,269	53,285	37,579	32,946	36,099	18,691	33,921	33,562	337,270	21.63%
Jig CVs	589	247	167	191	204	79	102	169	154	1,901	0.12%
Longline CPs	87,538	82,109	108,381	83,837	65,905	76,509	86,436	79,269	89,703	759,686	48.72%
Longline CVs	19	8	42	2	107	223	1,332	170	93	1,996	0.13%
Non-AFA Trawl CPs	16,018	17,578	19,537	21,860	22,098	24,523	23,628	29,757	28,033	203,032	13.02%
Non-AFA Trawl CVs	3,190	3,317	3,177	1,541	1,669	2,802	3,006	5,662	7,542	31,907	2.05%
Pot CPs	4,406	9,166	5,169	2,857	5,578	2,468	2,991	2,059	1,530	36,224	2.32%
Pot CVs	15,996	23,531	17,046	9,242	12,200	16,800	13,916	12,465	17,176	138,372	8.87%
TOTAL	177,780	194,651	215,431	165,467	144,569	161,463	152,553	166,297	180,944	1,559,154	100.00%

Source: Harvest data are from WPR reports and ADF&G fishtickets, 1995 - 2003. 2003 data are considered preliminary.

Note: In every year, some percentage of the harvest cannot be assigned to a given catcher vessel sector due to missing fishtickets from mothership deliveries. This harvest was not attributed to any sector in this table and is excluded from the annual total. The percent of harvest that cannot be assigned varies by year and ranges from 0.03% - 2.0%. Pacific cod harvested with hand troll gear and harvest from the 3 surimi-fillet non-AFA CPs was not included.

Table 8. BSAI Pacific cod annual harvest share by sector (including AFA 9 catch history), 1995 - 2003

SECTOR	1995	1996	1997	1998	1999	2000	2001	2002	2003	sum 95 - 03	average
<60 HAL/Pot CVs	0.51%	0.07%	0.03%	0.02%	0.12%	0.16%	0.67%	0.92%	0.96%	3.45%	0.38%
AFA Trawl CPs	5.18%	3.75%	3.98%	5.03%	2.55%	1.06%	0.94%	0.77%	0.78%	24.03%	2.67%
AFA Trawl CVs	22.45%	26.34%	24.73%	22.71%	22.79%	22.36%	12.25%	20.40%	18.55%	192.58%	21.40%
Jig CVs	0.33%	0.13%	0.08%	0.12%	0.14%	0.05%	0.07%	0.10%	0.08%	1.09%	0.12%
Longline CPs	49.24%	42.18%	50.31%	50.67%	45.59%	47.38%	56.66%	47.67%	49.58%	439.27%	48.81%
Longline CVs	0.01%	0.00%	0.02%	0.00%	0.07%	0.14%	0.87%	0.10%	0.05%	1.27%	0.14%
Non-AFA Trawl CPs	9.01%	9.03%	9.07%	13.21%	15.29%	15.19%	15.49%	17.89%	15.49%	119.67%	13.30%
Non-AFA Trawl CVs	1.79%	1.70%	1.47%	0.93%	1.15%	1.74%	1.97%	3.40%	4.17%	18.34%	2.04%
Pot CPs	2.48%	4.71%	2.40%	1.73%	3.86%	1.53%	1.96%	1.24%	0.85%	20.74%	2.30%
Pot CVs	9.00%	12.09%	7.91%	5.59%	8.44%	10.40%	9.12%	7.50%	9.49%	79.54%	8.84%
TOTAL	1	1	1	1	1	1	1	1	1	9	100.00%

Source: Each sector's annual harvest share was calculated for the individual year as a percentage of the total retained legal catch by all sectors. Harvest data are retained catch from WPR reports and ADF&G fishtickets, 1995 - 2003. 2003 data are considered preliminary.

In sum, this section is provided to:

- 1) indicate the range of allocation percentages that result from the current options under Component 4.**

Do these options provide a sufficiently broad range for analysis? Do any of the options result in such similar allocations that specific options can be eliminated?

- 2) assist the Council in determining whether the range of options in Component 5 is appropriate for the <60' fixed gear sector and jig gear sector.**

Options 5.2.2. – 5.2.4 propose a maximum percentage that the combined allocation to these two sectors cannot exceed (2.71%, 3%, or 4%), but does not require that these two sectors receive a combined allocation. Staff will analyze these options both as a maximum combined allocation and as separate allocations. Does the Council want to specify separate allocations to each of these sectors under 5.2.2. – 5.2.4? Unless further direction is provided, the separate allocations will be analyzed assuming that the 2% jig allocation is maintained and the remainder (0.71%, 1%, 2%) is allocated to the <60' fixed gear sector.

PART III: Management of BSAI Pacific Cod Sector Allocations (Component 5)

Component 5 is related to the allocation of the BSAI TAC to the various sectors. Section 5.1 provides an explanation of the fixed gear incidental catch allowance (ICA) established in the annual specifications process for the BSAI fixed gear Pacific cod sectors and provides direction should the ICA increase significantly in future years. Section 5.2 provides three options for establishing a maximum allocation for the <60' fixed gear catcher vessel sector and the jig sector that are not based on catch history (5.2.2 – 5.2.4).

Prior to the February Council meeting, Component 5 also included language describing how the sector allocations would be managed. Specifically, the motion noted that NMFS would continue to specify an ICA at the beginning of the year for the fixed gear Pacific cod fisheries, meaning that Pacific cod caught incidental to other fixed gear fisheries would be attributed to the ICA. The motion also specified that NMFS would manage the jig and trawl sectors using a 'hard cap.' In February, the Council eliminated this language in order to avoid confusion as to how the fisheries will be managed in the future, with the intent that revised language could be considered in the future. This section addresses the issue of management of the proposed sector allocations, which needs to be carefully considered as the amendment proposes to create more refined sector splits than are managed under the status quo. The current system is discussed, as well as three potential modifications to the current system for the trawl fisheries.

Current management system

Currently, NMFS credits both directed harvest of Pacific cod and the incidental harvest of Pacific cod against the Pacific cod TAC to ensure that Pacific cod are not overharvested. When cod is open for directed fishing, all cod must be retained. Directed fishing for Pacific cod is closed when the amount of cod available for harvest in the directed fishery is caught, reserving the remainder of the TAC for incidental catch in other groundfish fisheries. NMFS then allows vessels to retain incidental catches of Pacific cod (if the TAC has not been reached) taken in other directed fisheries that are open, up to the maximum retainable amount (MRA). If the fishery is closed to directed fishing and the TAC is reached, NMFS issues a prohibition of retention of cod and all cod caught must be discarded. If the fishery is closed to directed fishing, the ABC has been taken, and the harvest of cod approaches the overfishing level, then NMFS could close target fisheries that harvest cod incidentally. The overfishing level is the critical harvest point when determining whether directed fisheries for other target species will be closed due to incidentally caught fish.

In the existing management system, an annual ICA for the fixed gear Pacific cod sectors is deducted off the top of the aggregate amount of the BSAI Pacific cod TAC allocated to all of the fixed gear sectors combined (51%). Since 2000, an ICA of 500 mt⁴ has been deducted from the fixed gear sector's overall allocation (51%) before the allocation is apportioned to the separate fixed gear sectors. While the trawl sectors do not have an ICA established at the beginning of the year, NMFS currently has the ability to establish a directed fishing allowance (DFA) for the cod target trawl fisheries and an ICA for cod caught incidentally in the non-cod target trawl fisheries during the fishing year, should NMFS determine that any allocation or apportionment of Pacific cod has been or will be reached during the season.⁵ This system allows NMFS to close the directed fishery for cod as described above, and allow other directed trawl fisheries to continue fishing (using the ICA). The current management system is commonly referred to as a '**soft cap**' system because incidental catch of cod would not shut down other non-cod target fisheries unless the overall catch of cod approached the overfishing level.

⁴The 500 mt ICA was initially derived from estimates of incidental catch of Pacific cod in other groundfish fisheries from 1996 – 1999. NMFS determines the ICA on an annual basis in rulemaking (679.20(a)(7)(i)(C)(1).

⁵See 50 CFR 679.20(d)(1)(i).

Under this amendment, the **fixed gear** cod sectors will continue to be managed using an ICA established at the beginning of the year during the annual specifications process. The fixed gear fisheries (primarily the hook-and-line CP sector) fish almost entirely Pacific cod, and thus they finish up their season in the directed cod fishery. In addition, their other target species (Greenland turbot, IFQ halibut/sablefish) have relatively low incidental catches of Pacific cod, and this sector has been fairly predictable over the years. Because there are not subsequent fixed gear target fisheries that need cod for incidental catch later in the year, the hook-and-line CP sector has typically harvested its directed fishing allowance into December and does not harvest its entire ICA (M. Furuness, 3/9/05).

NMFS has not typically put **trawl** Pacific cod on bycatch status in the recent past, due to both the seasonal apportionments and the fact that the trawl sectors are not currently constrained by their Pacific cod allocations.⁶ Other than the amount of TAC that is apportioned to the trawl gear sectors, those fisheries are confined by both the Steller sea lion restrictions and PSC caps. The way the fishery is currently allocated essentially results in a large portion of the overall Pacific cod TAC from the trawl CP sector and some from the trawl CV sector acting as a ‘slush fund’ that is not taken until the end of the year when it is reallocated primarily to the hook-and-line CP sector.⁷ The seasonal allocations to the trawl sectors have ensured that a sufficient amount of Pacific cod is left for incidental catch in the other non-cod target trawl fisheries later in the year, specifically, a few thousand tons for the trawl catcher vessel sector participating in the B season pollock fishery, and several thousand tons for the trawl catcher processor sector participating in the flatfish, rockfish, and B season Atka mackerel fisheries (A. Smoker, 2/24/05). In effect, exceeding ABC and incurring an OFL closure have not been a past concern.

However, if the BSAI Pacific cod allocations among the trawl, jig, and fixed gear sectors are revised such that they reflect actual recent historical catch by sector and the overall trawl allocations are potentially reduced, the trawl sectors will be more constrained by their Pacific cod allocations, in both their target cod fisheries and in their late season non-cod target fisheries. This concern is further exacerbated by further splitting the two existing trawl allocations (CP and CV) into four trawl sectors (AFA CV, non-AFA CV, AFA CP, and non-AFA CP). Because of the lack of ‘room’ in the proposed trawl allocations, NMFS would have the difficult task of determining how much cod should be made available for the directed fishery and how much should be left to accommodate incidental catch of cod, on an individual trawl sector basis. As stated previously, this determination has not been necessary in the past, due to the fact that cod has not been the primary constraining factor to these sectors. The remainder of this section discusses various options for managing the trawl sector allocations using **hard caps** or **soft caps**. Either approach could potentially be managed by NMFS or through a cooperative structure.

Hard caps (managed by cooperatives versus managed by NMFS)

One management option is to establish each trawl sector’s allocation as a hard cap, meaning that when an individual sector’s allocation of BSAI Pacific cod is fully harvested, all directed fishing for BSAI Pacific cod closes for that sector, as well as any fisheries in which Pacific cod would be caught incidentally by that sector. In effect, reaching an allocation for a species (whether targeted or taken incidentally) under a hard cap system is like approaching the overfishing level under the current management system. Hard caps can be viewed as an effective deterrent to sectors having excessive incidental catch rates.

These allocations could potentially be managed by NMFS or managed by the sector itself. Managing sector allocations (especially small ones) as a hard cap may be more feasible if the sector has the ability to

⁶ Establishing an ICA inseason for the trawl sectors has not usually been necessary; however, NMFS did close the BSAI Pacific cod trawl CP fishery on March 14, 2004, and set aside 500 mt for an ICA until March 28 (the next seasonal apportionment started April 1).

⁷ A large portion of the 2% jig allocation (and in some years a portion of the pot allocation) is also typically reallocated.

manage it themselves through a cooperative. The individual sector should be better able to manage its allocation such that it can be used in a manner that will most benefit its participants (whether in the directed fishery or as incidental catch in other trawl fisheries). Under a system of self-management, members of the sector are responsible for staying within their allotments through internal controls, which are verified by NMFS. If the collective membership of the sector cannot control the actions of individual members within the sector, it is unlikely that the sector will be able to stay within its catch limit. Therefore, a hard cap is typically considered an appropriate tool to manage a rationalized sector.

Alternatively, if NMFS was to manage the allocations, it would need to establish directed fishing allowances (DFAs) and incidental catch allowances (ICAs) for each trawl sector. This approach would be relatively difficult, given that the agency would need to determine exactly when to close the directed cod fishery and the amount of cod quota needed to be held back for incidental catch needs in the other trawl fisheries during the year. NMFS would likely have to be relatively conservative in establishing the ICA, given the more refined, smaller allocations to each sector and the annual variability of Pacific cod required for incidental catch in the trawl fisheries. In addition, it is possible that some small allocations may not be opened to directed fishing unless the sectors themselves are responsible for staying within their allotments. The problem statement for this amendment emphasizes that the Pacific cod allocations should be adjusted in order to reduce uncertainty in and provide stability to the sectors. Allocating appropriate amounts of incidentally caught cod, so that each sector's directed fisheries can be harvested, is an important concern when creating stability.

Thus, given that the amendment proposes a defined allocation to each of the four trawl sectors, a hard cap system may be more feasible if each sector can potentially manage the use of its Pacific cod (whether for directed catch or incidental use) on its own. The notion that the four trawl sector allocations can be managed using hard caps is at least partly fueled by the fact that three of those sectors are either already operating under, or have the potential to operate under, a cooperative system. The effectiveness of this management system will depend on whether each trawl sector can successfully manage its Pacific cod allocation between its directed cod fishery and other fisheries, so that no fisheries unfairly 'pre-empt' the other for lack of cod. Without cooperatives, or similar internal controls at the sector level, it is unlikely that the aggregate sector participants will be able to control the actions of individuals within the sector. However, whether NMFS is managing the fishery and setting a DFA and ICA for each sector, or the sector manages its own allocation through a cooperative structure, a hard cap means that it would be up to each sector to operate within that allocation. The remainder of this section considers whether each of the four trawl sectors is structured such that self-managing under a hard cap may be a feasible option.

AFA Sectors

The average number of vessels that landed BSAI Pacific cod in 1999 – 2003 are shown in Table 9 below. Table 9 also shows the number of permits available in each sector, and describes the type of permit necessary to fish in that sector. Both the **AFA trawl CV sector** and **AFA trawl CP sector** are defined under the AFA, and thus the number of eligible participants has been determined and is fairly constant. These vessels currently operate in a cooperative system established through the AFA for BSAI pollock, and manage their Pacific cod sideboards through the cooperative as well. It is expected that should either of these sectors receive a direct allocation of Pacific cod under this new amendment package (which will replace their Pacific cod sideboards), the existing structure in place for these sectors could well accommodate management of Pacific cod allocations.

One issue that could complicate the management of the Pacific cod allocation for the AFA trawl CV sector (self-managed under a hard cap) is the option proposed under Component 1 discussed previously. If selected, this option would allow a number of non-AFA trawl CVs that meet a specified threshold (100 mt of Pacific cod landings in 1995 – 1997) to be part of the AFA trawl CV sector for purposes of the cod allocations. The level of complexity this option introduces depends both on the

number of non-AFA vessels that meet this criteria and the ability of those vessels to work or contract with the current AFA trawl CV cooperatives. Part I of this paper estimates that, depending on the way the option is interpreted, either 3, 4, or 9 non-AFA trawl CVs could potentially qualify. Public testimony may provide additional information as to the feasibility of managing the AFA trawl CV sector allocation through the cooperatives if this option is selected.

Table 9. Participants (1999 – 2003) and applicable permits in the BSAI Pacific cod fisheries

Sector	# of vessels harvesting BSAI Pacific cod (average 1999 - 2003)	# of vessels with valid LLP or permit	Permit issued
AFA Trawl CPs	13	20	AFA CP permit/listed in 208(e)(1)-(20)
Non-AFA Trawl CPs	22	46	trawl LLP (CP)
AFA Trawl CVs	100	111	AFA CV permit
Non-AFA Trawl CVs	15	52	trawl LLP (CV)
Jig CVs	17	N/A	LLP is not required if <60' in the BSAI ¹
<60 H&L/Pot CVs	31	117	non-trawl LLPs
Longline CPs	40	44	non-trawl LLP + H&L CP cod endorsement
Longline CVs >60'	15	10	non-trawl LLP + H&L CV cod endorsement
Pot CPs	6	9	non-trawl LLP + pot CP cod endorsement
Pot CVs >60'	79	67	non-trawl LLP + pot CV cod endorsement

Source: Number of vessel licenses is provided by the RAM database, March 2005. Number of vessels with BSAI P.cod landings is provided by NPFMC staff, from Weekly Processor Reports and ADF&G Fishtickets, 1999 - 2003. No 'targeting' was applied to the data, thus, some vessels' Pacific cod was likely harvested incidental to another target species. This is most notable in the trawl sector. Targeted data will be provided for the EA/RIR/IRFA for this action. 2003 data are considered preliminary.

Note: Average # of vessels harvesting BSAI Pacific cod includes LLP and non-LLP participants. Non-LLP participants are limited to fishing within 3 miles, and could participate in any sector except for the AFA trawl CP and AFA trawl CV sectors. The distribution of LLP and non-LLP participants in each sector will be provided in the EA/RIR/IRFA for this action.

¹An LLP is not required to fish in the BSAI if a jig vessel is <60' LOA and uses no more than 5 jig machines, one line per machine, and 15 hooks per line.

Non-AFA Sectors

Under BSAI Amendment 80, the **non-AFA CP sector** will be defined by sector eligibility requirements⁸ and receive sector allocations of target flatfish (and be subject to sideboards in BSAI Pacific cod). At the same time, Amendment 80 proposes to establish a cooperative structure for this sector. Given that the expectation is that Amendment 80 will be approved prior to the BSAI Pacific cod allocation amendment,

⁸ The Consolidated Appropriations Act of 2005 (P.L. 108-792) establishes catcher processor sector definitions for participation in the non-pollock groundfish fisheries. BSAI Amendment 80 will be consistent with those definitions.

one could surmise that the non-AFA trawl CP sector will also be in position to cooperatively manage a Pacific cod allocation under a hard cap.

One issue of concern that may detract from the non-AFA trawl CP sector's ability to manage a direct Pacific cod allocation through cooperatives is the potential that not all of the non-AFA trawl CPs will join a cooperative. Amendment 80 allows for this possibility, and proposes options for allocating both groundfish and PSC between the cooperative(s) and eligible non-AFA trawl CPs who elect not to join a cooperative (Am. 80, Component 9). In addition, the sideboards established under Amendment 80 for the non-AFA trawl CP sector are proposed to be established separately between cooperative(s) and those not in a cooperative. Note, however, that this Pacific cod amendment proposes a direct Pacific cod allocation to the non-AFA trawl CP sector as a whole, and does not propose to further apportion that allocation between vessels that are in a cooperative and vessels that are not. It is uncertain whether any eligible non-AFA trawl CPs would opt not to join a cooperative. If not all vessels join a cooperative, management of the overall non-AFA trawl CP sector Pacific cod allocation becomes more difficult, as the potential increases for one or a few vessels not in the cooperative to significantly affect the harvest.

If the non-AFA trawl CP Pacific cod allocation is further subdivided into separate cooperative and non-cooperative cod allocations, the non-cooperative allocation could be so small that most of the allocation would need to be set aside for the ICA. This is partially due to the reduced size of the allocation (the non-AFA trawl CP allocation is estimated to be 13.0% - 16.0% of the BSAI Pacific cod TAC in Table 3) and also due to the variability and unpredictability in the catch of the non-cooperative vessels. NMFS would need a sufficiently large ICA to manage the non-cooperative vessels (the vessels in the cooperative would manage their separate allocation). Should the non-AFA trawl CP allocation not be further split and not all vessels join a cooperative, it may be necessary for NMFS to manage that allocation, and establish a directed fishing allowance (DFA) and an ICA for the non-AFA trawl CP sector as a whole.

The **non-AFA trawl CV** sector is not likely to operate under a cooperative structure in the near future, and thus will not likely be able to manage an allocation itself. It is assumed that individual sectors are more likely to be able to form cooperatives if: 1) all eligible participants are easily identified through a restrictive license limitation program or other mechanism, and 2) separate allocations are made to each sector. This assumption is based on the theory that cooperatives are more likely to form in fisheries where the participants' activities are more homogeneous and there are fewer participants.

The non-AFA trawl CV sector is discussed in more detail in Part I of this paper. This sector is the only trawl sector whose eligibility is not fixed through regulation or statute, such that the number of vessels participating in this sector could vary substantially on an annual basis. Table 9 above shows that while 15 non-AFA trawl CVs landed Pacific cod on average during 1999 – 2003, 52 non-AFA trawl CVs have a valid LLP to participate in this sector in Federal waters. (In addition, an unlimited number of non-LLP participants could choose to harvest BSAI Pacific cod in the parallel fishery in state waters.) Thus, the number of participants in this sector remains uncertain. Because it is the only trawl sector that is not either currently under a cooperative structure or being proposed to be under a cooperative structure, it is assumed that NMFS will need to continue to manage this fishery through Federal Register notice. Under a hard cap, this means that when this sector reaches its DFA and ICA, all other directed fisheries that catch cod incidentally will also be closed for this sector. This may not be of significant concern at this point, as this sector does not generally have any other target fishery.

However, concerns with management of this sector could be compounded by Component 1, Option 1 discussed earlier in this paper. Table 2 in Part I indicates the number of non-AFA CVs that could potentially qualify under Component 1, Option 1, and thus participate in the *AFA trawl CV* sector for purposes of the BSAI Pacific cod allocations. Nine vessels would qualify under the least restrictive interpretation of the criteria, the harvests of which represent over 95% of the entire non-AFA trawl CV sector's harvest in some individual years during 1995 – 2003. Under another interpretation of the option,

4 vessels would qualify, representing up to 86% of the entire sector's harvest in some years during this time period. Depending on the interpretation of the option (of which staff has requested clarification), the non-AFA trawl CV sector allocation could be significantly reduced due to a number of vessels with the most history in this sector moving that history to the AFA CV sector. Even without accounting for this option, Table 3 indicates that the non-AFA trawl CV sector would receive a relatively small allocation in the range of 1.8% - 3.0% of the BSAI Pacific cod TAC. Should this allocation be reduced further under Option 1, it may be more difficult to manage this sector's fishery within their allocation. While this sector does not generally have any other target fishery, the small allocation and uncertain number of participants mean that NMFS would likely set a conservative harvest limit so as to avoid exceeding the allocation.

In sum, the AFA trawl CP sector has a definitive set of participants that would potentially allow for self-management of its Pacific cod allocation under a hard cap – by establishing an arrangement within the existing cooperative structure to apportion a sufficient amount of cod for directed fishing and a sufficient amount of cod to support incidental catch in other target fisheries. The AFA trawl CV sector may also be in a position to manage its allocation as a hard cap, depending on the ability of the various cooperatives to work together, as well as with a number of non-AFA trawl catcher vessels that may qualify to participate in that sector. The non-AFA trawl CP sector's ability to manage a hard cap allocation is improved with the formation of a cooperative(s) under Amendment 80, but may potentially be jeopardized by an unknown number of non-AFA CPs that opt not to join the cooperative. The non-AFA trawl CV sector's allocation will need to continue to be managed by NMFS inseason.

Soft caps managed by NMFS

Another possible management option is to establish each trawl sector's allocation as a soft cap, managed by NMFS. This means that each trawl sector would receive a separate allocation, and NMFS would designate a portion of the allocation to be set aside as an ICA to accommodate the incidental catch of cod in the sector's other target fisheries. When the sector's ICA (and directed fishing allowance) is fully harvested, cod would be placed on prohibited species status for that sector and no longer be allowed to be retained. However, that sector's other target fisheries would not be closed unless the overall cod catch exceeds the ABC and approaches the overfishing level.

In this system, the ICA could be established *inseason*, as NMFS evaluates the progress of the fisheries and attempts to determine how much of the allocation needs to be set aside for use later in the year. The amount needed in an ICA decreases as the year progresses. Alternatively, the ICA could be established in the annual specifications process and set *preseason*, as it is for the fixed gear BSAI Pacific cod fisheries and the BS and AI pollock fisheries.

The soft cap approach is similar to the current system, with the understanding that NMFS rarely has had to establish an ICA inseason in the trawl fisheries because the current allocations of cod have not been the constraining factor for the trawl sectors. However, with more refined (smaller) allocations to each trawl sector that reflect actual retained harvest of cod, there will no longer be as much flexibility in the allocations later in the year. Thus, NMFS would need to determine the amount of cod that is required to harvest each trawl sector's directed fisheries, and allocate that amount as an ICA. Because the trawl fisheries are more unpredictable, and these sectors participate in other fisheries that have a high incidental catch of cod, they have a greater potential for exceeding their allocations. As noted previously, the ICA would need to be set fairly conservatively to account for these factors.

The advantage of this approach to a sector is that if a trawl sector harvests its ICA, that sector's other directed fisheries that catch cod incidentally are not immediately closed. Harvest of a sector's ICA would trigger management actions for that sector only. However, the primary disadvantage to this approach is the potential consequence of exceeding the ABC. For at least 2005 and 2006, the BSAI Pacific cod TAC is set equal to ABC. If one sector harvests its entire cod ICA early in the year, and cod is placed on

prohibited species status for that sector, that sector can continue to fish in its directed fisheries and harvest (and discard) additional cod. There is thus the potential for this component of the fishery to push the overall Pacific cod catch over the ABC. If the overall BSAI Pacific cod harvest approached the OFL, then all sectors' fisheries that catch cod (directed and incidental) would be closed. In effect, this would potentially allow one sector of the fishery to pre-empt all other sectors.

Soft caps managed by cooperatives

A third possible option is to manage the trawl sector allocations under soft caps, but have the sectors manage their own harvests under a cooperative system where possible. This system would operate the same as the soft cap approach discussed above, but without NMFS designating the DFA and ICA. This approach follows the earlier discussion that some sectors are, or are proposed to be, structured under a cooperative system with limited participants. The status of each sector with regard to cooperatives and its ability to manage participants is discussed in an earlier part of this section.

The same advantages and disadvantages generally related to a soft cap system apply to this approach; the difference is that the cooperative is expected to more effectively determine how to apportion between the sector's directed fishery needs and incidental catch needs. However, as stated previously, this approach is likely not feasible for sectors that do not have a cooperative structure (non-AFA CVs). In addition, this approach may not realize any additional benefits in those sectors with cooperatives whose ability to self-manage may be comprised by additional participants that choose not to join the cooperative (non-AFA CPs).

In sum, Part III is intended to describe some of the issues associated with various options for managing the Pacific cod sector allocations and to assist the Council in determining how the trawl sector allocations should be managed. Staff's understanding from previous Council discussions is that the fixed gear sector allocations are to continue to be managed under the current system, and the trawl allocations would be managed under a hard cap. Staff is seeking clarification of this approach at this meeting. The Council could also potentially identify sectors that will manage their allocations themselves through a cooperative structure (with verification by NMFS), and sectors that will continue to be managed by NMFS through the establishment of DFAs and ICAs in the Federal Register.

**Council Motion on BSAI Pacific Cod Allocations
(Updated as of February 12, 2005)**

BSAI Pacific Cod Sector Allocations: Draft Problem Statement

Part 1.) BSAI Pacific Cod Sector Allocations: “The BSAI Pacific cod fishery is fully utilized and has been allocated among gear groups and to sectors within gear groups. The current allocations among trawl, jig, and fixed gear were implemented in 1997 (Amendment 46) and are overdue for review. Harvest patterns have varied significantly among the sectors resulting in annual inseason reallocations of TAC. As a result, the current allocations do not correspond with actual dependency and use by sectors.

Participants in the BSAI Pacific cod fishery who have made significant investments and have a long-term dependence on the resource need stability in the allocations to their sectors. To reduce uncertainty and provide stability, allocations should be adjusted to better reflect historic use by sector. The basis for determining sector allocations will be catch history as well as consideration of socio-economic factors.

As other fisheries in the BSAI and GOA are incrementally rationalized, historical participants in the BSAI Pacific cod fishery may be put at a disadvantage. Each sector in the BSAI Pacific cod fishery currently has different degrees of license requirements and levels of participation. Allocations to the sector level are a necessary step on the path towards comprehensive rationalization. Prompt action is needed to maintain stability in the BSAI Pacific cod fisheries.

Part 2.) Apportionment of BSAI Pacific Cod Sector Allocations between the BS and AI

In the event that the BSAI Pacific cod ABC/TAC is apportioned between the BS and the AI management areas, a protocol needs to be established that would continue to maintain the benefits of sector allocations and minimize competition among gear groups; recognize differences in dependence among gear groups and sectors that fish for Pacific cod in the BS and AI; and ensure that the distribution of harvest remains consistent with biomass distribution and associated harvest strategy.

BSAI Pacific Cod Sector Allocations: Draft Elements and Options

Part I: BSAI Pacific Cod Sector Allocations

A. Allocation to Sectors

- Component 1: Identify and define sectors
- Component 2: Identify TAC to be allocated to sectors
- Component 3: Method for determining catch history
- Component 4: Sector catch history years
- Component 5: Allocation of BSAI Pacific cod TAC to sectors
- Component 6: Rollovers between sectors
- Component 7: CDQ allocation of Pacific cod

B. Apportionment of BSAI PSC to Sectors

- Component 1: Apportionment of trawl halibut PSC to the cod fishery group
- Component 2: Apportionment of the cod trawl fishery group PSC to trawl sectors
- Component 3: Apportionment of cod H&L halibut PSC between catcher processors (CPs) and catcher vessels (CVs)

Part II: Apportionment of BSAI Pacific cod Sector Allocations to BS and AI (if needed)

This part would provide a method to apportion BSAI Pacific cod sector allocations to the BS and AI areas in the event that the BSAI Pacific cod ABC/TAC is apportioned to the BS and AI areas during the annual specifications process.

- Option 1: Sector allocations remain as BSAI (with AI and BS TACs). No specific sector allocations to AI or BS. (*Council discussion paper: option 3*)
- Option 2: BS and AI sector allocations based on equal percentage from BSAI sector allocations. (*Council discussion paper: option 2*)
- Option 3: BS and AI sector allocations based on historic harvest share in AI area with remainder of BSAI allocation to be caught in the BS. Sector's BSAI allocation remains. (*Council discussion paper: option 1*)
- Option 4: BS and AI sector allocations based on historic harvest share in BS area with remainder of BSAI allocation to be caught in the AI. Sector's BSAI allocation remains. (*new, variation of Option 3*)

PART 1: BSAI PACIFIC COD SECTOR ALLOCATIONS

A. Allocation to Sectors

Component 1: Identify and Define Sectors

Identify the sectors for which catch history will be calculated. The Council may choose to allocate to combined sectors in Component 5; however, each sector's catch history will be calculated separately.

1.1 Sectors for which catch history will be calculated.

- 1.1.1 AFA Trawl CPs (AFA 20*)
 - Suboption a: Include catch history of the nine trawl CPs whose claims to catch history have been extinguished by Section 209 of the AFA
 - Suboption b: Exclude catch history of the nine trawl CPs whose claims to catch history have been extinguished by Section 209 of the AFA
- 1.1.2 H&G Trawl CPs (non-AFA Trawl CPs)
- 1.1.3 AFA Trawl CVs
- 1.1.4 Non-AFA Trawl CVs
- 1.1.5 Longline CPs
- 1.1.6 Longline CVs $\geq 60'$
- 1.1.7 Pot CPs
- 1.1.8 Pot CVs $\geq 60'$
- 1.1.9 Fixed Gear CVs (pot and hook-and-line) $< 60'$
- 1.1.10 Jig CVs

*refers to the 20 trawl CP vessels listed in Section 208(e) of American Fisheries Act

Eligibility criteria for non-AFA trawl catcher vessels to be included in the AFA catcher vessel sector for purposes of the cod allocations:

- Option 1. A non-AFA trawl catcher vessel must have made minimum cod landings of 100 mt during the years 1995 – 1997 with a valid LLP.

Component 2: Identify TAC to be allocated to sectors

The BSAI Pacific cod TAC that is to be allocated to sectors is TAC less CDQ. In addition, the annual incidental catch allowance (ICA) for fixed gear would be deducted (off the top) from the aggregate amount of the BSAI Pacific cod TAC allocated to all of the fixed gear sectors combined (status quo).

Component 3: Methodology for Determining Sector Catch History

P-cod is an IRIU species. For purposes of determining catch history, “catch” means retained legal catch (including rollovers). A sector's catch history includes all retained legal catch from both the Federal fishery and parallel fishery in the BSAI (i.e. retained legal catch from the Federal BSAI Pacific cod TAC less CDQ). This includes retained legal catch from both LLP and non-LLP vessels. The analysis will also provide each sector's catch history based on total catch (retained and discarded) where practicable.

For each of the years under consideration in Component 4 (1995-2003), each sector's annual harvest share will be calculated for that individual year as a percentage of the total retained legal catch by all sectors. For each of the sets of catch history years in Component 4, each sector's harvest percentage will be calculated as the sector's average of the annual harvest share.

Component 4: Sector Catch History Years

Component is to include sets of years from which one set of years will be selected for all sectors. Note that the allocations from Amendment 46 (BSAI Pacific Cod Allocations) were implemented in January 1997.

There will be a suboption under each set of years to drop one year. Each sector would drop its worst year (smallest annual harvest share percentage for that sector). This could result in an aggregate percentage greater than 100% for a set of years for all sectors combined. If that is the case, this would be scaled back to 100%.

- 4.1 1995 – 2002
 - 4.1.1 Drop one year
- 4.2 1997 – 2003
 - 4.2.1 Drop one year
- 4.3 1998 – 2002
 - 4.3.1 Drop one year
- 4.4 1999 – 2003
 - 4.4.1 Drop one year
- 4.5 2000 – 2003
 - 4.5.1 Drop one year
- 4.6 The Council can select percentages for cod allocated to each sector that fall within the range of percentages analyzed.

Component 5: Allocation of BSAI TAC to Sectors

- 5.1 **Fixed Gear ICA** (*status quo*): A small amount (approximately 500 mt) of Pacific cod is taken incidentally in BSAI fixed gear directed fisheries for groundfish where Pacific cod is not the target. This amount is determined annually by the NMFS Regional Administrator and is to be deducted from the aggregate amount of BSAI Pacific cod TAC allocated to all the fixed gear sectors combined (*i.e. off the top of fixed gear allocation*).
In the event the annual amount determined necessary for the fixed gear ICA increases significantly, the Council will revisit this issue and consider limiting the ICA amount and/or revising MRAs.
- 5.2 **Allocations to Sectors:** Allocations to sectors are to be based on catch history (Component 4) as well as other considerations (see Problem Statement).

The allocations (whether combined or separate) to the <60' fixed gear CVs and jig CVs (i.e. the 'small boat sectors') shall collectively not exceed:

- 5.2.1 Actual catch history percentage for jig and <60' fixed gear CVs collectively (from the set of years selected for all sectors in Component 4).
- 5.2.2 2.71% (*represents current 2% jig allocation plus 1.4% of 51% fixed gear*)
- 5.2.3 3%
- 5.2.4 4%

Note: The intent of the allocations is to provide stability to the sectors. In all options and suboptions, the <60' fixed gear CV sector will only fish from the direct allocation to that sector, which includes any seasonal rollover of the unused jig allocation.

Component 6: Rollovers between Sectors

Reallocated quota (rollovers) will continue to be hierarchical in nature, flowing from the most precise definition of a sector to the next most inclusive definition before unused Pacific cod is re-allocated to a different gear type, while maintaining management flexibility. The jig allocation will continue to be seasonally apportioned and will rollover on a seasonal basis. For all other sectors, after September 1, managers may reallocate projected unused sector allocations taking into account: a) the intent of rollover hierarchy, and b) the likelihood of a sector receiving a rollover to actually harvest the rollover.

Rollover hierarchy for unused sector allocations (*current regulations adapted to sector splits*)

- 6.1 Projected unused trawl sector allocations must be considered for reallocation to other trawl sectors (AFA CP trawl, non-AFA CP trawl, AFA CV trawl, non-AFA CV trawl) before being reallocated to the fixed gear sectors (hook-and-line CP, hook-and-line CV $\geq 60'$, pot CP, pot CV $\geq 60'$).
- 6.2 Reallocation of TAC from the trawl sectors to fixed gear sectors will be 0.9% to pot CP 4.1% to pot CV $\geq 60'$, and 95% to hook-and-line CP.
- 6.3 Projected unused allocation in the jig sector should rollover to the <60' fixed gear CV sector on a seasonal basis.
- 6.4 Projected unused pot sector allocations (CPs and $\geq 60'$ CVs) must be considered for reallocation to the other pot sector before being reallocated to the hook-and-line CP sector.
- 6.5 Projected unused allocation in the <60' fixed gear CV sector, both pot sectors (CP and $\geq 60'$ CV), and hook-and-line CV $\geq 60'$ should rollover to the hook-and-line CP sector.
- 6.6 Unused seasonal allowances for the trawl, pot, and hook-and-line sectors may be reapportioned to the subsequent seasonal allocation for the respective sectors.

Component 7: CDQ Allocation of BSAI Pacific cod

CDQ allocations for BSAI Pacific cod shall be removed from the TAC prior to the allocation to all other sectors at percentage amounts equal to one of the following options:

- 7.1 7.5% (*status quo*)
- 7.2 10%
- 7.3 15%

B. Apportionment of BSAI PSC to Sectors

Note: The apportionment of trawl PSC to sectors would facilitate cooperative formation, may allow sectors to better manage PSC use, and may prevent preemption by another trawl sector. However, the apportionment of trawl PSC into the cod fishery group and then between cod trawl sectors may prove to be difficult and could restrict management flexibility. The apportionments in this action will also have to work in conjunction with PSC apportionment in BSAI Amendment 80. Due to the complexity, the Council is seeking input on options for these components.

At this time, it may only be necessary to apportion trawl halibut and crab PSC. The amount of herring PSC apportioned to the cod trawl fishery group (27 mt in 2005) may be too small to apportion between all trawl sectors.

The Council recommends under Part B, Components 1 and 2, that the analysis look at the variability of cod catch annually in the trawl fisheries in order to determine how much cod the various trawl sectors need in order to accommodate incidental catch needs in their non-cod target fisheries.

Component 1: Apportionment of trawl halibut and crab PSC to the cod fishery group

The total amount of trawl halibut PSC for the non-CDQ fisheries is 3,400 mt, which is apportioned between Pacific cod, yellowfin sole, rocksole/other flatfish/flathead sole, pollock/Atka mackerel/other. Generally, 1,400 mt is apportioned to the cod trawl fishery group, but this amount and actual use can vary annually. A significant amount of Pacific cod is taken incidentally in other trawl fisheries so the PSC use associated with that Pacific cod harvest would be attributed to a fishery group other than cod trawl. Amendment 80 will also allocate halibut PSC to the H&G trawl sector so that the amount of halibut PSC available to the remaining trawl sectors will be reduced.

(Options to be determined).

Component 2: Apportionment of the cod trawl fishery group halibut and crab PSC to trawl sectors

Option 1: PSC apportioned to the cod trawl sectors will be based on the average bycatch rate of the trawl cod sectors applied to the cod allocation percentages determined for each sector under Part A Component 4.

Component 3: Apportionment of cod hook-and-line halibut PSC between CPs and CVs

The total amount of non-trawl halibut PSC for the non-CDQ fisheries is 833 mt. The 833 mt is normally apportioned between cod hook-and-line sectors and other non-trawl fisheries during the annual specifications process. Generally, 775 mt is apportioned to hook-and-line cod fisheries and 58 mt to other non-trawl.

This component would divide the halibut PSC amount apportioned to hook-and-line cod between hook-and-line CPs and hook-and-line CVs (for CVs $\geq 60'$ and CVs $< 60'$ combined). The apportionment is to be done by one of the following options:

- 3.1 In proportion to the BSAI Pacific cod TAC allocated to the sectors
- 3.2 10 mt for CVs, remainder for CPs
- 3.3 Other *(to be determined)*

Part II: APPORTIONMENT OF BSAI PACIFIC COD SECTOR ALLOCATIONS TO BS AND AI

Note: This part would provide a method to apportion BSAI Pacific cod sector allocations to the BS and AI areas in the event that the BSAI Pacific cod ABC/TAC is apportioned to the BS and AI areas during the specifications process. No apportionment of BSAI PSC between the BS and the AI is under consideration at this time.

Option 1: Sector allocations remain as BSAI (with BS and AI TACs)

- 1.1 No allocation to a sector of a specific percentage of a sub-area. Sectors would have a BSAI allocation (from Part 1, A. Component 5) to fish in either sub-area (BS and AI) if the sub-area is open for directed fishing and TAC is available. (*Council discussion paper: Option 3*).

Option 2: BS and AI sector allocations based on equal percentage from BSAI sector allocations

- 2.1 Allocation to a sector of an equal percentage in both sub-areas. The allocation percentage of BSAI TAC a sector receives (from Part 1, A. Component 5) would result in that same percentage being applied to both the BS and AI sub-areas so that a sector would have the same percentage in both sub-areas. (*Council discussion paper: Option 2*).

Option 3: BS and AI sector allocations based on a sector's historic harvest in the AI with remainder of sector's overall BSAI allocation to be caught in the BS. Sector's BSAI allocation is maintained and used in annual calculation. (*Council discussion paper: Option 1*).

- 3.1 1995 - 2002
 3.2 1997 - 2003
 3.3 1998 - 2002
 3.4 1999 - 2003
 3.5 2000 - 2003
 3.6 2002 - 2003

Table A-1. Overview of BSAI Pacific cod Allocation and Endorsement Amendments

Amendments	Am. 24	Am. 46	Am. 64	Am. 67	Am. 77
Action	Allocation of BSAI P.cod TAC among trawl gear, fixed gear, and jig gear.	Allocation of BSAI P. cod TAC among trawl gear, fixed gear, and jig gear. Allocation between trawl CP and CV.	Allocation of fixed gear BSAI P.cod TAC (51%) among pot gear, longline CPs, longline CVs, and <60' vessels.	LLP Pacific cod endorsement requirements for ?60' fixed gear vessels in the directed BSAI P.cod fishery.	Allocation of fixed gear P.cod TAC (51%) among pot CPs, pot CVs, longline CPs, longline CVs, and <60' vessels.
Allocations	Trawl: 54% Fixed: 44% Jig: 2%	Trawl: 47% Trawl CP (23.5%) Trawl CV (23.5%) Fixed: 51% Jig: 2%	Of fixed gear 51%: longline CPs 80.0% longline CVs 0.3% pot (CP and CV) 18.3% <60' pot/longline 1.4%	Endorsement rqmt (based on participation and landings criteria) for the following sectors: longline CP, longline CV, pot CP and pot CV. Not required for <60' fixed gear vessels.	Of fixed gear 51%: longline CPs 80.0% longline CVs 0.3% pot CPs 3.3% pot CVs 15.0% <60' pot/longline 1.4%
Allocation basis	approximate harvest during 1991 - 1993, with exception of increased jig allocation	industry negotiation: based closely on current harvest percentages of each sector under current halibut PSC limits	based closely on 1995 - 1998 harvests by each sector, with the additional allocation to the <60' vessels.	N/A	Longline CP, longline CV, and pot gear split based closely on 1995-1998 harvests. Pot CP and CV split based on 1998-2001 harvests. Additional allocation to <60' vessels.
Other actions	Authorized three seasons for fixed gear sector. Reallocations: 1) Authorized NMFS to reallocate unused P.cod from trawl to fixed gear and vice versa. 2) Reallocation of unused jig allocation to other gear sectors on or about Sept. 1.	Authorized three seasons for fixed gear sectors. Reallocations: 1) Authorized NMFS to reallocate unused P.cod within gear types and then between trawl and fixed gear. 2) Reallocation of unused jig allocation to fixed gear sectors specified for Sept. 15.	Authorized three seasons for fixed gear sectors. Reallocations: 1) Unused longline CV and <60' vessel allocation will be reallocated to longline CP sector. 2) Reallocation of unused jig allocation to fixed gear sectors specified for Sept. 15. 3) Unused trawl or jig allocations are reallocated: 95% to longline CPs and 5% to pot gear.	N/A	Authorized three seasons for fixed gear sectors. Reallocations: 1) Unused longline CV and <60' vessel allocation will be reallocated to longline CP sector. 2) Established 3 seasons for jig gear allocation. Any unused portion of a seasonal allocation for jig gear will be reallocated to <60' CVs. 3) Unused trawl allocations are reallocated: 95% to longline CPs; 0.9% to pot CPs; 4.1% to pot CVs. 4) Unused pot CP or CV quota will be reallocated to the other pot sector before it is reallocated to other fixed gear sectors.
Date effective	Feb. 28, 1994	Jan. 1, 1997	Sept. 1, 2000	Jan. 1, 2003	Jan. 1, 2004
Sunset date	Dec. 31, 1996	none	Dec. 31, 2003	none	none

Note: The fixed gear allocations established under Am. 64 and Am. 77 were determined excluding quota reallocated from other gear (trawl or jig) sectors. Including reallocated quota would have reduced the percentage of catch harvested in 1995 - 1999 by the pot sector by about 0.5 percentage points (487 mt using the 2003 TAC) and increased the percentage of catch harvested by the longline catcher processor sector by the same amount.

TABLE A-2. 2005 AND 2006 GEAR SHARES AND SEASONAL ALLOWANCES OF THE BSAI PACIFIC COD ITAC (amounts are in mt)

Gear Sector	Percent	2005 Share of gear sector total	2005 Subtotal percentages for gear sectors	2005 Share of gear sector total	2005 Seasonal apportionment ¹		2006 Share of gear sector total	2006 Subtotal percentages for gear sectors	2006 Share of gear sector total	2006 Seasonal apportionment ¹	
					Date	Amount				Date	Amount
Total hook-and-line/pot gear	51	97,181	.....	.....	.....	.....	91,991	.....	.....	.....	.....
Hook-and-line/pot ICA	.....	.....	.....	500	.....	.....	.....	.....	500	.....	.....
Hook-and-line/pot sub-total	.....	96,681	.....	.....	.....	.....	91,491	.....	.....	.....	.....
Hook-and-line C/P	.....	.....	80	77,344	Jan 1-Jun 10 Jun 10-Dec 31	46,407 30,938	.....	80	73,193	Jan 1-Jun 10 Jun 10-Dec 31	43,916 29,277
Hook-and-line CV	.....	.....	0.3	290	Jan 1-Jun 10 Jun 10-Dec 31	174 116	.....	0.3	274	Jan 1-Jun 10 Jun 10-Dec 31	165 110
Pot C/P	.....	.....	3.3	3,190	Jan 1-Jun 10 Sept 1-Dec 31	1,914 1,276	.....	3.3	3,019	Jan 1-Jun 10 Sept 1-Dec 31	1,812 1,208
Pot CV	.....	.....	15	14,502	Jan 1-Jun 10 Sept 1-Dec 31	8,701 5,801	.....	15	13,724	Jan 1-Jun 10 Sept 1-Dec 31	8,234 5,489
CV < 60 feet LOA using Hook-and-line or Pot gear	.....	.....	1.4	1,354	.....	.....	.....	1.4	1,281	.....	.....
Total Trawl Gear	47	89,559	.....	.....	.....	.....	84,776	.....	.....	.....	.....
Trawl CV	.....	.....	50	44,779	Jan 20-Apr 1 Apr 1-Jun 10 Jun 10-Nov 1	31,345 4,478 8,956	.....	50	42,388	Jan 20-Apr 1 Apr 1-Jun 10 Jun 10-Nov 1	29,672 4,239 8,478
Trawl CP	.....	.....	50	44,779	Jan 20-Apr 1 Apr 1-Jun 10 Jun 10-Nov 1	22,390 13,434 8,956	.....	50	42,388	Jan 20-Apr 1 Apr 1-Jun 10 Jun 10-Nov 1	21,194 12,716 8,478
Jig	2	3,811	.....	.....	Jan 1-Apr 30 Apr 30-Aug 31 Aug 31-Dec 31	1,524 762 1,524	3,608	.....	.....	Jan 1-Apr 30 Apr 30-Aug 31 Aug 31-Dec 31	1,443 722 1,443
Total	100	190,550	.....	.....	.....	.....	180,375	.....	.....	.....	.....

¹ For most non-trawl gear the first season is allocated 60 percent of the ITAC and the second season is allocated 40 percent of the ITAC. For jig gear, the first season and third seasons are each allocated 40 percent of the ITAC and the second season is allocated 20 percent of the ITAC. No seasonal harvest constraints are imposed for the Pacific cod fishery by catcher vessels less than 60 feet (18.3 m) LOA using hook-and-line or pot gear. For trawl gear, the first season is allocated 60 percent of the ITAC and the second and third seasons are each allocated 20 percent of the ITAC. The trawl catcher vessels' allocation is further allocated as 70 percent in the first season, 10 percent in the second season and 20 percent in the third season. The trawl catcher/processors' allocation is allocated 50 percent in the first season, 30 percent in the second season and 20 percent in the third season. Any unused portion of a seasonal Pacific cod allowance will be reapportioned to the next seasonal allowance.

TABLE A-3. 2005 AND 2006 PROHIBITED SPECIES BYCATCH ALLOWANCES FOR THE BSAI TRAWL AND NON-TRAWL FISHERIES

Trawl Fisheries	Prohibited species and zone					
	Halibut mortality (mt) BSAI	Herring (mt) BSAI	Red King Crab (animals) Zone 1 ¹	<u>C. opilio</u> (animals) COBLZ ¹	<u>C. bairdi</u> (animals)	
					Zone 1 ¹	Zone 2 ¹
Yellowfin sole	886	183	33,843	3,101,915	340,844	1,788,459
January 20 - April 1	262	.....	.....	.....	.....	.....
April 1 - May 21	195	.....	.....	.....	.....	.....
May 21 - July 5	49	.....	.....	.....	.....	.....
July 5 - December 31	380	.....	.....	.....	.....	.....
Rock sole/other flat/flathead sole ²	779	27	121,413	1,082,528	365,320	596,154
January 20 - April 1	448	.....	.....	.....	.....	.....
April 1 - July 5	164	.....	.....	.....	.....	.....
July 5 - December 31	167	.....	.....	.....	.....	.....
Turbot/arrowtooth/sablefish ³	.....	12	.....	44,946	.....	.....
Rockfish	.....	.....	.....	.....	.....	.....
July 5 - December 31	69	10	.....	44,945	.....	10,988
Pacific cod	1,434	27	26,563	139,331	183,112	324,176
Midwater trawl pollock	.....	1,562	.....	.....	.....	.....
Pollock/Atka mackerel/other ⁴	232	192	406	80,903	17,224	27,473
Red King Crab Savings Subarea ⁶	.....	.....	.....	.....	.....	.....
(non-pelagic trawl)	.....	.....	42,495	.....	.....	.....
Total trawl PSC	3,400	2,012	182,225	4,494,569	906,500	2,747,250
Non-trawl Fisheries						
Pacific cod - Total	775					
January 1 - June 10	320					
June 10 - August 15	0					
August 15 - December 31	455					
Other non-trawl - Total	58					
May 1 - December 31	58					
Groundfish pot and jig	exempt					
Sablefish hook-and-line	exempt					
Total non-trawl PSC	833					
PSQ reserve ⁵	342	.....	14,775	364,424	73,500	222,750
PSC grand total	4,575	2,012	197,000	4,858,993	980,000	2,970,000

¹ Refer to § 679.2 for definitions of areas.

² "Other flatfish" for PSC monitoring includes all flatfish species, except for halibut (a prohibited species), Greenland turbot, rock sole, yellowfin sole and arrowtooth flounder.

³ Greenland turbot, arrowtooth flounder, and sablefish fishery category.

⁴ Pollock other than pelagic trawl pollock, Atka mackerel, and "other species" fishery category.

⁵ With the exception of herring, 7.5 percent of each PSC limit is allocated to the CDQ program as PSQ reserve. The PSQ reserve is not allocated by fishery, gear or season.

⁶ In December 2004, the Council recommended that red king crab bycatch for trawl fisheries within the RKCSS be limited to 35 percent of the total allocation to the rock sole/flathead sole/"other flatfish" fishery category (see § 679.21(e)(3)(ii)(B)).