

Regulatory Impact Review/ Initial Regulatory Flexibility Analysis

**For a Proposed Regulatory Amendment Affecting the GOA
Pacific Cod and Pollock Sideboard Limits for the AFA
Catcher Vessel Fleet**

Draft

Prepared for the

North Pacific Fishery Management Council

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Executive Summary

This document contains the Regulatory Impact Review (RIR) and Initial Regulatory Flexibility Analysis (IRFA) for a proposed amendment to regulations that govern the Pacific cod and pollock fisheries in the Gulf of Alaska (GOA) Federal waters. The amendment would change the GOA Pacific cod and pollock sideboard limits for the AFA catcher vessel (CV) fleet.

Statement of the Problem and Management Objectives

The sector directly affected by the proposed action consists of catcher vessels that are permitted under AFA and are not exempt from GOA groundfish catcher vessel sideboard directed fishing closures. The objective of the options under consideration is to reduce the impacts to non-AFA fishermen resulting from participation by non-exempt AFA catcher vessels in directed fisheries for GOA Pacific cod and pollock.

Based on Council discussions staff developed the following Purpose and Need Statement:

Since the establishment of GOA groundfish sideboard limits for non-exempt AFA catcher vessels by the American Fisheries Act of 1998 (AFA), changes in both GOA and BSAI fisheries warrant re-examination of these sideboard limits. The majority of the current sideboard limits for pollock and Pacific cod have gone unharvested by the non-exempt AFA catcher vessel sector in recent years, while during that time other vessels have increased their dependency on these fisheries in the GOA. On the other hand, given changes in the BSAI fisheries, including significant reductions in the BSAI pollock TAC in 2008, the potential exists for increased effort in GOA pollock and Pacific cod fisheries by non-exempt AFA catcher vessels, thereby reducing harvest opportunities for vessels that have developed an increased dependency on these relatively small, fully subscribed fisheries.

Alternatives Considered

Alternative 1: No action

Alternative 1 maintains the existing regulatory measures for GOA Pacific cod and pollock sideboard limits for non-exempt AFA catcher vessels. These sideboard limits are based on the retained catch of non-exempt AFA catcher vessels of each species from 1995 through 1997 divided by the TAC for that species over the same period. The ratio of 1995–1997 nonexempt AFA CV catch to 1995–1997 TAC is multiplied by the TAC available to catcher vessels in the year or season in which the harvest limit will be in effect.

Alternative 2: Vessel catch history consists of the years 2005 through 2007

Under Alternative 2, the GOA Pacific cod and pollock sideboard limits for listed non-exempt AFA catcher vessels would be based on the retained catch of non-exempt AFA catcher vessels of each species from 2005 through 2007 divided by the TAC for that species over the same period.

Alternative 3: Vessel catch history consists of the years 2001 through 2005

Under Alternative 3, the GOA Pacific cod and pollock sideboard limits for listed non-exempt AFA catcher vessels would be based on the retained catch of non-exempt AFA catcher vessels of each species from 2001 through 2005 divided by the TAC for that species over the same period.

Alternative 4: Prohibit directed fishing

Under Alternative 4, directed fishing by listed non-exempt AFA catcher vessels for GOA Pacific cod and pollock would be prohibited, where the term “directed fishing” means any fishing activity that

results in the retention of an amount of a species or species group on board a vessel that is greater than the maximum retainable amount for that species or species group as calculated under §679.20.

Alternatives Considered but Eliminated From Further Review

The alternative of removing GOA sideboard limits was considered but eliminated from further review for the following reasons:

- 1) The alternative does not meet the stated purpose and need.
- 2) The alternative would not meet the requirement of Sec. 211(c)(1) of the AFA

Analysis of the Alternatives

The baseline conditions under Alternative 1 were calculated by applying the status quo sideboard percentages to the non-exempt AFA CV GOA pollock and Pacific cod catch reported in the analysis data on a season by season and year by year basis for the 2001-2007 period. The projected non-exempt AFA CV GOA pollock and Pacific cod sideboard harvest by management area was calculated for the action alternatives as if the action alternatives had been in effect during the 2001-2007 period instead of Alternative 1. Table ES-1 compares the non-exempt AFA CV GOA pollock sideboards and sideboard harvest across the alternatives, while Table ES-2 compares the non-exempt AFA CV GOA Pacific cod sideboards and sideboard harvest across the alternatives.

Table ES - 1. Summary of Non-Exempt AFA CV GOA Pollock Sideboard and Harvest by Management Area

	Management Area ¹		
	610	620	630
Alternative 1			
Sideboard Amount (% of TAC)	61.123	14.271	24.375
Sideboard Amount (mt)	106,037	26,076	27,790
Non-Exempt AFA CV Catch (mt)	31,612	18,080	9,867
Alternative 2			
Sideboard Amount (% of TAC)	13.708	10.206	8.830
Sideboard Amount (mt)	23,780	18,648	10,067
Projected Non-Exempt AFA CV Catch (mt)	22,171	14,862	8,159
Harvest Reductions to Comply with Sideboard (mt)	9,441	3,218	1,708
Harvest Reductions to Comply with Sideboard (Percent of Catch)	29.9	17.8	17.3
Alternative 3			
Sideboard Amount (% of TAC)	20.997	10.197	9.126
Sideboard Amount (mt)	36,426	18,633	10,404
Projected Non-Exempt AFA CV Catch (mt)	29,230	14,853	8,260
Harvest Reductions to Comply with Sideboard (mt)	2,382	3,226	1,607
Harvest Reductions to Comply with Sideboard (Percent of Catch)	7.5	17.8	16.3
Alternative 4			
No harvest in directed pollock fishery			

¹ NOAA Fisheries policy regarding the protection of confidential data precludes the public disclosure of information on the pollock harvest by non-exempt AFA catcher vessels in Area 640.

Table ES - 2. Summary of Non-Exempt AFA CV Pacific Cod Sideboard and Harvest by Management Area

	Management Area	
	Western Gulf	Central Gulf
Alternative 1		
Sideboard Amount (% of TAC)	14.230	7.220
Sideboard Amount (mt)	15,820	9,676
Non-Exempt AFA CV Catch (mt)	774	3,936
Alternative 2		
Sideboard Amount (% of TAC)	0.554	2.191
Sideboard Amount (mt)	616	2,936
Projected Non-Exempt AFA CV Catch (mt)	405	2,320
Harvest Reductions to Comply with Sideboard (mt)	369	1,616
Harvest Reductions to Comply with Sideboard (Percent of Catch)	47.7	41.1
Alternative 3		
Sideboard Amount (% of TAC)	0.734	2.617
Sideboard Amount (mt)	816	3,508
Projected Non-Exempt AFA CV Catch (mt)	491	2,630
Harvest Reductions to Comply with Sideboard (mt)	283	1,306
Harvest Reductions to Comply with Sideboard (Percent of Catch)	36.6	33.2
Alternative 4		
No harvest in directed Pacific cod fishery		

Net Benefits to the Nation

Under the status quo (Alternative 1), the existing regulatory measures for GOA Pacific cod and pollock sideboard limits for non-exempt AFA catcher vessels would be maintained. Under that alternative, it is possible that the non-exempt AFA catcher vessel sector would increase their harvest of GOA pollock and Pacific cod at some future time. This increase could contribute to losses of production efficiency due to an increased race for fish. Costs could rise slightly, if other participants in the GOA pollock and Pacific cod fisheries, including exempt AFA vessels and non-AFA vessels, perceive a need to increase rates of effort to maintain their historical share of the overall catch. The increase in effort could contribute to more aggressive fishing practices (e.g., plugging nets, less care for catch brought on board) that lower product quality. The extent of these possible effects is very difficult to predict and depends on several factors, including stock sizes and markets.

Alternatives 2 and 3 would allow non-exempt AFA catcher vessels to continue to conduct directed fisheries for GOA pollock and Pacific cod, though at reduced levels. More restrictive sideboard options would negatively affect entities in the non-exempt AFA CV fleet, relative to the No-Action Alternative, although it is uncertain whether such differences would be significant for the fleet as a whole. For non-exempt AFA catcher vessels which rely to a great extent on GOA pollock and Pacific cod fisheries, reducing the amount of the sideboard limit for pollock and Pacific cod disproportionately burdens those operators, who would now have to compete with other vessels for a relatively smaller quota apportionment. This analysis of the likely economic outcomes of the

alternatives indicates that Alternative 2 would have an overall greater negative effect on entities in the non-exempt AFA CV fleet than would Alternative 3. Alternative 4 would deny non-exempt AFA catcher vessels access to GOA Pacific cod and pollock fisheries altogether. In the case of non-exempt AFA catcher vessels which have significant reliance on these fisheries, losing their ability to fish GOA Pacific cod and pollock at all would be expected to have a significant, negative impact on gross revenues.

Differences among the alternatives for effecting sideboards have the potential for distributional gains and losses across sectors. Given the open access nature of the GOA pollock and Pacific cod fisheries and the capacity that exists in other fleets, any harvest forgone by the non-exempt AFA CV fleet would almost certainly be harvested by members of the exempt AFA and non-AFA fleets. Consequently, the nature of the sideboard measures essentially represents a tradeoff between AFA and non-AFA vessels—reductions in the level of the sideboard limits for non-exempt AFA catcher vessels under Alternatives 2, 3 and 4 would be offset, as the exempt AFA and non-AFA sectors would realize that amount of gain in the amount of harvest available to them. While relative operating costs and other factors may affect the “net” results of such trade-offs, the net benefits to the Nation would be expected to tend towards neutral. Losses experienced by the non-exempt AFA CV fleet would be offset by the gains experienced by the exempt AFA and non-AFA fleets.

Effects on Small Entities

No small entities would be directly regulated by the proposed action; therefore, no small entities would be affected by the proposed action. The RFA requires a consideration of affiliations between entities for the purpose of assessing if an entity is small. The fishery cooperative formed under Section 1 of the Fisherman’s Collective Marketing Act 1934 (15 U.S.C. 521) for the purpose of cooperatively managing directed fishing for BSAI pollock are an important type of affiliation. A list of AFA catcher vessel permits compiled by NOAA Fisheries Alaska Regional Office (accessed at <http://www.fakr.noaa.gov/ram/afa.htm> on March 4, 2008) indicates that there were 95 non-exempt AFA catcher vessels in 2008. All of these vessels were members of BSAI pollock fishery cooperatives and therefore “affiliated” for RFA purposes with the other operations in their respective co-op fleets. This affiliation would make all of these vessels large entities for RFA purposes, as each AFA fishery cooperative, and its collective membership, is expected to have combined gross annual revenues in excess of \$4 million

1 Introduction

This document contains the Regulatory Impact Review (RIR) and Initial Regulatory Flexibility Analysis (IRFA) for a proposed amendment to regulations that govern the Pacific cod and pollock fisheries in the Gulf of Alaska (GOA) Federal waters. The amendment would change the GOA Pacific cod and pollock sideboard limits for the AFA catcher vessel (CV) fleet.

1.1 Requirements of a Regulatory Impact Review

A RIR is required under Presidential Executive Order (EO) 12866 (58 FR 51735; October 4, 1993). The requirements for all regulatory actions specified in EO 12866 are summarized in the following statement from the order: “In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nonetheless essential to consider. Further, in choosing among alternative regulatory approaches agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.”

EO 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be “significant.” A significant regulatory action is one that is likely to:

- Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, local or tribal governments or communities;
- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in this Executive Order.

According to *Guidelines for Economic Analysis of Fishery Management Actions* (NOAA Fisheries 2000), the key elements of the RIR include—

- A statement of the problem;
- A description of the management objectives;
- A description of the fishery;
- A description of each selected alternative, including the “no action” alternative; and
- An economic analysis of the expected effects of each selected alternative relative to the baseline.

1.2 Requirements of an Initial Regulatory Flexibility Analysis

The Regulatory Flexibility Act (RFA), first enacted in 1980, and codified at 5 U.S.C. 601, *et. seq.*, was designed to place the burden on the government to review all regulations to ensure that, while accomplishing their intended purposes, they do not unduly inhibit the ability of small entities to compete. The RFA recognizes that the size of a business, unit of government, or nonprofit organization frequently has a bearing on its ability to comply with a Federal regulation. Major goals of the RFA are (1) to increase agency awareness and understanding of the impact of their regulations

on small business; (2) to require that agencies communicate and explain their findings to the public; and (3) to encourage agencies to use flexibility and to provide regulatory relief to small entities.

The RFA emphasizes predicting significant adverse economic impacts on small entities as a group distinct from other entities and on the consideration of alternatives that may minimize those impacts, while still achieving the stated objective of the action. When an agency publishes a proposed rule, it must either (1) “certify” that the action would not have a significant adverse economic effect on a substantial number of small entities, and support such a certification declaration with a “factual basis” demonstrating this outcome, or (2) if such a certification cannot be supported by a factual basis, prepare and make available for public review, an Initial Regulatory Flexibility Analysis (IRFA) that describes the impact of the proposed rule on small entities.

Based upon a preliminary evaluation of the actions analyzed in this document, it appears that “certification” would not be appropriate. Therefore, an IRFA has been prepared for each action.

The IRFA must contain:

- A description of the reasons why action by the agency is being considered;
- A succinct statement of the objectives of, and the legal basis for, the proposed rule;
- A description of, and where feasible, an estimate of the number of small entities to which the proposed rule will apply (including a profile of the industry, divided into industry segments, if appropriate);
- A description of the projected reporting, recordkeeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;
- An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule;
- A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) and any other applicable statutes, and that would minimize any significant adverse economic impact of the proposed rule on small entities. Consistent with the stated objectives of applicable statutes, the analysis shall discuss significant alternatives, such as:
 - a. The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;
 - b. The clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities;
 - c. The use of performance rather than design standards;
 - d. An exemption from coverage of the rule, or any part thereof, for such small entities.

The “universe” of the entities to be considered in an IRFA generally includes only those small entities that can reasonably be expected to be directly regulated by the alternatives under consideration. If the effects of the rule fall primarily on a distinct segment of the industry, or portion thereof, (e.g., user group, gear type, geographic area), that segment would be considered the universe for purposes of this analysis.

In preparing an IRFA, an agency may provide either a quantifiable or numerical description of the effects of a proposed rule (and alternatives to the proposed rule), or more general, descriptive statements if quantification is not practicable or reliable.

1.2.1 Definition of small entities

The RFA recognizes and defines three kinds of small entities: (1) small businesses; (2) small non-profit organizations; and (3) and small government jurisdictions.

1.2.1.1 Small business

Section 601(3) of the RFA defines a “small business” as having the same meaning as a “small business concern,” which is defined under Section 3 of the Small Business Act. A “small business” or “small business concern” includes any firm that is independently owned and operated and does not dominate in its field of operation. The U.S. Small Business Administration (SBA) has established size criteria for all major industry sectors in the United States, including fish harvesting and fish processing businesses. A business involved in fish harvesting is a small business if it is independently owned and operated and not dominant in its field of operation (including its affiliates), and if it has combined annual receipts not in excess of \$4 million for all its affiliated operations worldwide. A seafood processor is a small business if it is independently owned and operated, not dominant in its field of operation (including its affiliates) and employs 500 or fewer persons, on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. A business involved in both the harvesting and processing of seafood products is a small business if it meets the \$4 million criterion for fish harvesting operations. A wholesale business servicing the fishing industry is a small business if it employs 100 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide.

The SBA has established “principles of affiliation” to determine whether a business concern is “independently owned and operated.” In general, business concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party controls or has the power to control both. The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists. Individuals or firms that have identical or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, are treated as one party with such interests aggregated when measuring the size of the concern in question. The SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining the concern’s size. However, business concerns owned and controlled by Indian Tribes, Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601), Native Hawaiian Organizations, or Community Development Corporations authorized by 42 U.S.C. 9805 are not considered affiliates of such entities, or with other concerns owned by these entities solely because of their common ownership.

Affiliation may be based on stock ownership when, (1) a person is an affiliate of a concern if the person owns or controls, or has the power to control 50 percent or more of its voting stock, or a block of stock which affords control because it is large compared to other outstanding blocks of stock, or (2) if two or more persons each owns, controls or has the power to control less than 50 percent of the voting stock of a concern, with minority holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern. Affiliation may also be based on common management or joint venture arrangements. Affiliation arises where one or more officers, directors, or general partners, controls the board of directors and/or the management of another concern. Parties to a joint venture also may be affiliates. A contractor and subcontractor are treated as a joint venture if the ostensible subcontractor will perform primary and vital requirements of a contract or if the prime contractor is unusually reliant upon the ostensible subcontractor. All requirements of the contract are

considered in reviewing such relationship, including contract management, technical responsibilities, and the percentage of subcontracted work.

1.2.1.2 Small organization

A small organization is any not-for-profit enterprise that is independently owned and operated and not dominant in its field (for example, private hospitals and educational institutions).

1.2.1.3 Small governmental jurisdiction

Small governmental jurisdictions are governments of cities, counties, towns, townships, villages, school districts, or special districts with a population of less than 50,000.

2 Regulatory Impact Review

2.1 Statement of the Problem and Management Objectives

The sector directly affected by the proposed action consists of catcher vessels that are permitted under AFA and are not exempt from GOA groundfish catcher vessel sideboard directed fishing closures. The objective of the options under consideration is to reduce the impacts to non-AFA fishermen resulting from participation by non-exempt AFA catcher vessels in directed fisheries for GOA Pacific cod and pollock.

Based on Council discussions staff developed the following Purpose and Need Statement:

Since the establishment of GOA groundfish sideboard limits for non-exempt AFA catcher vessels by the American Fisheries Act of 1998 (AFA), changes in both GOA and BSAI fisheries warrant re-examination of these sideboard limits. The majority of the current sideboard limits for pollock and Pacific cod have gone unharvested by the non-exempt AFA catcher vessel sector in recent years, while during that time other vessels have increased their dependency on these fisheries in the GOA. On the other hand, given changes in the BSAI fisheries, including significant reductions in the BSAI pollock TAC in 2008, the potential exists for increased effort in GOA pollock and Pacific cod fisheries by non-exempt AFA catcher vessels, thereby reducing harvest opportunities for vessels that have developed an increased dependency on these relatively small, fully subscribed fisheries.

2.2 Background

2.2.1 Regulatory background

This section provides a brief ‘primer’ on the GOA groundfish sideboard limits for AFA catcher vessels and other relevant regulations, in order to provide the necessary regulatory context for the proposed action. Paragraph 211(a) of the AFA mandates that the “North Pacific Council shall recommend for approval by the Secretary such conservation and management measures as it determines necessary to protect other fisheries under its jurisdiction and the participants in those fisheries, including processors, from adverse impacts caused by this Act or fishery cooperatives in the directed pollock fishery.” With specific reference to catcher vessels, paragraph 211(c)(1)(A) of the AFA required the NPFMC to recommend for approval by the Secretary conservation and management measures to prevent listed AFA catcher vessels from exceeding in the aggregate the traditional harvest levels of such vessels in other fisheries under the authority of the NPFMC as a result of fishery cooperatives in the directed pollock fishery.

The Council met the requirement by taking final action on a comprehensive suite of sideboard measures, including catcher vessel sideboard limits for GOA groundfish species, at its June 1999 meeting and forwarding those recommendations to NOAA Fisheries. An emergency interim rule containing the Council’s recommendations was published on January 28, 2000 (65 FR 4520). This rule was superseded by the final rule to implement Amendments 61/61/13/8, effective on December 30, 2002 (67 FR 79692).

The catcher vessel harvesting sideboards apply to all AFA catcher vessels participating in all GOA groundfish fisheries except vessels qualifying for sideboard exemptions. AFA catcher vessels less than 125 ft (38.1 m) LOA that are determined by NOAA Fisheries to have harvested less than 5,100 mt of BSAI pollock and to have made 40 or more landings of GOA groundfish from 1995 through 1997 are exempt from GOA groundfish catcher vessel sideboard directed fishing closures. The catch histories of the exempt vessels are not counted towards the sideboard amounts for non-exempt vessels.

The AFA catcher vessel groundfish sideboard limits in the GOA are based on the retained catch of non-exempt AFA catcher vessels of each sideboard species from 1995 through 1997 divided by the TAC for that species over the same period. The ratio of the 1995–1997 non-exempt AFA catcher vessel catch to the 1995–1997 TAC is multiplied by the TAC available to catcher vessels in the year or season in which the harvest limit will be in effect. The TAC is divided evenly among seasons in those management areas in which the TAC is apportioned on a seasonal basis. Table 1 shows the GOA sideboard ratio for the AFA trawl catcher vessel sector, 2008 TAC and the 2008 sideboard amounts for pollock and Pacific cod.

Table 1. Final 2008 GOA Non-Exempt AFA CV Groundfish Harvest Sideboard Limitations for Pollock and Pacific Cod

Species	Apportionments by season	Area/ component	Ratio of 1995–1997 non-exempt AFA CV catch to 1995–1997 TAC	2008 TAC (mt)	2008 non-exempt AFA catcher vessel sideboard (mt)
Pollock	A Season, January 20–March 10	610 (Shumagin)	0.6112	3,322	2,030
		620 (Chirikof)	0.1427	6,215	887
		630 (Kodiak)	0.2438	3,069	748
	B Season, March 10–May 31	610 (Shumagin)	0.6112	3,321	2,030
		620 (Chirikof)	0.1427	7,576	1,081
		630 (Kodiak)	0.2438	1,709	417
	C Season, August 25–October 1	610 (Shumagin)	0.6112	5,480	3,349
		620 (Chirikof)	0.1427	2,695	385
		630 (Kodiak)	0.2438	4,431	1,080
	D Season, October 1–November 1	610 (Shumagin)	0.6112	5,479	3,349
		620 (Chirikof)	0.1427	2,695	385
		630 (Kodiak)	0.2438	4,431	1,080
Annual	640 (West Yakutat)	0.3499	1,517	531	
	650 (Southeast Outside)	0.3499	8,240	2,883	
Pacific cod	A Season 1, January 1–June 10	610 (WG) inshore	0.1423	10,502	1,494
		610 (WG) offshore	0.1026	1,167	120
		620 (CG) inshore	0.0722	15,350	1,108
	B Season 2, September 1–December 31	620 (CG) offshore	0.0721	1,706	123
		610 (WG) inshore	0.1423	7,002	996
		610 (WG) offshore	0.1026	778	80
		620 (CG) inshore	0.0722	10,233	739
	Annual	620 (CG) offshore	0.0721	1,137	82
		E inshore	0.0079	2,155	17
		E offshore	0.0078	239	2

NOAA Fisheries does not allocate sideboard limits among the fishery cooperatives formed under the AFA for each of the three BSAI processing sectors (inshore, offshore and mothership). Rather, the catcher vessel sideboard cap for each sideboard species is made available to all AFA catcher vessels

in all sectors on a seasonal basis at the beginning of the year. After NOAA Fisheries sets the cap, the cooperatives divide it among themselves and each cooperative determines how their portion of the cap is divided among member vessels. Because the three separate catcher vessel sectors share the same sideboard caps, an inter-cooperative agreement was implemented to divide the caps among cooperatives and set penalties for exceeding the cap.

The pollock and Pacific cod portions of the sideboards are apportioned seasonally based on the percentage of the overall pollock and Pacific cod TAC allocated to each quarter. However, any unharvested portion of a seasonal sideboard is rolled over to the following season within the same year. Consequently, dividing the caps by quarter does not restrict the harvest to the traditional times of year that they have occurred in the past.

NOAA Fisheries closes directed fisheries to AFA catcher vessels when sideboard amounts are inadequate to support a directed fishery. The closures are timed so that adequate amounts of the species are available for bycatch needs in other directed fisheries. This is done to help ensure that sideboard caps are not exceeded. NMFS will only open directed fishing for a species when adequate sideboard amounts exist at the start of the fishing year to cover both the bycatch needs of that species in other fisheries and the directed fishery harvests. As Table 2 shows, there are a number of GOA groundfish fisheries closed for the AFA catcher vessel sector during the 2008 and 2009 season due to small sideboard limits.

Table 2. 2008 and 2009 Non-Exempt AFA CV Sideboard Directed Fishing Closures for All Gear Types in the GOA

Species	Regulatory area/district	Amount (mt)
Pacific cod	Eastern	17 (inshore) 2 (offshore)
Deep-water flatfish	Western	0
Rex sole	Western	1
Flathead sole	Eastern and Western	19 and 7 (2008) 20 and 70 (2009)
Arrowtooth flounder	Eastern and Western	17 and 10
Northern rockfish	Western	1
Pelagic shelf rockfish	Entire GOA	0(W), 0(C), 4(E)
Demersal shelf rockfish	Southeast Outside District	1

Although not a sideboard specifically associated with the AFA, there are stand down requirements for trawl catcher vessels that fish in both the BSAI and GOA (§679.23(h)) that affect AFA catcher vessels. These stand down requirements are intended to prevent unexpected shifts of fishing effort between BSAI and GOA fisheries that can lead to overharvests of total allowable catch in the Western and Central regulatory areas of the GOA. A trawl catcher vessels operating in the BSAI while pollock or Pacific cod are open for directed fishing is prohibited from deploying trawl gear in the Western and Central GOA for three days after the date of landing or transferring all of the vessel's BSAI groundfish. An exception applies to directed fishing for Pacific cod in the GOA for processing by the offshore sector. In a similar fashion, a trawl catcher vessel operating in the Western GOA area while pollock or inshore Pacific cod is open for directed fishing in the Western GOA is restricted from using its trawl gear in the BSAI for three days after the date of landing or transferring all of its Western GOA groundfish. Finally, a trawl catcher vessel operating in the Central GOA area while

pollock or inshore Pacific cod is open to directed fishing is required to stand down for two days after landing or transferring its Central GOA groundfish before operating in the BSAI.

In addition to stand down requirements there are exclusive fishing seasons for trawl catcher vessels that fish in both the BSAI and GOA that affect AFA catcher vessels (§679.23(h)). These measures were implemented by emergency interim rule on January 25, 2000 (65 FR 3892) to address competitive interactions between the groundfish fishery and Steller sea lions. As shown in Table 3, catcher vessels fishing in one season in the GOA or BSAI are prohibited from fishing in the alternative management area until the following season. This prohibition limits the concentration of fishing effort in one area and reduces the potential for localized depletion of Steller sea lion prey. Vessels less than 125 ft (38.1 m) LOA are exempt from this restriction when fishing east of 157° 00' W long.

Table 3. CV Exclusive Fishing Seasons

If you own or operate a catcher vessel and engage in directed fishing for pollock in the	During the	Then you are prohibited from subsequently engaging in directed fishing for pollock with that catcher vessel in the
BSAI	A season	GOA until the following C season
	B season	GOA until the A season of the next year
GOA	A season	BSAI until the following B season
	B season	BSAI until the following B season
	C season	BSAI until the A season of the following year
	D season	BSAI until the A season of the following year

Finally, AFA catcher vessels are affected by trip limits for pollock that were implemented as part of the package of sea lion mitigation measures adopted in 1999 to allow the fishery to continue in the GOA (64 FR 3441). A catcher vessel fishing for groundfish in the GOA will be prohibited from retaining on board more than 300,000 lb (136 mt) of unprocessed pollock harvested in the GOA any time during a trip (§679.7(b)(2)). This trip limit does not exempt vessels from regulations that require 100 percent retention of pollock when directed fishing for pollock is open. In addition, §679.7(b)(3) prohibits vessels from operating as pollock tenders in the GOA east of 157° 00' W long to prevent the large scale use of tender vessels to avoid the trip limit restriction. Vessels operating as tenders in the GOA west of 157° 00' W long are prohibited from retaining on board more than 600,000 lb (272 mt) of unprocessed pollock or the equivalent of two fishing trips. Tendering west of 157° 00' W long is allowed because smaller vessels delivering to Sand Point and King Cove are more dependent on tenders than the larger vessels that operate east of 157° 00' W long and deliver primarily to Kodiak. In December 2007, the Council submitted an amendment to NMFS that would

- a) Limit trawl catcher vessels in the GOA pollock fishery to landing no more than 136 mt, through any delivery means, in a calendar day - 12 AM to 12 AM (or 0001 hrs to 2400 hrs); and
- b) Limit the cumulative amount of pollock harvested from any GOA reporting area landed by a trawl catcher vessel to the daily trip limit of 136 mt times the numbers of calendar days the fishery is open in the respective reporting area.

The amendment is intended to more effectively restrict catcher vessel pollock harvests in the GOA and allow enforcement of the trip limit regulation as the Council intended when the limit was initially implemented. NMFS has not yet published a proposed rule for the Council's amendment, but industry has agreed to comply with the provisions of the amendment before the rule is promulgated.

2.2.2 Background on the intent of the proposed action

This section provides more information related to the intent of the proposed action and the reasons that prompted the initiation of this amendment. Subsections summarize historical non-exempt AFA CV pollock and Pacific cod harvests in the GOA by management area. Pollock catches in Area 650 (Southeast Outside) and Pacific cod catches in the Eastern Gulf were zero during the 2001-2007 period and, therefore, are not discussed in the subsections below.

2.2.2.1 Summary of non-exempt AFA CV pollock harvest in Area 610 (Shumagin)

Table 4 shows the seasonal TAC and non-exempt AFA CV pollock harvest in Area 610 during the 2001-2007 period. As shown in Table 5, non-exempt AFA catcher vessels harvested 40.5 percent or less of their annual total sideboard for pollock in Area 610 during each year of the period. The pollock sideboard catch by these vessels in Area 610 shows a decreasing trend, with the proportion of the sideboard harvested dropping from 40.5 percent to 13.7 percent during that period. Overall, 31,612 mt (29.8 percent) of the 106,037 mt total sideboard limit in Area 610 was harvested. The percent of the seasonal sideboard harvested varied between zero and 83.0 percent. There was no consistent pattern in the seasonality of the pollock sideboard harvest in Area 610. In some years the pollock catch was concentrated in the C or D seasons, while in other years the highest catches were in the A or B seasons.

Table 4. Seasonal TAC and Non-Exempt AFA CV Pollock Harvest in Area 610, 2001 – 2007

Season	2001	2002	2003	2004	2005	2006	2007
Seasonal TAC (mt)							
A	7,707	2,916	2,894	3,747	5,035	4,210	4,511
B	3,854	2,916	2,894	3,748	5,035	4,210	4,511
C	10,998	5,949	5,500	7,717	10,155	10,249	7,995
D	9,165	5,949	5,500	7,718	10,155	10,249	7,995
Full Year	31,724	17,730	16,788	22,930	30,380	28,918	25,012
Non-Exempt AFA CV Catch (mt)							
A	911	14	683	1,035	1,651	813	120
B	761	210	273	0	212	989	0
C	1,532	2,126	1,492	2,438	633	812	1,139
D	4,649	1,578	1,144	1,210	2,551	1,797	839
Full Year	7,853	3,928	3,592	4,683	5,047	4,411	2,099

Table 5. Non-Exempt AFA CV Pollock Harvest as a Percentage of Seasonal TAC, Seasonal Sideboard and Cumulative Sideboard in Area 610, 2001 – 2007

Season	2001	2002	2003	2004	2005	2006	2007
Non-Exempt AFA CV Catch as a Percent of Seasonal TAC							
A	11.8	0.5	23.6	27.6	32.8	19.3	2.7
B	19.8	7.2	9.4	0.0	4.2	23.5	0.0
C	13.9	35.7	27.1	31.6	6.2	7.9	14.3
D	50.7	26.5	20.8	15.7	25.1	17.5	10.5
Full Year	24.8	22.2	21.4	20.4	16.6	15.3	8.4
Non-Exempt AFA CV Catch as a Percent of Seasonal Sideboard (61.12 % of TAC)							
A	19.3	0.8	38.6	45.2	53.7	31.6	4.4
B	32.3	11.8	15.4	0.0	6.9	38.4	0.0
C	22.8	58.5	44.4	51.7	10.2	13.0	23.3
D	83.0	43.4	34.0	25.6	41.1	28.7	17.2
Full Year	40.5	36.2	35.0	33.4	27.2	25.0	13.7
Non-Exempt AFA CV Catch as a Percent of Cumulative Seasonal Sideboard							
A	19.3	0.8	38.6	45.2	53.7	31.6	4.4
B	23.7	6.3	27.0	22.6	30.3	35.0	2.2
C	23.2	32.6	35.5	37.4	20.2	22.9	12.1
D	40.5	36.2	35.0	33.4	27.2	25.0	13.7
Full Year	40.5	36.2	35.0	33.4	27.2	25.0	13.7

Figure 1. Non-Exempt AFA CV Pollock as a Percent of Seasonal Sideboard in Area 610, 2001 – 2007

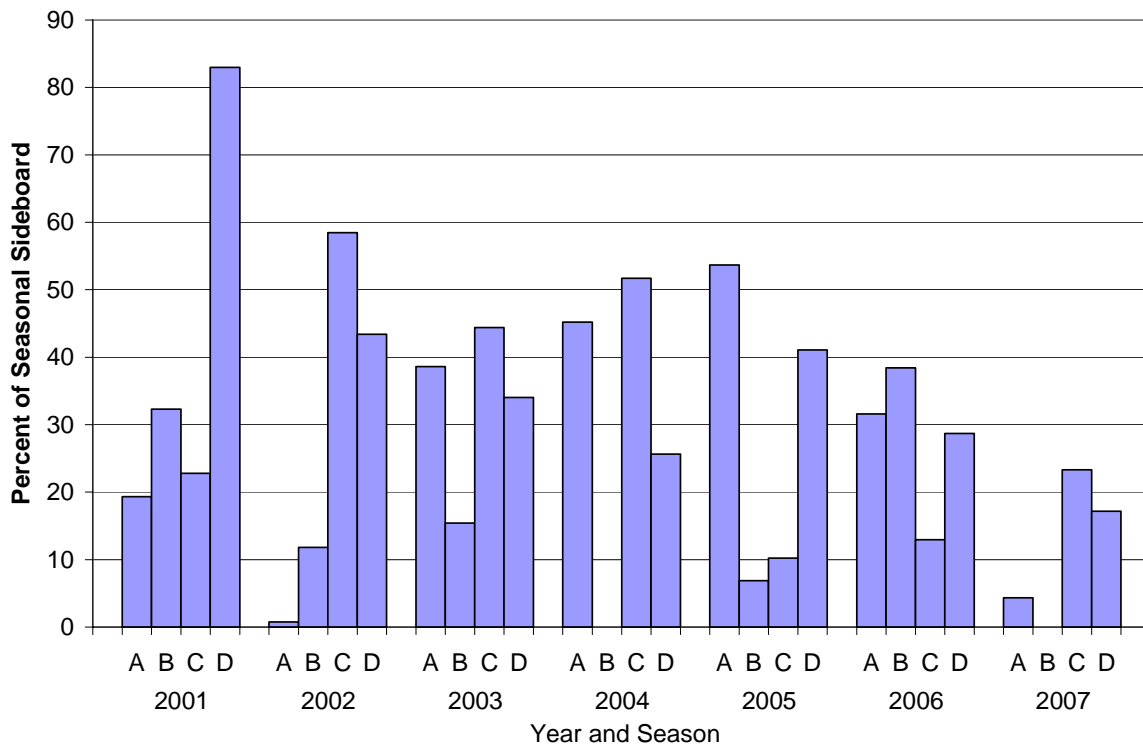


Figure 2. Non-Exempt AFA CV Pollock Harvest as a Percent of TAC in Area 610, 2001 – 2007

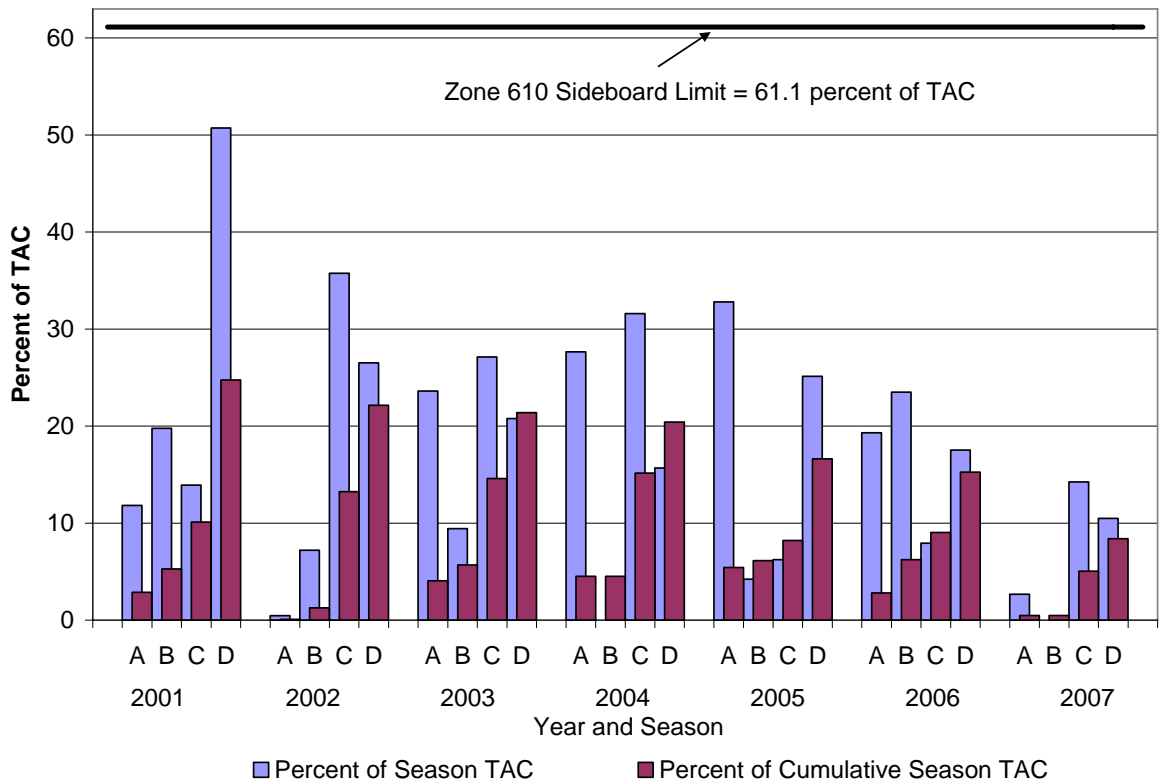


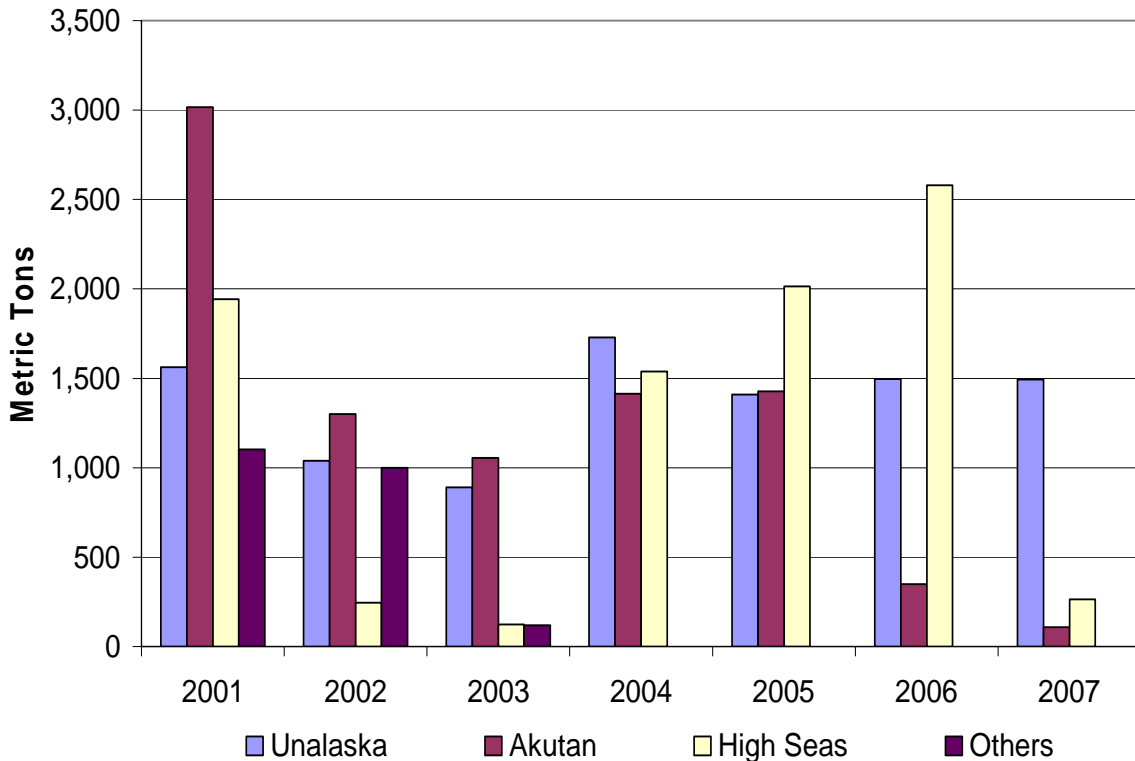
Table 6 and Figure 3 show the Area 610 directed pollock harvest by non-exempt AFA catcher vessels grouped by AFA cooperative. Vessels from three co-ops—Unalaska Fleet, Akutan CV Association and High Seas Catchers’—dominated the pollock harvest in Area 610, accounting for around 92 percent of the total non-exempt AFA CV harvest from 2001–2007. Interviews with fleet managers indicate that the pattern of participation in the GOA pollock fishery by cooperatives generally shows a high level of coordination among coop members. For example, if more than one vessel in a cooperative fished for GOA pollock during a year, the vessels typically fished in different seasons.

Table 6. Non-Exempt AFA CV Directed Pollock Harvest by AFA Cooperatives in Area 610 (mt), 2001 – 2007

AFA Cooperative	2001	2002	2003	2004	2005	2006	2007	Total
Unalaska Fleet	1,561	1038	891	1729	1409	1497	1493	9,618
Akutan Catcher Vessel Association	3,017	1301	1,056	1414	1428	350	109	8,675
High Seas Catchers’	1,944	245	124	1538	2015	2579	264	8,709
Northern Victor	0	999	120	0	0	0	0	1,119
Westward Fleet	1,102	0	0	0	0	0	0	1,102
Mothership	0	0	0	0	0	0	0	0
Peter Pan Fleet	0	0	0	0	0	0	0	0
Unisea Fleet	0	0	0	0	0	0	0	0
Arctic Enterprise	0	0	0	0	0	0	0	0
Total	7,624	3,583	2,281	4,681	4,852	4,426	1,866	29,223

Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Figure 3. Non-Exempt AFA CV Directed Pollock Harvest by AFA Cooperatives in Area 610, 2001 – 2007



Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Table 7 shows the relative economic importance of the Gulf of Alaska pollock fishery in Area 610 for non-exempt AFA catcher vessels. For those vessels that harvested pollock in Area 610, the revenue from that harvest accounted for around 9.6 percent of their total revenue during the 2001-2007 period.

Table 7. Economic Importance of Gulf of Alaska Pollock Fishery in Area 610 for Non-Exempt AFA Catcher Vessels, 2001 – 2007

	2001	2002	2003	2004	2005	2006	2007	All Years
Area 610 Pollock Revenue (\$Thousands)	1,814.1	930.0	818.9	1,018.6	1,316.8	1,225.7	454.9	7,579.0
Total Revenue from All North Pacific Fisheries (\$Millions)	8.49	11.96	11.59	7.78	10.52	14.87	13.78	78.99
Area 610 Pollock Revenue as Percent of Total Revenue	21.4	7.8	7.1	13.1	12.5	8.2	3.3	9.6

2.2.2.2 Summary of non-exempt AFA CV pollock harvest in Area 620 (Chirikof)

Table 8 shows the seasonal TAC and non-exempt AFA CV pollock harvest in Area 620 during the 2001-2007 period. As shown in Table 9, non-exempt AFA catcher vessels harvested more than half of their annual total sideboard for pollock in Area 620 in each year during the period. Overall, 19,550 mt (75.0 percent) of the 26,076 mt total sideboard limit in Area 620 was harvested during that period. The percent of the seasonal sideboard harvested varied between zero and 100 percent. The pollock harvest exceeded the seasonal sideboard limit during some years, but in most years this overage was accommodated by a roll over of that portion of the sideboard cap in the previous season that remained

unharvested. In 2002 and 2007, however, the annual pollock harvest exceeded the cumulative sideboard amount. The pollock sideboard catch in Area 620 was generally concentrated in the B season, with that season accounting for 53.9 percent of the total pollock sideboard harvest during the 2001-2007 period.

Table 8. Seasonal TAC and Non-Exempt AFA CV Pollock Harvest in Area 620, 2001 – 2007

Season	2001	2002	2003	2004	2005	2006	2007
Seasonal TAC (mt)							
A	10,479	8,618	6,535	9,027	11,692	11,192	7,357
B	5,232	8,618	7,778	10,704	13,820	13,394	8,924
C	6,546	2,905	2,686	3,380	4,446	2,953	2,304
D	5,465	2,905	2,686	3,379	4,446	2,953	2,304
Full Year	27,722	23,046	19,685	26,490	34,404	30,492	20,889
Non-Exempt AFA CV Catch (mt)							
A	360	300	177	11	714	880	5
B	1,651	1,616	2,001	1,800	1,712	2,259	3,012
C	67	1,400	137	404	96	0	0
D	22	614	160	74	76	0	0
Full Year	2,100	3,929	2,476	2,290	2,598	3,139	3,017

Table 9. Non-Exempt AFA CV Pollock Harvest as a Percentage of Seasonal TAC, Seasonal Sideboard and Cumulative Sideboard in Area 620, 2001 – 2007

Season	2001	2002	2003	2004	2005	2006	2007
Cumulative Non-Exempt AFA CV Catch as a Percent of Annual TAC							
A	3.4	3.5	2.7	0.1	6.1	7.9	0.1
B	31.6	18.7	25.7	16.8	12.4	16.9	33.8
C	1.0	48.2	5.1	12.0	2.2	0.0	0.0
D	0.4	21.1	6.0	2.2	1.7	0.0	0.0
Full Year	7.6	17.1	12.6	8.6	7.6	10.3	14.4
Non-Exempt AFA CV Catch as a Percent of Seasonal Sideboard							
A	24.1	24.4	19.0	0.9	42.8	55.1	0.5
B	221.1	131.4	180.3	117.9	86.8	118.2	236.5
C	7.2	337.6	35.8	83.8	15.2	0.0	0.0
D	2.8	148.1	41.7	15.4	12.0	0.0	0.0
Full Year	53.1	119.5	88.1	60.6	52.9	72.1	101.2
Non-Exempt AFA CV Catch as a Percent of Cumulative Seasonal Sideboard							
A	24.1	24.4	19.0	0.9	42.8	55.1	0.5
B	89.7	77.9	106.6	64.3	66.6	89.5	129.9
C	65.4	115.4	95.5	67.2	59.0	79.9	113.8
D	53.1	119.5	88.1	60.6	52.9	72.1	101.2
Full Year	53.1	119.5	88.1	60.6	52.9	72.1	101.2

Figure 4. Non-Exempt AFA CV Pollock as a Percent of Seasonal Sideboard in Area 620, 2001 – 2007

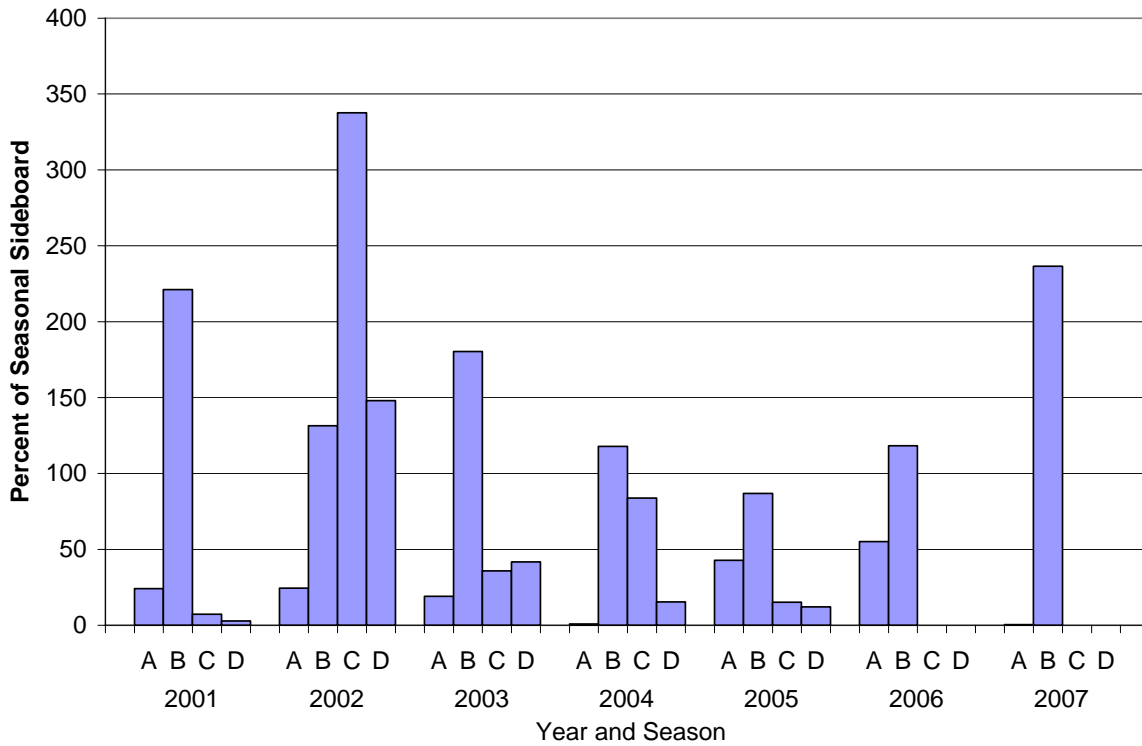


Figure 5. Non-Exempt AFA CV Pollock Harvest as a Percent of TAC in Area 620, 2001 – 2007

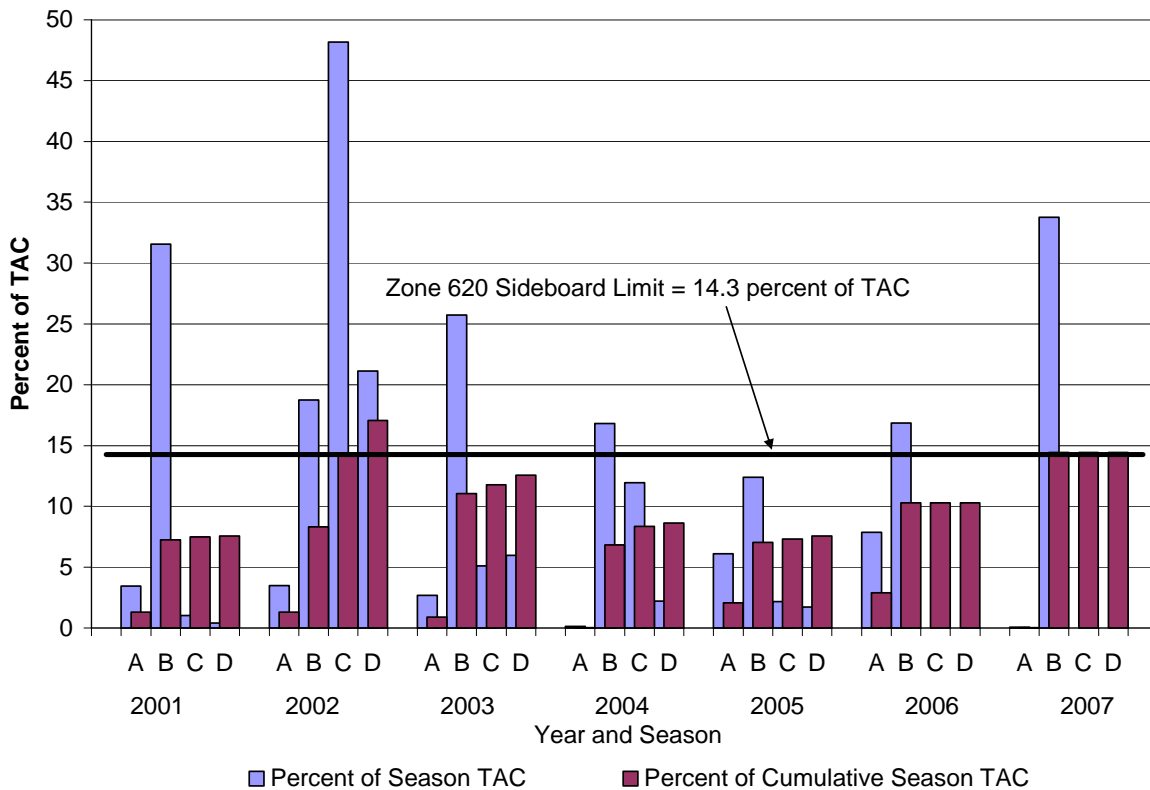


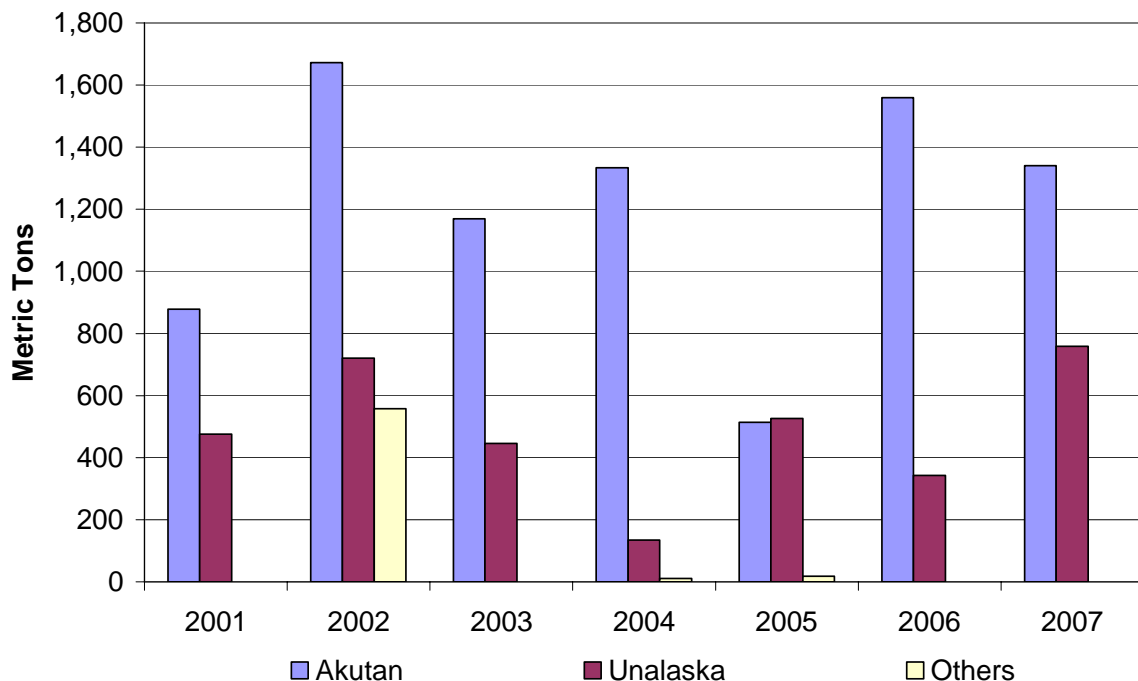
Table 10 and Figure 6 show the directed pollock harvest by AFA cooperatives in Area 620 during the 2001-2007 period. Harvests were dominated by the Akutan Catcher Vessel Association co-op which accounted for about 68 percent of the total non-exempt AFA CV harvest in that period. The Unalaska Fleet co-op was a consistent participant in Area 620, but accounted for only 27 percent of the harvests during the period. In contrast to its relatively high participation in Area 610, vessels in the High Seas co-op were not important players in the Area 620 pollock fishery. Vessels in the Northern Victor co-op participated in the early years of the 2001-2007 period.

Table 10. Non-Exempt AFA CV Directed Pollock Harvest by AFA Cooperatives in Area 620 (mt), 2001 – 2007

AFA Cooperative	2001	2002	2003	2004	2005	2006	2007	Total
Unalaska Fleet	476	720	446	134	526	343	759	3,404
Akutan Catcher Vessel Association	878	1672	1,169	1334	514	1559	1341	8,467
High Seas Catchers'	0	0	0	11	18	0	0	29
Northern Victor	0	557	0	0	0	0	0	557
Westward Fleet	0	0	0	0	0	0	0	0
Mothership	0	0	0	0	0	0	0	0
Peter Pan Fleet	0	0	0	0	0	0	0	0
Unisea Fleet	0	0	0	0	0	0	0	0
Arctic Enterprise	0	0	0	0	0	0	0	0
Total	1,354	2,949	1,615	1,479	1,058	1,902	2,100	12,457

Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Figure 6. Non-Exempt AFA CV Directed Pollock Harvest by AFA Cooperatives in Area 620, 2001 – 2007



Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Table 11 shows the relative economic importance of the Gulf of Alaska pollock fishery in Area 620 for non-exempt AFA catcher vessels. For those vessels that harvested pollock in Area 620, the revenue from that harvest accounted for around 4.8 percent of their total revenue during the 2001-2007 period.

Table 11. Economic Importance of Gulf of Alaska Pollock Fishery in Area 620 for Non-Exempt AFA Catcher Vessels, 2001 – 2007

	2001	2002	2003	2004	2005	2006	2007	All Years
Area 620 Pollock Revenue (\$Thousands)	557.6	904.6	500.0	521.1	752.8	943.0	766.5	4,945.6
Total Revenue from All North Pacific Fisheries (\$Millions)	7.04	16.90	13.83	11.48	21.74	18.91	13.70	103.60
Area 620 Pollock Revenue as Percent of Total Revenue	7.9	5.4	3.6	4.5	3.5	5.0	5.6	4.8

2.2.2.3 Summary of non-exempt AFA CV pollock harvest in Area 630 (Kodiak)

Table 12 shows the seasonal TAC and non-exempt AFA CV pollock harvest in Area 630 during the 2001-2007 period. As shown in Table 13, non-exempt AFA catcher vessels harvested 48.0 percent or less of their annual total sideboard for pollock in Area 630 during each year of the period. Overall, 9,867 mt (35.5 percent) of the 27,790 mt total sideboard limit was harvested during that period. The percent of the seasonal sideboard harvested varied between zero and 100 percent. As in Area 610, there was no consistent pattern in the seasonality of the pollock harvest in Area 630.

Table 12. Seasonal TAC and Non-Exempt AFA CV Pollock Harvest in Area 630, 2001 – 2007

Season	2001	2002	2003	2004	2005	2006	2007
Seasonal TAC (mt)							
A	7,986	1,122	2,274	3,091	4,148	4,062	3,320
B	3,991	1,122	1,031	1,413	2,021	1,861	1,753
C	8,610	3,803	3,517	4,768	6,274	6,263	4,889
D	7,175	3,803	3,517	4,768	6,275	6,262	4,889
Full Year	27,762	9,850	10,339	14,040	18,718	18,448	14,851
Non-Exempt AFA CV Catch (mt)							
A	1,475	17	4	0	256	330	98
B	357	60	31	80	251	33	7
C	448	952	459	517	371	607	39
D	53	123	381	317	1,214	318	1,069
Full Year	2,332	1,152	876	914	2,091	1,288	1,213

Table 13. Non-Exempt AFA CV Pollock Harvest as a Percentage of Seasonal TAC, Seasonal Sideboard and Cumulative Sideboard in Area 630, 2001 – 2007

Season	2001	2002	2003	2004	2005	2006	2007
Cumulative Non-Exempt AFA CV Catch as a Percent of Annual TAC							
A	18.5	1.5	0.2	0.0	6.2	8.1	3.0
B	8.9	5.3	3.0	5.6	12.4	1.8	0.4
C	5.2	25.0	13.1	10.9	5.9	9.7	0.8
D	0.7	3.2	10.8	6.6	19.4	5.1	21.9
Full Year	8.4	11.7	8.5	6.5	11.2	7.0	8.2
Non-Exempt AFA CV Catch as a Percent of Seasonal Sideboard							
A	75.8	6.3	0.8	0.0	25.3	33.3	12.1
B	36.7	21.9	12.4	23.1	50.9	7.4	1.7
C	21.3	102.7	53.6	44.5	24.2	39.7	3.3
D	3.0	13.3	44.5	27.2	79.4	20.9	89.7
Full Year	34.5	48.0	34.8	26.7	45.8	28.7	33.5
Non-Exempt AFA CV Catch as a Percent of Cumulative Seasonal Sideboard							
A	75.8	6.3	0.8	0.0	25.3	33.3	12.1
B	62.7	14.1	4.4	7.3	33.7	25.2	8.5
C	45.4	69.8	29.7	26.4	28.9	32.7	6.0
D	34.5	48.0	34.8	26.7	45.8	28.7	33.5
Full Year	34.5	48.0	34.8	26.7	45.8	28.7	33.5

Figure 7. Non-Exempt AFA CV Pollock as a Percent of Seasonal Sideboard in Area 630, 2001 – 2007

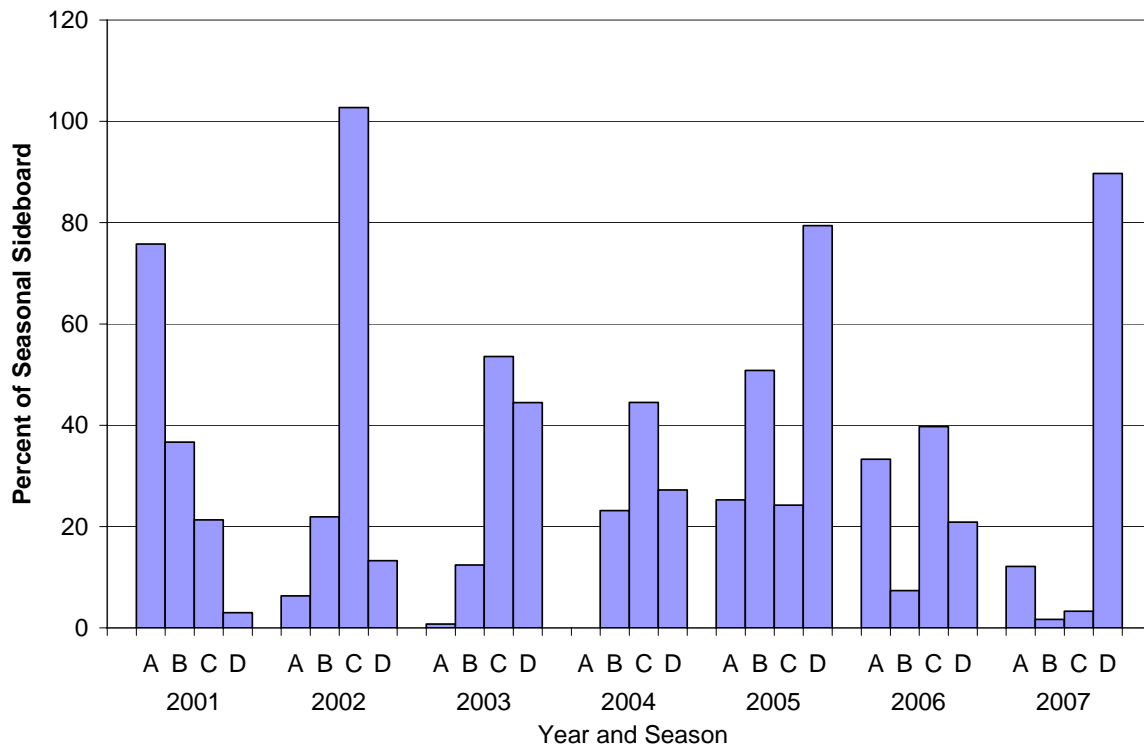


Figure 8. Non-Exempt AFA CV Pollock Harvest as a Percent of TAC in Area 630, 2001 – 2007

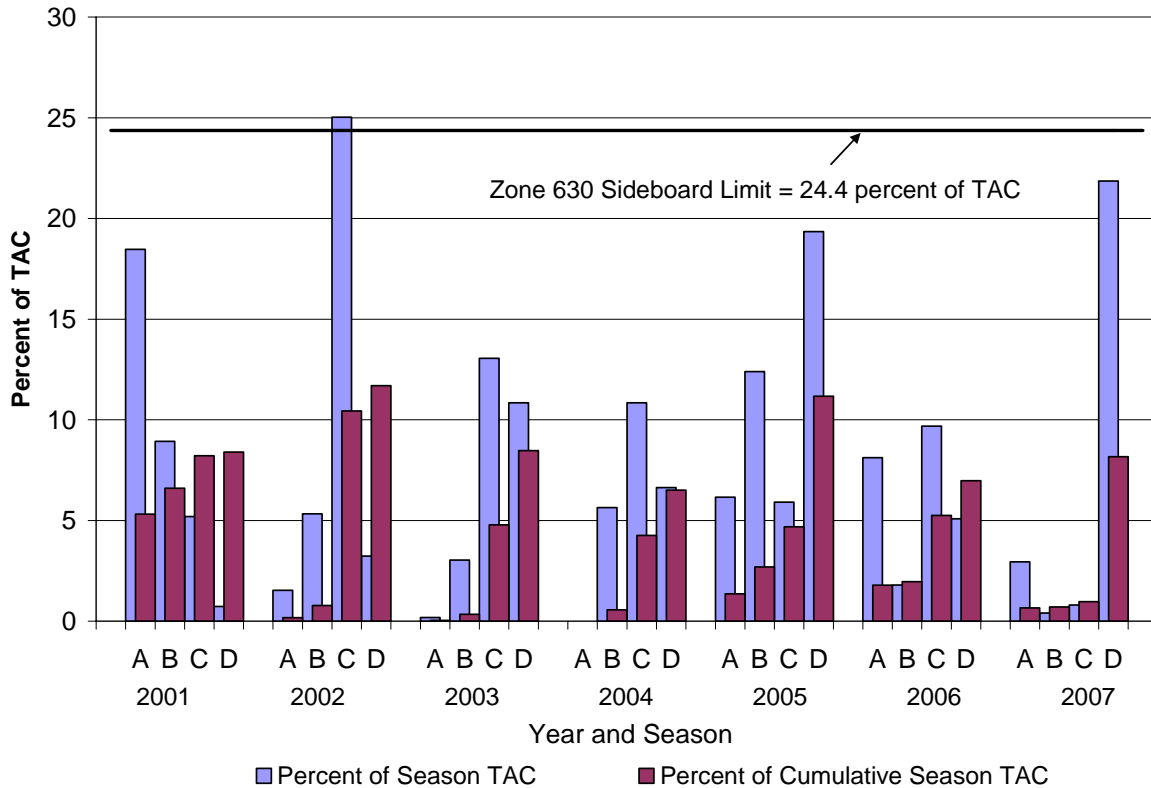


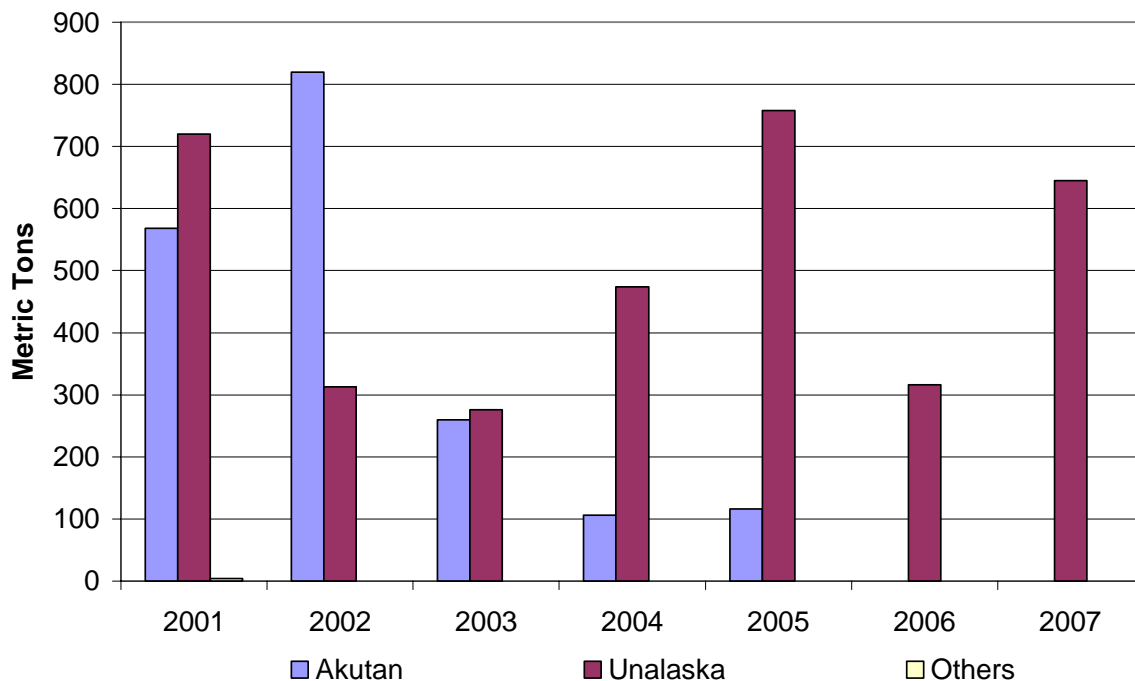
Table 14 and Figure 9 show the participation in the Area 630 pollock fishery by the various AFA cooperatives during the 2001-2007 period. As in Area 620, harvests in Area 630 were dominated by vessels in the Akutan Catcher Vessel Association co-op and Unalaska Fleet co-op. The Akutan Catcher Vessel Association co-op harvested 35 percent of the total non-exempt AFA CV catch, while the Unalaska co-op accounted for 65 percent.

Table 14. Non-Exempt AFA CV Directed Pollock Harvest by AFA Cooperatives in Area 630 (mt), 2001 – 2007

AFA Cooperative	2001	2002	2003	2004	2005	2006	2007	Total
Unalaska Fleet	720	313	276	474	758	316	645	3,502
Akutan Catcher Vessel Association	528	820	260	106	116	0	0	1,870
High Seas Catchers'	0	0	0	0	0	0	0	0
Northern Victor	0	0	0	0	0	0	0	0
Westward Fleet	0	0	0	0	0	0	0	0
Mothership	0	0	0	0	0	0	0	0
Peter Pan Fleet	4	0	0	0	0	0	0	0
Unisea Fleet	0	0	0	0	0	0	0	0
Arctic Enterprise	0	0	0	0	0	0	0	0
Total	1,292	1,133	536	508	874	316	645	5,376

Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Figure 9. Non-Exempt AFA CV Directed Pollock Harvest by AFA Cooperatives in Area 630, 2001 – 2007



Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Table 15 shows the relative economic importance of the Gulf of Alaska pollock fishery in Area 630 for non-exempt AFA catcher vessels. For those vessels that harvested pollock in Area 630, the revenue from that harvest accounted for around 3.6 percent of their total revenue during the 2001-2007 period.

Table 15. Economic Importance of Gulf of Alaska Pollock Fishery in Area 630 for Non-Exempt AFA Catcher Vessels, 2001 – 2007

	2001	2002	2003	2004	2005	2006	2007	All Years
Area 630 Pollock Revenue (\$Thousands)	623.4	219.3	176.6	211.9	635.5	397.8	300.3	2,564.8
Total Revenue from All North Pacific Fisheries (\$Millions)	15.37	9.83	9.94	9.53	10.64	11.05	5.20	71.55
Area 630 Pollock Revenue as Percent of Total Revenue	4.1	2.2	1.8	2.2	6.0	3.6	5.8	3.6

2.2.2.4 Summary of non-exempt AFA CV pollock harvest in Area 640 (West Yakutat)

NOAA Fisheries policy regarding the protection of confidential data precludes the public disclosure of information collected by NOAA Fisheries on the pollock harvest of non-exempt AFA catcher vessels in Area 640.

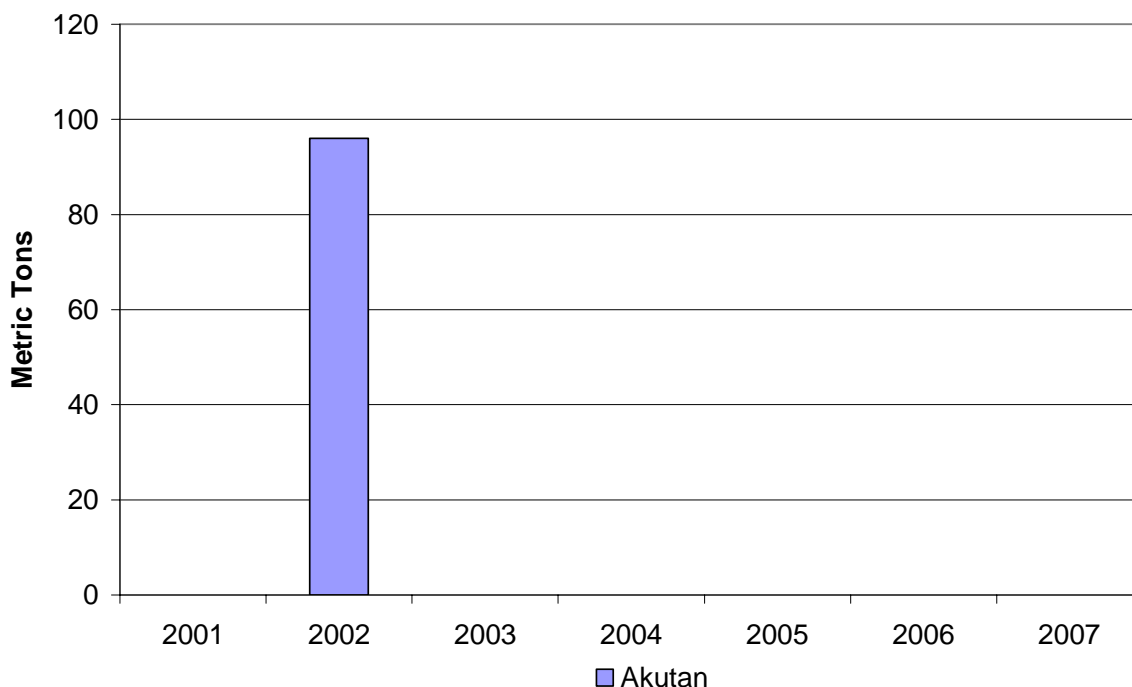
As shown in Table 16 and Figure 10, all of the directed pollock harvest by non-exempt AFA catcher vessels in Area 640 was taken by vessels in the Akutan Catcher Vessel Association co-op in 2002. Directed pollock harvest data for Area 640 in 2007 were unavailable.

Table 16. Non-Exempt AFA CV Pollock Harvest by AFA Cooperatives in Area 640 (mt), 2001 – 2007

AFA Cooperative	2001	2002	2003	2004	2005	2006	2007	Total
Unalaska Fleet	0	0	0	0	0	0	-	0
Akutan Catcher Vessel Association	0	96	0	0	0	0	-	96
High Seas Catchers'	0	0	0	0	0	0	-	0
Northern Victor	0	0	0	0	0	0	-	0
Westward Fleet	0	0	0	0	0	0	-	0
Mothership	0	0	0	0	0	0	-	0
Peter Pan Fleet	0	0	0	0	0	0	-	0
Unisea Fleet	0	0	0	0	0	0	-	0
Arctic Enterprise	0	0	0	0	0	0	-	0
Total	0	96	0	0	0	0	-	96

Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Figure 10. Non-Exempt AFA CV Directed Pollock Harvest by AFA Cooperatives in Area 640, 2001 – 2007



Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

2.2.2.5 Summary of non-exempt AFA CV Pacific cod harvest in Western Gulf

Table 17 shows the seasonal TAC and non-exempt AFA CV Pacific cod harvest in the Western Gulf during the 2001-2007 period. As shown in Table 18, non-exempt AFA catcher vessels harvested 10.5 percent or less of their annual total sideboard for Pacific cod in the Western Gulf during each year of the 2001-2007 period. Overall, 774 mt (4.7 percent) of the 16,366 mt total sideboard limit was harvested during that period. The percent of the seasonal sideboard harvested varied between zero and

15.2 percent. With the exception of 2001, the Pacific cod sideboard catch in the Western Gulf was concentrated in the A season, with that season accounting for 79.6 percent of the total Pacific cod sideboard harvest during the 2001-2007 period.

Table 17. Seasonal TAC and Non-Exempt AFA CV Pacific Cod Harvest in Western Gulf, 2001 – 2007

Season	2001	2002	2003	2004	2005	2006	2007
Seasonal TAC in Western Gulf-Inshore (mt)							
A	9,882	9,098	8,343	9,157	8,471	10,876	10,876
B	6,588	6,066	5,562	6,104	5,647	7,251	7,251
Full Year	16,470	15,164	13,905	15,261	14,118	18,127	18,127
Non-Exempt AFA CV Catch (mt)							
A	57	137	53	43	3	51	168
B	143	7	0	0	0	1	4
Full Year	200	144	53	43	3	52	172

Table 18. Non-Exempt AFA CV Pacific Cod Harvest as a Percentage of Seasonal TAC, Sideboard and Cumulative Sideboard in Western Gulf, 2001 – 2007

Season	2001	2002	2003	2004	2005	2006	2007
Non-Exempt AFA CV Catch as a Percent of Seasonal TAC							
A	1.0	1.5	0.7	0.5	0.6	0.5	1.5
B	2.2	0.1	0.0	0.0	0.0	0.0	0.1
Full Year	1.5	1.0	0.4	0.3	0.4	0.3	1.0
Non-Exempt AFA CV Catch as a Percent of Seasonal Sideboard							
A	7.3	10.6	5.0	3.3	4.5	3.3	10.9
B	15.2	0.9	0.1	0.1	0.1	0.1	0.4
Full Year	10.5	6.7	3.1	2.0	2.7	2.0	6.7
Non-Exempt AFA CV Catch as a Percent of Cumulative Seasonal Sideboard							
A	7.3	10.6	5.0	3.3	4.5	3.3	10.9
B	10.5	6.7	3.1	2.0	2.7	2.0	6.7
Full Year	10.5	6.7	3.1	2.0	2.7	2.0	6.7

Figure 11. Non-Exempt AFA CV Pacific Cod Harvest as a Percent of Seasonal Sideboard in Western Gulf, 2001 – 2007

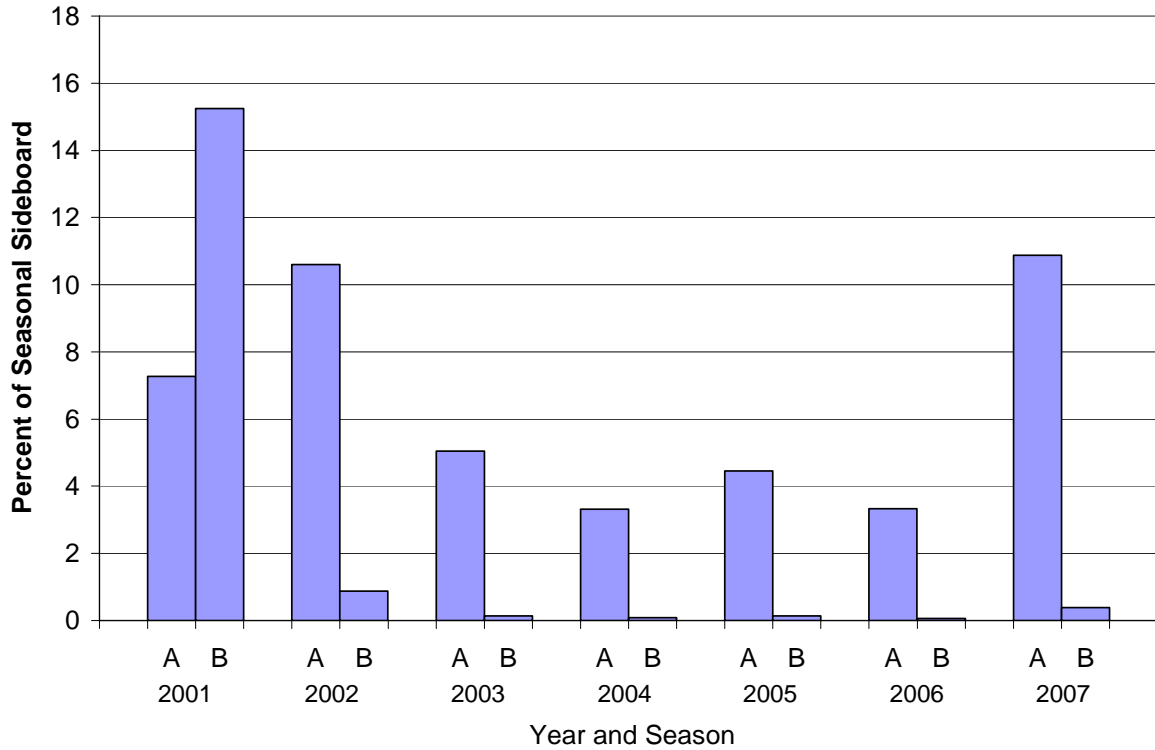
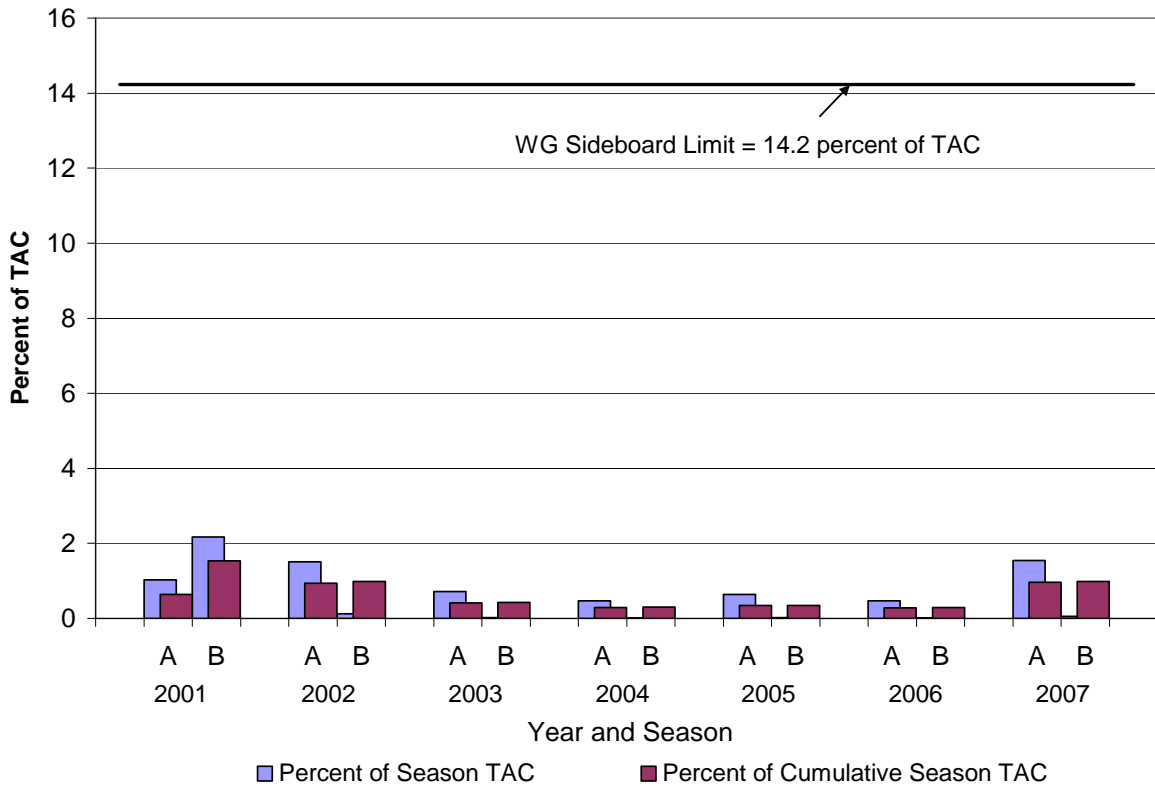


Figure 12. Non-Exempt AFA CV Pacific Cod Harvest as a Percent of TAC in Western Gulf, 2001 – 2007



Pacific cod is often taken incidentally when vessels are targeting other species such as pollock. Table 19 describes participation in the Western Gulf Pacific cod fishery by the non-exempt AFA CV fleet in terms of directed and incidental fishing effort. Whether or not a vessel was engaged in directed fishing was determined by algorithms used by NMFS. During the 2001–2007 period 86.2 percent of the Pacific cod harvested by non-exempt AFA catcher vessels engaged in directed fishing for Pacific cod, while the remaining 13.8 percent was taken incidentally in other targeted fisheries. A total of 27 different non-exempt AFA catcher vessels landed Pacific cod in the Western Gulf from 2001 through 2007, but no more than 10 vessels landed Pacific cod in any given year.

Table 19. Directed and Incidental Participation of Non-Exempt AFA Catcher Vessels in the Western Gulf Pacific Fishery, 2001 – 2007

	2001	2002	2003	2004	2005	2006	2007	Total
Incidental Catch (mt)	7	5	44	1	2	46	2	107
Incidental Catch as Percent of Total (%)	2.8	3.4	71.6	3.0	3.1	88.7	1.3	13.8
Vessels with Incidental Catch	3	6	5	4	4	4	3	14
Directed Fishing Catch (mt)	239	140	17	43	53	6	170	668
Directed Catch as Percent of Total (%)	97.2	96.6	28.4	97.0	96.9	11.3	98.7	86.2
Vessels Engaged in Directed Fishing	10	5	5	6	5	5	6	21
Total Catch (mt)	245	145	61	44	55	52	172	774
Total Number of Vessels	10	9	9	8	6	6	7	27

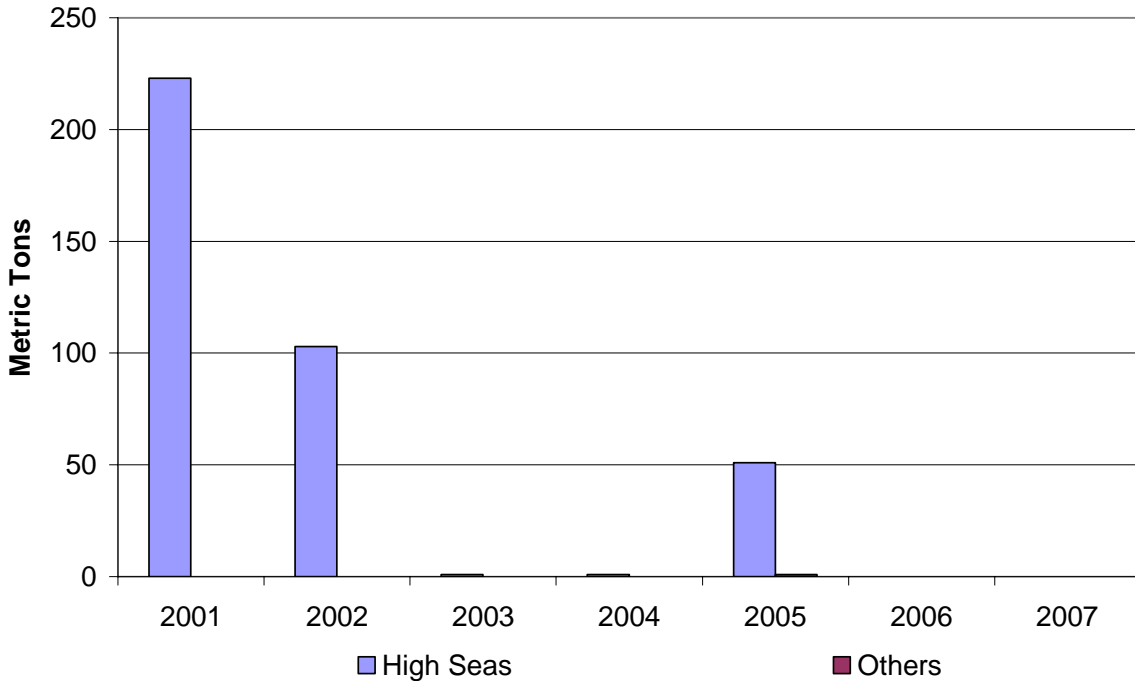
As shown in Table 20 and Figure 13, participation in the Western Gulf directed Pacific cod fishery by AFA cooperatives was relatively sporadic during the 2001-2007 period. Only the High Seas Catchers' co-op was a consistent participant during those years. Directed Pacific cod harvest data for the Western Gulf in 2007 were unavailable.

Table 20. Non-Exempt AFA CV Directed Pacific Cod Harvest by AFA Cooperatives in Western Gulf (mt), 2001 – 2007

AFA Cooperative	2001	2002	2003	2004	2005	2006	2007	Total
Unalaska Fleet	0	0	0	0	0	0	-	0
Akutan Catcher Vessel Association	0	0	0	0	0	0	-	0
High Seas Catchers'	223	103	1	1	51	0	-	379
Northern Victor	0	0	0	0	0	0	-	0
Westward Fleet	0	0	0	0	0	0	-	0
Mothership	0	0	0	0	0	0	-	0
Peter Pan Fleet	0	0	0	0	0	0	-	1
Unisea Fleet	0	0	0	0	0	0	-	0
Arctic Enterprise	0	0	0	0	0	0	-	0
Total	223	103	1	1	51	0	-	380

Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Figure 13. Non-Exempt AFA CV Directed Pacific Cod Harvest by AFA Cooperatives in Western Gulf, 2001 – 2007



Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Table 21 shows the relative economic importance of the Gulf of Alaska Pacific cod fishery in the Western Gulf for non-exempt AFA catcher vessels. For those vessels that harvested Pacific cod in the Western Gulf, the revenue from that harvest accounted for around 0.6 percent of their total revenue during the 2001-2007 period.

Table 21. Economic Importance of Gulf of Alaska Pacific Cod Fishery in Western Gulf for Non-Exempt AFA Catcher Vessels, 2001 – 2007

	2001	2002	2003	2004	2005	2006	2007	All Years
Western Gulf Pacific Cod Revenue (\$Thousands)	122.5	65.5	31.0	21.1	28.7	38.0	172.0	478.9
Total Revenue from All North Pacific Fisheries (\$Millions)	8.83	10.99	13.24	12.16	10.52	14.87	11.92	82.52
Western Gulf Pacific Cod Revenue as Percent of Total Revenue	1.4	0.6	0.2	0.2	0.3	0.3	1.4	0.6

2.2.2.6 Summary of non-exempt AFA CV Pacific cod harvest in Central Gulf

Table 22 shows the seasonal TAC and non-exempt AFA CV Pacific cod harvest in the Central Gulf during the 2001-2007 period. As shown in Table 23, non-exempt AFA catcher vessels harvested 53.3 percent or less of their annual total sideboard for Pacific cod in the Central Gulf during each year of the 2001-2007 period. Overall, 3,936 mt (36.0 percent) of the 10,917 mt total sideboard limit was harvested during that period. The percent of the seasonal sideboard harvested varied between 4.4 and 59.0 percent. The Pacific cod sideboard catch in the Central Gulf tended to be concentrated in the A season, with that season accounting for 73.5 percent of the total Pacific cod sideboard harvest during the 2001-2007 period.

Table 22. Seasonal TAC and Non-Exempt AFA CV Pacific Cod Harvest in Central Gulf, 2001 – 2007

Season	2001	2002	2003	2004	2005	2006	2007
Seasonal TAC in Central Gulf-Inshore (mt)							
A	16,335	13,387	12,253	14,643	13,547	15,339	15,339
B	10,980	8,924	8,168	9,761	9,031	10,226	10,226
Full Year	27,315	22,311	20,421	24,404	22,578	25,565	25,565
Non-Exempt AFA CV Catch (mt)							
A	196	215	164	439	454	376	249
B	11	27	299	153	138	14	5
Full Year	207	241	463	592	593	391	253

Table 23. Non-Exempt AFA CV Pacific Cod Harvest as a Percentage of Seasonal TAC, Sideboard and Cumulative Sideboard in Central Gulf, 2001 – 2007

Season	2001	2002	2003	2004	2005	2006	2007
Non-Exempt AFA CV Catch as a Percent of Seasonal TAC							
A	1.4	1.9	4.0	4.2	4.3	3.1	1.7
B	1.2	0.3	3.7	2.8	1.8	0.3	1.0
Full Year	1.3	1.3	3.9	3.6	3.3	2.0	1.4
Non-Exempt AFA CV Catch as a Percent of Seasonal Sideboard							
A	19.1	26.3	55.3	58.0	59.0	42.3	24.2
B	17.0	4.4	50.8	39.1	25.3	4.6	13.9
Full Year	18.2	17.6	53.5	50.4	45.5	27.2	20.1
Non-Exempt AFA CV Catch as a Percent of Cumulative Seasonal Sideboard							
A	19.1	26.3	55.3	58.0	59.0	42.3	24.2
B	18.2	17.6	53.5	50.4	45.5	27.2	20.1
Full Year	18.2	17.6	53.5	50.4	45.5	27.2	20.1

Figure 14. Non-Exempt AFA CV Pacific Cod Harvest as a Percent of Seasonal Sideboard in Central Gulf, 2001 – 2007

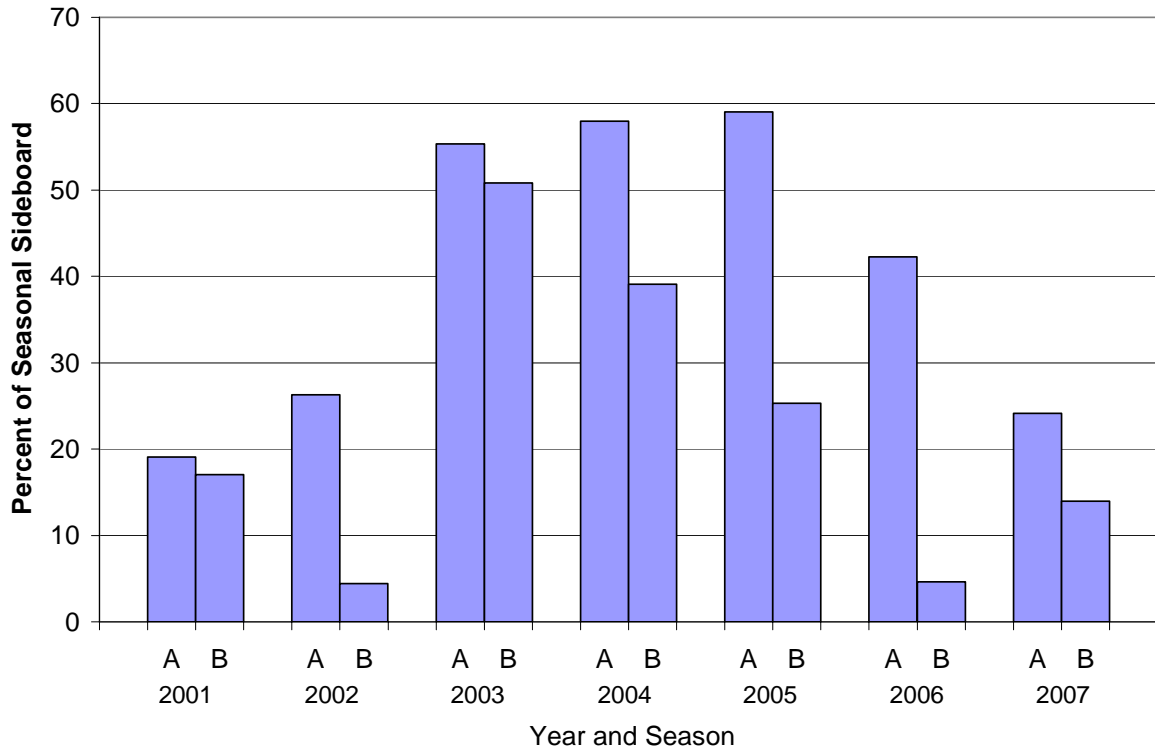
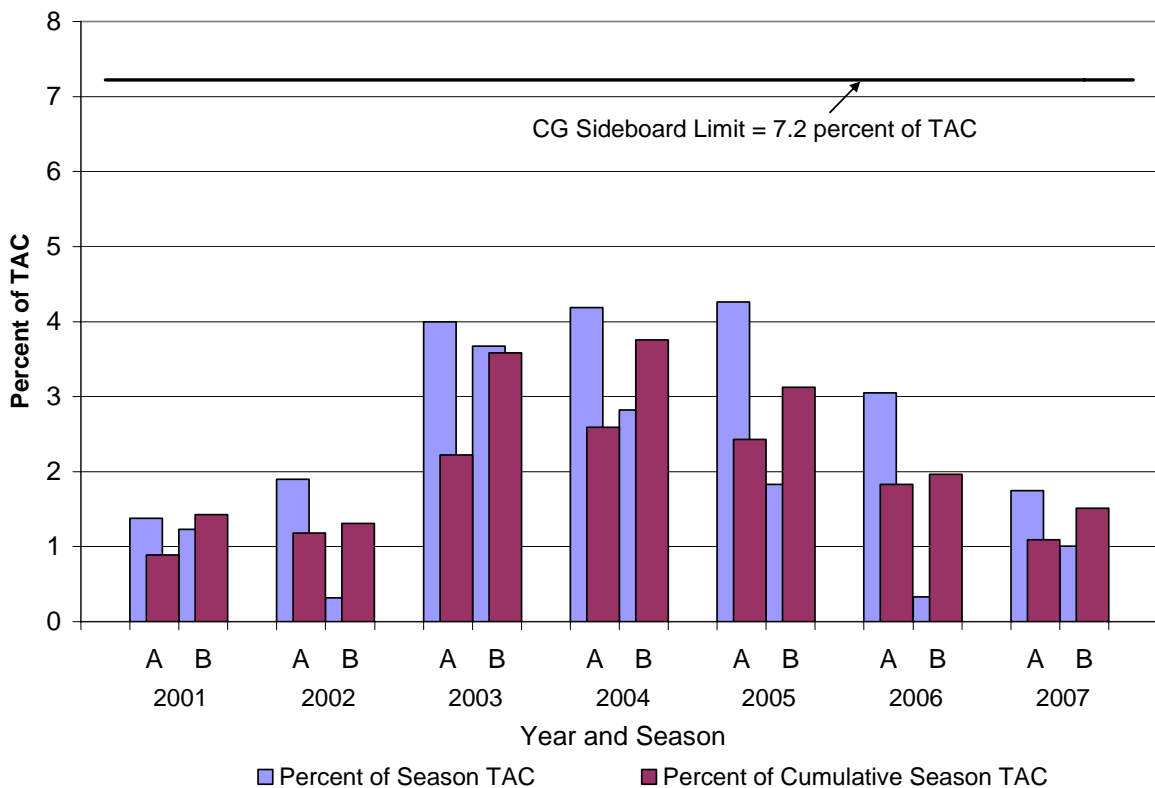


Figure 15. Non-Exempt AFA CV Pacific Cod Harvest as a Percent of TAC in Central Gulf, 2001 – 2007



Incidental catches of Pacific cod accounted for 30 percent of the total Pacific cod landed in the Central Gulf by non-exempt AFA catcher vessels during the 2001–2007 period. This is more than twice the incidental catch percentage in the Western Gulf (Table 19). Overall, a total of 18 non-exempt AFA catcher vessels landed Pacific cod in the Central Gulf from 2001 through 2007, but no more than six vessels engaged in directed fishing after 2001.

Table 24. Directed and Incidental Participation of Non-Exempt AFA Catcher Vessels in the Central Gulf Pacific Fishery, 2001 – 2007

	2001	2002	2003	2004	2005	2006	2007	Total
Incidental Catch (mt)	149	205	223	209	166	117	118	1,187
Incidental Catch as Percent of Total (%)	41.4	72.7	28.3	23.5	22.3	23.2	31.9	30.2
Vessels with Incidental Catch	7	8	6	9	6	8	5	14
Directed Fishing Catch (mt)	211	77	566	680	577	385	252	2,749
Directed Catch as Percent of Total (%)	58.6	27.3	71.7	76.5	77.7	76.8	68.1	69.8
Vessels Engaged in Directed Fishing	9	2	5	4	6	3	4	12
Total Catch (mt)	360	283	789	889	742	502	370	3,936
Total Number of Vessels	10	8	7	9	9	8	6	18

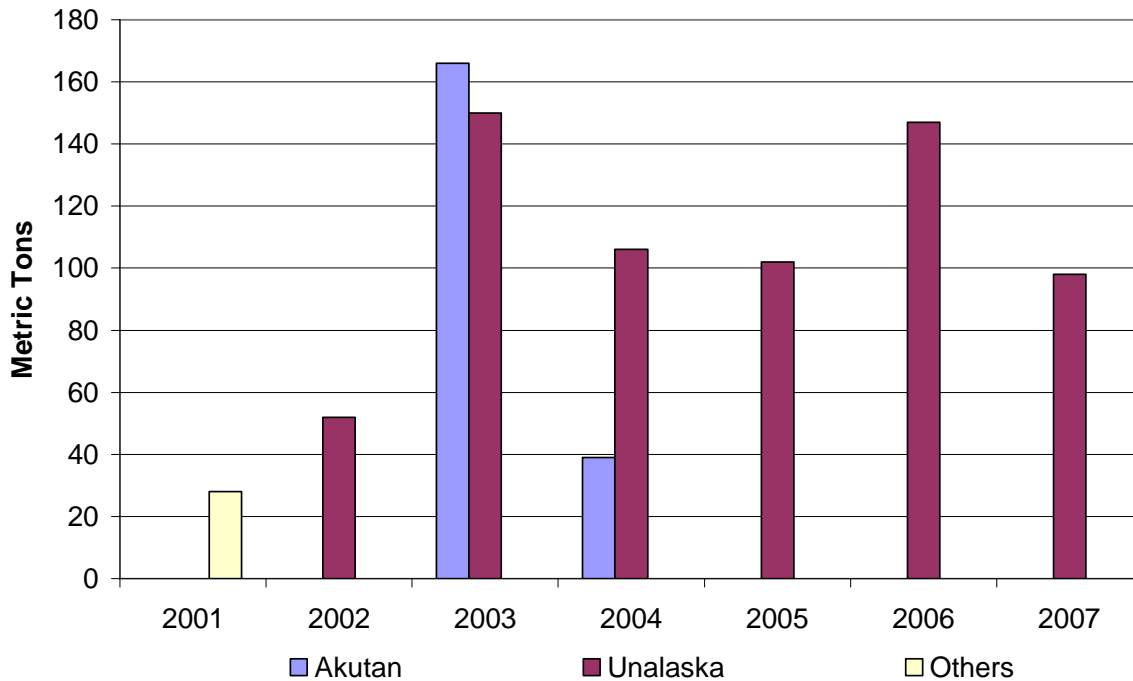
As shown in Table 25 and Figure 16, the Akutan Catcher Vessel Association and Unalaska Fleet co-ops were the only significant participants in the Central Gulf directed Pacific cod fishery during the 2001–2007 period. The Akutan Catcher Vessel Association co-op accounted for 23 percent of the total non-exempt AFA CV harvest during that period, while the Unalaska co-op accounted for 74 percent.

Table 25. Non-Exempt AFA CV Directed Pacific Cod Harvest by AFA Cooperatives in Central Gulf (mt), 2001 – 2007

AFA Cooperative	2001	2002	2003	2004	2005	2006	2007	Total
Unalaska Fleet	0	52	150	106	102	147	98	655
Akutan Catcher Vessel Association	0	0	166	39	0	0	0	205
High Seas Catchers'	0	0	0	0	0	0	0	0
Northern Victor	0	0	0	0	0	0	0	0
Westward Fleet	0	0	0	0	0	0	0	0
Mothership	0	0	0	0	0	0	0	0
Peter Pan Fleet	1	0	0	0	0	0	0	1
Unisea Fleet	27	0	0	0	0	0	0	27
Arctic Enterprise	0	0	0	0	0	0	0	0
Total	28	52	316	145	102	147	98	888

Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council.

Figure 16. Non-Exempt AFA CV Directed Pacific Cod Harvest by AFA Cooperatives in Central Gulf, 2001 – 2007



Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Table 26 shows the relative economic importance of the Gulf of Alaska Pacific cod fishery in the Central Gulf for non-exempt AFA catcher vessels. For those vessels that harvested Pacific cod in the Central Gulf, the revenue from that harvest accounted for around 2.6 percent of their total revenue during the 2001-2007 period.

Table 26. Economic Importance of Gulf of Alaska Pacific cod Fishery in Central Gulf for Non-Exempt AFA Catcher Vessels, 2001 – 2007

	2001	2002	2003	2004	2005	2006	2007	All Years
Central Gulf Pacific Cod Revenue (\$Thousands)	211.7	133.9	481.3	498.4	464.9	415.0	377.2	2,582.3
Total Revenue from All North Pacific Fisheries (\$Millions)	13.04	12.39	10.85	16.38	19.13	18.91	10.14	100.85
Central Gulf Pacific Cod Revenue as Percent of Total Revenue	1.6	1.1	4.4	3.1	2.4	2.2	3.7	2.6

2.2.2.7 Summary and discussion

Generally, non-exempt AFA catcher vessels have not fully harvested their sideboard for GOA pollock. During the 2001-2007 period these vessels harvested 61,496 mt (37.6 percent) of the 163,625 mt total pollock sideboard limit (including the Area 650 sideboard). However, there is substantial variation in the percent of the pollock sideboard harvested across management areas. In Area 620 75.0 percent of the total sideboard limit was harvested during the 2001-2007 period, whereas in Area 650 none of sideboard limit was harvested. The pollock sideboard harvest in Area 620 tended to be highest in the B season when pollock are carrying high-value roe. The seasonality of the catches in other management areas shows no consistent pattern. Vessels in two AFA cooperatives—Unalaska Fleet Cooperative and Akutan Catcher Vessel Association—dominated the GOA pollock harvest by

the non-exempt AFA CV fleet, accounting for around 77 percent of the total harvest from 2001–2007. For those non-exempt AFA catcher vessels that harvested Gulf of Alaska pollock, the revenue from that harvest on average accounted for 9.6 percent (Area 610) or less of their total revenue during the 2001-2007 period.

Non-exempt AFA catcher vessels have also not fully harvested their sideboard for GOA Pacific cod. During the 2001-2007 period these vessels harvested 4,710 mt (17.3 percent) of the 27,283 mt total Pacific cod. sideboard limit (including the Eastern Gulf sideboard). However, there is substantial variation in the percent of the Pacific cod sideboard harvested across management areas. In the Central Gulf 36.0 percent of the total sideboard limit was harvested during the 2001-2007 period, whereas in the Western Gulf only 4.7 percent was harvested. In both the Western and Central Gulf the Pacific cod sideboard harvest tends to be highest during the A season. As in the GOA pollock fishery, vessels in the Unalaska Fleet Cooperative and Akutan Catcher Vessel Association dominated the GOA Pacific cod harvest by the non-exempt AFA CV fleet, accounting for around 96.7 percent of the total harvest from 2001–2007. For those non-exempt AFA catcher vessels that harvested Gulf of Alaska Pacific cod, the revenue from that harvest on average accounted for 2.6 percent (Central Gulf) to 0.6 percent (Western Gulf) of their total revenue during the 2001-2007 period

The overall low harvest of GOA pollock and Pacific cod sideboards by non-exempt AFA catcher vessels has occurred even though the formation of fishery cooperatives under the AFA afforded co-op members opportunities to maximize their participation in non-BSAI pollock fisheries in various ways. The leasing of quota among co-op members allows excess harvesting capacity to be removed from the BSAI pollock fishery; this freed-up fishing capital can then shift to other fisheries, including the GOA pollock and Pacific cod fisheries. In addition, the allocation of sideboard amounts among co-op members facilitates the transfer (for example, through leasing) of sufficient sideboard amounts to make participation in the GOA pollock and Pacific cod fisheries worthwhile for at least one vessel within a cooperative. Intercoop transfers of sideboard cap allocations can also occur. Finally, fishery cooperatives provide vessels with greater flexibility to schedule their fishing activity because they are no longer racing for pollock at the start of every season. As a result, vessels in cooperatives have the ability to enter other fisheries, including the GOA pollock and Pacific cod fisheries, that might previously have been conducted concurrent with the BSAI pollock fishery.

Representatives of AFA fishermen indicate that there are a number of reasons for the generally low GOA pollock and Pacific cod sideboard harvests, including the following:

- The Steller sea lion protection measures reduced the areas available for fishing in the GOA.
- As discussed in Section 2.2.1, 300,000 pound trip limit for pollock trawl harvests in the GOA.
- The exclusive season rule discussed in Section 2.2.1 for directed pollock fishing in Area 610 and the western side of Area 620 restricts fishing to either the BSAI or GOA until a subsequent season or the following year. An industry representative stated that no AFA CV will register in Area 610 if they have an opportunity to fish in the BSAI.
- The stand down rule discussed in Section 2.2.1 constrains fishing effort in the GOA, especially given that fishing seasons in the GOA tend to be of relatively short duration.

Moreover, an additional obstacle would be created by an amendment approved by the Council in April 2008. If approved by the Secretary, the amendment would remove area endorsements from LLP licenses held by boats that have not made at least two landings between 2000 and 2006. To take advantage of efficiencies (e.g., operating cost savings), some AFA LLP holders have not entered their vessels into GOA sideboarded fisheries. By allowing other cooperative partners to fish the sideboard amounts attributed to their catch history, these LLP holders may not meet the minimum landing threshold. If this action eliminates a latent LLP endorsement that does not have recent history of participation in a GOA sideboarded fishery, that AFA vessel would be unable to fish its contribution

to the sideboard limit in the future. The final EA/RIR/IRFA prepared for the amendment in March 2008 estimated that the minimum landing threshold would remove from AFA catcher vessel licenses 33 of the 61 CG endorsements and 66 of the 79 WG endorsements. [These numbers need to be verified.]

Under current fishery conditions the above regulatory obstacles are likely to continue to constrain the harvest of GOA pollock and Pacific cod sideboards. However, a change in current conditions could cause a reentry of effort by non-exempt AFA vessels that would result in increases in sideboard catches when compared to the recent post-AFA implementation years. In particular, industry representatives stated that a large drop in the Eastern Bering Sea pollock TAC could precipitate a substantial increase in the harvest of GOA pollock and Pacific cod sideboards. An increase in the sideboard harvest would be most likely to occur under the “worst case” scenario in which the EBS pollock spawning biomass fell below $B_{20\%}$ and the directed pollock fishery in the Bering Sea would be closed.

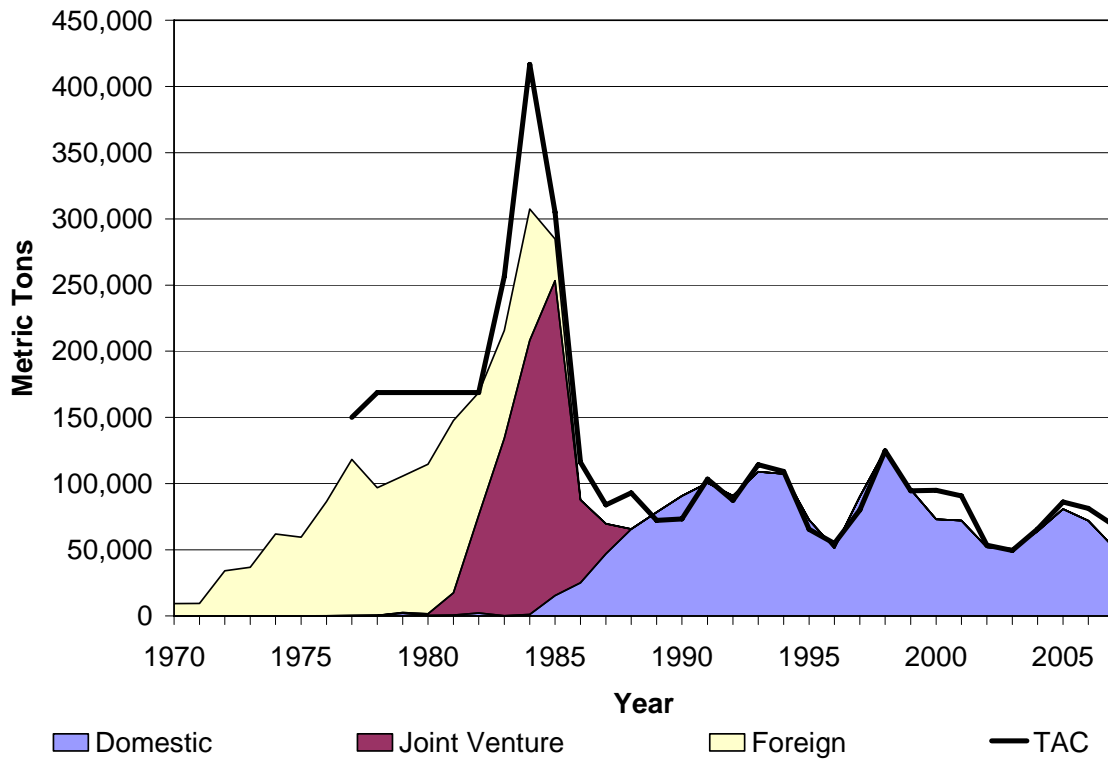
2.3 Description of the Fisheries

This section provides a brief summary of relevant characteristics of the GOA pollock and Pacific cod fisheries. A detailed description of these fisheries can be found in the *Alaska Groundfish Fisheries Final Programmatic Supplemental Environmental Impact Statement* (NMFS 2004). Updated fishery statistics are provided in *Economic Status of the Groundfish Fisheries off Alaska, 2006* (Hiatt et al. 2007).

2.3.1 GOA pollock

The commercial fishery for walleye pollock in the GOA started as a foreign fishery in the early 1970s. Catches increased rapidly during the late 1970s and early 1980s. A large spawning aggregation was discovered in Shelikof Strait in 1981, and a fishery developed for which pollock roe was an important product. The domestic fishery for pollock developed rapidly in the GOA with only a short period of joint venture operations in the mid-1980s. The fishery was fully domestic by 1988. Figure 17 shows the history of the GOA pollock harvests and TAC from 1970 through 2007.

Figure 17. Historical Harvest and TAC in the Gulf of Alaska Pollock Fishery, 1970 – 2007



Source: www.afsc.noaa.gov/REFM/docs/2007/GOApollock.pdf

Figure 18 shows the management areas for the GOA pollock fishery. The Western Regulatory Area includes management area 610 (Shumagin). The Central Regulatory Area is comprised of management areas 620 (Chirikof) and 630 (Kodiak). The Eastern Regulatory Area includes management areas 640 (West Yakutat) and 650 (Southeast Outside).

Figure 18. Management Areas for the Gulf of Alaska Pollock Fishery

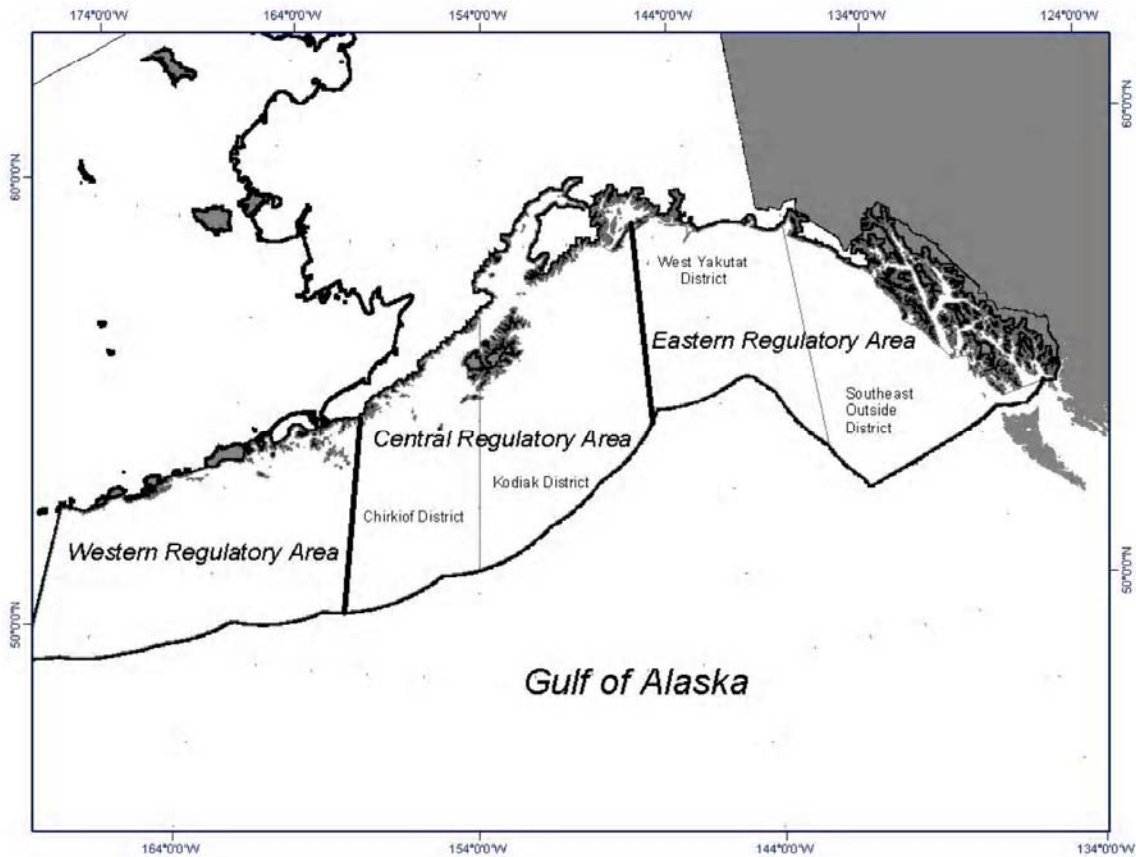


Table 27 shows the recent history of the GOA pollock harvests for management areas 610, 620, 630 and 640. One of the most noticeable features of this table is the decrease in the TAC in Area 620 for the years 2000 and 2001 and the return in 2002 to previous levels. The reason for this change during 2000 and 2001 was the recording of harvests to the Shelikof area during those two years. In 2000 and 2001, the Shelikof area, which is comprised of portions of both Areas 620 and 630, had pollock landings of 25,853 mt and 18,895 respectively. Beginning in 2002, the Shelikof harvests have not been accounted for separately.

Table 27. Recent Harvest and TAC in the Gulf of Alaska Pollock Fishery by Management Area (mt), 1999-2007

	610-Shumagin		620-Chirikof		630-Kodiak		640-West Yakutat	
	catch	TAC	catch	TAC	catch	TAC	catch	TAC
1999	23,384	23,120	38,142	38,840	30,133	30,520	1,759	2,110
2000	22,074	26,378	699	7,815	25,853	20,987	2,108	2,340
2001	30,471	31,056	1,742	8,059	17,026	23,583	2,351	2,235
2002	17,455	17,840	20,535	25,233	10,902	6,995	1,818	1,165
2003	16,510	16,788	19,642	19,685	12,435	10,339	943	1,078
2004	23,455	22,930	24,661	26,490	14,444	14,040	226	1,280
2005	30,973	30,380	27,904	34,404	19,329	18,718	1,880	1,688
2005	24,738	28,918	27,156	30,492	17,056	18,448	1,572	1,792
2007	16,159	25,012	19,332	20,980	12,217	14,850	86	1,398

All of the GOA pollock quota is allocated to the inshore sector, with approximately 90 percent of the catch taken with pelagic trawls. During winter, fishing effort targets pre-spawning aggregations in Shelikof Strait and near the Shumagin Islands. Fishing in summer is less predictable, but typically occurs on the east side of Kodiak Island and in nearshore waters along the Alaska Peninsula.

Incidental catch in the GOA directed pollock fishery is low. For tows classified as pollock targets in the GOA between 2004 and 2006, about 94 percent of the catch by weight consisted of pollock. Nominal pollock targets are defined by the dominance of pollock in the catch, and may include tows where other species were targeted, but caught pollock inadvertently. The most common managed species in the incidental catch are arrowtooth flounder, Pacific cod, flathead sole, Pacific Ocean perch, rex sole, and the shortraker/rougheye rockfish complex. The most common nontarget species are eulachon, capelin, squid, grenadiers, and various shark species.

Kodiak is the major port for pollock in the GOA, with 61 percent of the 2002-2006 landings. In the western GOA, Sand Point, Dutch Harbor, King Cove, and Akutan are important ports, sharing 38% of 2002-2006 landings. Secondary ports, including Cordova, Seward, and Homer account for the remaining 1% of the 2002-2006 landings.

Since 1992, the GOA pollock TAC has been apportioned spatially and temporally to reduce potential impacts on Steller sea lions. The details of the apportionment scheme have evolved over time, but the general objective is to allocate the TAC to management areas based on the distribution of surveyed biomass, and to establish three or four seasons between mid-January and autumn during which some fraction of the TAC can be taken. The Steller sea lion protection measures implemented in 2001 established four seasons in the Central and Western GOA beginning January 20, March 10, August 25, and October 1, with 25% of the total TAC allocated to each season. Allocations to management areas 610, 620 and 630 are based on the seasonal biomass distribution as estimated by groundfish surveys. In addition, a new harvest control rule was implemented that requires a cessation of fishing when spawning biomass declines below 20% of the reference unfished level.

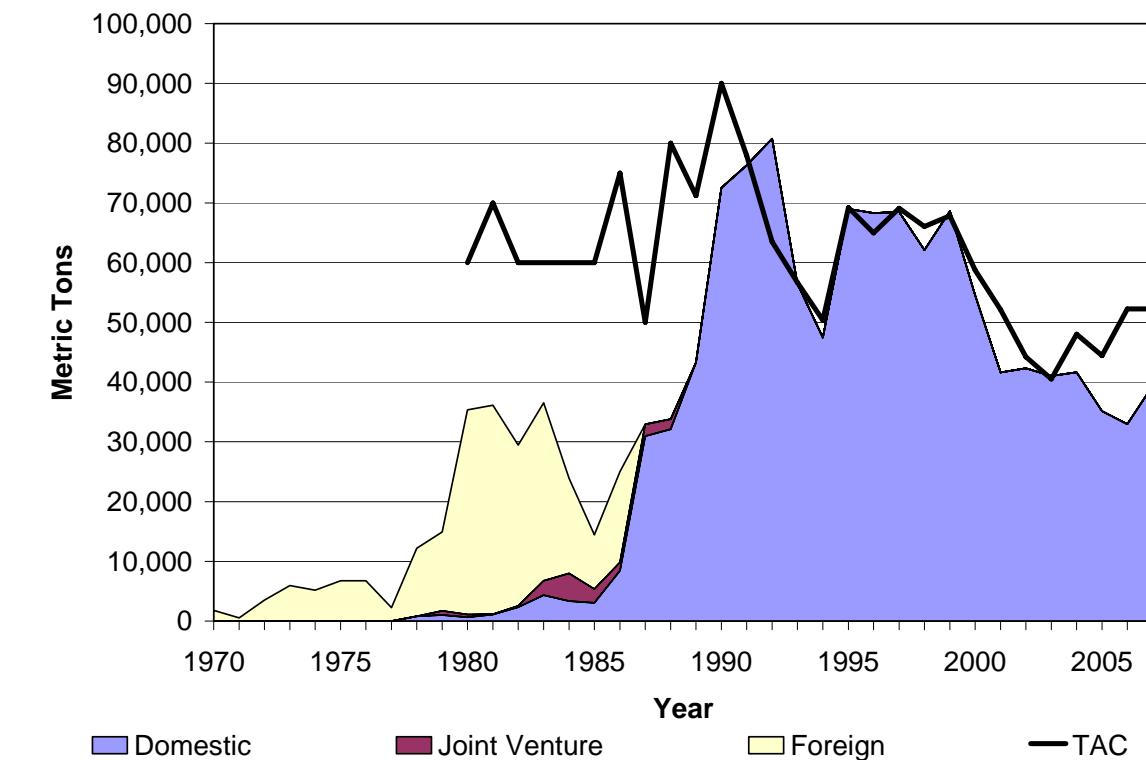
Since the inception of a state-managed pollock fishery in Prince William Sound in 1995, the GOA Plan Team has recommended the guideline harvest level (GHL) for the pollock fishery in Prince William Sound be deducted from the ABC for the western stock of pollock in the GOA in the Western/Central/West Yakutat Area. For the 2007 and 2008 pollock fisheries in Prince William Sound the state's GHL is 1,650 mt.

Primary products produced from the GOA pollock fishery are surimi, minced product, fillets, meal, oil and roe.

2.3.2 GOA Pacific cod

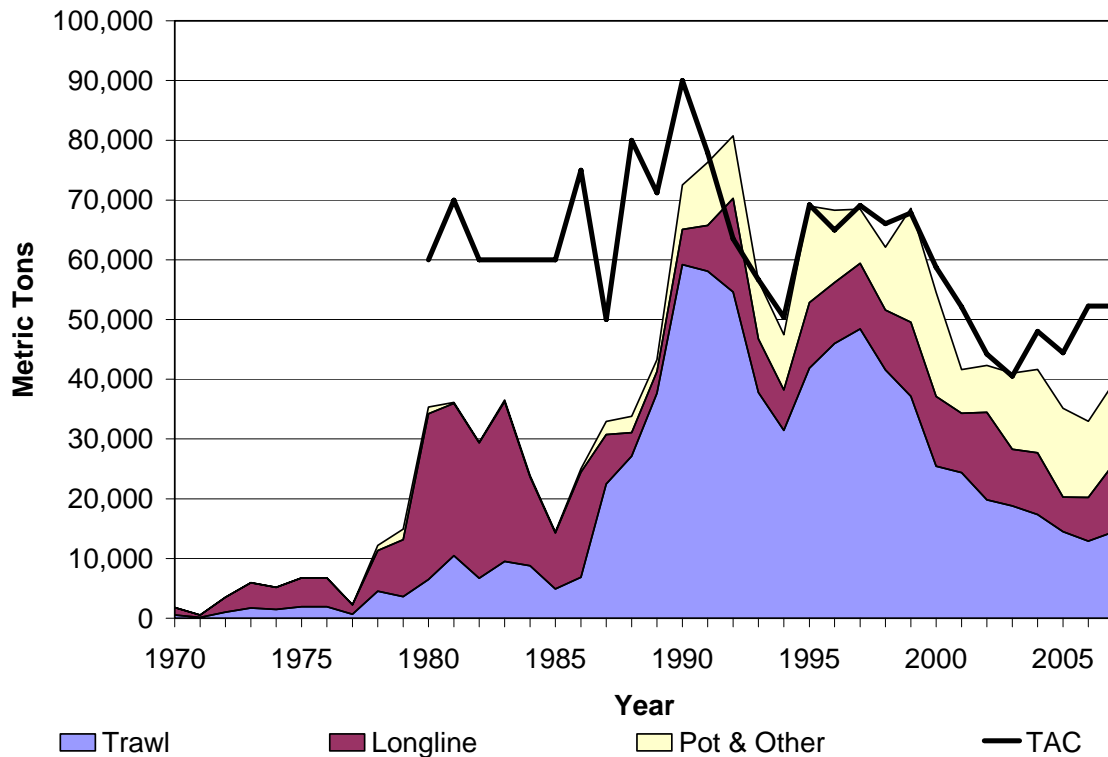
During the two decades prior to passage of the MFCMA in 1976, the fishery for Pacific cod in the GOA was small, averaging around 3,000 t per year. Most of the catch during this period was taken by the foreign fleet, whose catches of Pacific cod were usually incidental to directed fisheries for other species. By 1976, catches had increased to 6,800 t. The foreign fishery peaked in 1981 at a catch of nearly 35,000 t. A small joint venture fishery existed through 1988, averaging a catch of about 1,400 t per year. The domestic fishery increased steadily through 1986, then increased more than three-fold in 1987 as the foreign fishery was eliminated. Currently, Pacific cod is the second largest volume fishery in the GOA after pollock.

Figure 19. Historical Harvest and TAC in the Gulf of Alaska Pacific Cod Fishery, 1970 – 2007



Source: http://www.afsc.noaa.gov/refm/stocks/2006_assessments.htm

Figure 20. Historical Harvest and TAC in the Gulf of Alaska Pacific Cod Fishery by Gear, 1970 – 2007



Source: http://www.afsc.noaa.gov/refm/stocks/2006_assessments.htm

Three separate area TACs are identified for Pacific cod in the Western Gulf, Central Gulf, and Eastern Gulf management subareas. The recent TAC, total catch, and percentage of TAC harvested in the federal Pacific cod fisheries in the Western and Central GOA are summarized in Table 28. In 2005 and 2006, the Central and Western Gulf TACs were not fully harvested. In 2006, more than 5,000 mt of the Western Gulf TAC and more than 5,000 mt of the Central Gulf TAC were not harvested. These underages were the result of low harvests during the B season. In both 2005 and 2006, the B season closed in early October for the trawl sector when final halibut PSC apportionments were used, but the directed season remained open until December 31st for the fixed gear sectors. Vessels continued to fish for cod until the end of the year, but the TACs were not fully harvested.

Table 28. Harvest (mt), TAC (mt) and Percent of TAC Harvested in the Federal Pacific Cod Fishery in the Western and Central Gulf, 1995–2006

Year	Western Gulf			Central Gulf		
	Catch	Federal TAC	Percent of TAC harvested	Catch	Federal TAC	Percent of TAC harvested
1995	22,516	20,100	112.0	45,465	45,650	99.6
1996	19,823	18,850	105.2	47,589	42,900	110.9
1997	23,949	24,225	98.9	43,678	43,690	100.0
1998	19,817	23,170	85.5	41,436	41,720	99.3
1999	23,158	23,630	98	44,544	42,935	103.7
2000	21,867	20,625	106	32,188	34,080	94.4
2001	14,161	18,300	77.4	27,324	30,250	90.3
2002	17,168	16,849	101.9	25,058	24,790	101.1
2003	16,235	15,450	105.1	24,828	22,690	109.4
2004	15,554	16,957	91.7	27,464	27,116	101.3
2005	12,402	15,687	79.1	22,595	25,086	90.1
2006	14,742	20,141	73.2	23,011	28,405	81.0
2007	13,401	20,141	66.5	25,985	28,405	91.5

In addition to area allocations, GOA Pacific cod is allocated on the basis of processor component (inshore/offshore) and season; there is no explicit allocation among gears. The inshore component is allocated 90% of the TAC and the remainder is allocated to the offshore component. Within the Central and Western Regulatory Areas, 60% of the annual TAC is apportioned to the A season for hook-and-line, pot, and jig gear from January 1 through June 10, and for trawl gear from January 20 through June 10. Forty percent of the annual TAC is apportioned to the B season for hook-and-line, pot, and jig gear from September 1 through December 31, and for trawl gear from September 1 through November 1. The longline and trawl fisheries are also associated with a Pacific halibut mortality limit which sometimes constrains the magnitude and timing of harvests taken by these two gear types. Since 1997, a substantial fishery for Pacific cod has been conducted inside State of Alaska waters, mostly in the Western and Central Regulatory Areas. To accommodate the state-managed fishery, the federal TAC was set well below ABC in each of those years.

Presently, the Pacific cod stock is exploited by a multiple-gear fishery, including trawl, longline, pot, and jig components. Trawl gear has traditionally accounted for the largest single-gear share of the catch, although catches by pot gear have increased due, in part, by comparatively low halibut bycatch rates. The GOA Pacific cod fisheries have the largest number of participants of any Alaska groundfish fisheries. Participants in the 2006 fisheries included 187 hook-and-line, 144 pot and 62 trawl vessels. Competition for the GOA Pacific cod resource is high for a variety of reasons, including increased market value of cod products, rationalization of other fisheries in the BSAI and GOA, increased participation by fishermen displaced from other fisheries, a reduced federal TAC due to the state waters cod fishery, and Stellar Sea Lion mitigation measures including the A/B seasonal split of the GOA Pacific cod TAC.

Significant portions of Pacific cod harvests are processed in inshore processing plants and communities. Inshore plants include shore based plants that process groundfish, as well as floating processors moored or anchored near shore in protected bays and harbors. The most common primary

products produced from the GOA Pacific cod fishery are skinless boneless fillets, and for processors without fillet machinery headed and gutted fish. A wide variety of ancillary products may also be produced, including roe, milt, surimi, collars, stomachs, heads, fish meal and oil.

2.4 Alternatives Considered

2.4.1 Alternative 1: No action

Alternative 1 maintains the existing regulatory measures for GOA Pacific cod and pollock sideboard limits for non-exempt AFA catcher vessels. These sideboard limits are based on the retained catch of non-exempt AFA catcher vessels of each species from 1995 through 1997 divided by the TAC for that species over the same period. The ratio of 1995–1997 nonexempt AFA CV catch to 1995–1997 TAC is multiplied by the TAC available to catcher vessels in the year or season in which the harvest limit will be in effect.

2.4.2 Alternative 2: Vessel catch history consists of the years 2005 through 2007

Under Alternative 2, the GOA Pacific cod and pollock sideboard limits for listed non-exempt AFA catcher vessels would be based on the retained catch of non-exempt AFA catcher vessels of each species from 2005 through 2007 divided by the TAC for that species over the same period.

2.4.3 Alternative 3: Vessel catch history consists of the years 2001 through 2005

Under Alternative 3, the GOA Pacific cod and pollock sideboard limits for listed non-exempt AFA catcher vessels would be based on the retained catch of non-exempt AFA catcher vessels of each species from 2001 through 2005 divided by the TAC for that species over the same period.

2.4.4 Alternative 4: Prohibit directed fishing

Under Alternative 4, directed fishing by listed non-exempt AFA catcher vessels for GOA Pacific cod and pollock would be prohibited, where the term “directed fishing” means any fishing activity that results in the retention of an amount of a species or species group on board a vessel that is greater than the maximum retainable amount for that species or species group as calculated under §679.20.

2.4.5 Alternatives Considered but Eliminated From Further Review

The alternative of removing GOA sideboard limits was considered but eliminated from further review for the following reasons:

1) The alternative does not meet the stated purpose and need, which is to reduce the potential impacts to non-AFA fishermen resulting from participation by listed AFA catcher vessels in directed fisheries for GOA Pacific cod and pollock. Any alternative that does not meet the underlying need is not a “reasonable” alternative under the National Environmental Policy Act; therefore, it does not have to be analyzed and can be eliminated from further consideration.

2) In addition to not furthering the Council’s stated purpose and need, this alternative would not meet the requirement of Sec. 211(c)(1) of the AFA, which states that the North Pacific Council shall recommend for approval by the Secretary conservation and management measures to—(A) prevent the catcher vessels eligible under subsections (a), (b), and (c) of section 208 from exceeding in the aggregate the traditional harvest levels of such vessels in other fisheries under the authority of the North Pacific Council as a result of fishery cooperatives in the directed pollock fishery; and (B) protect processors not eligible to participate in the directed pollock fishery from adverse effects as a result of this Act or fishery cooperatives in the directed pollock fishery.

The removal of GOA sideboard limits would allow AFA catcher vessels to exceed in the aggregate the traditional harvest levels of such vessels in non-BSAI pollock fisheries under the authority of the North Pacific Council.

Sec. 213(c)(1) of the AFA provides the Council with the authority to recommend management measures to supersede provisions of the AFA, except for sections 206 and 208, for conservation purposes or to mitigate adverse effects in fisheries or on owners of fewer than three vessels in the directed pollock fishery caused by this title or fishery cooperatives in the directed pollock fishery, provided such measures take into account all factors affecting the fisheries and are imposed fairly and equitably to the extent practicable among and within the sectors in the directed pollock fishery.

The Council believed that the exemption of certain AFA catcher vessels from GOA sideboard limits was warranted to mitigate adverse economic effects on owners of fewer than three vessels in the directed pollock fishery given that the exempt vessels are primarily owned by independent fishermen who own fewer than three vessels in the directed pollock fishery. In contrast, there is no information supporting the supposition that removing GOA sideboard limits would mitigate adverse economic effects on owners of fewer than three vessels in the directed pollock fishery.

2.5 Analysis of the Alternatives

This analysis addresses the likely attributable economic and welfare outcomes of each of the proposed alternatives.

2.5.1 Alternative 1

Alternative 1 is the No-Action Alternative (status quo). This alternative is the baseline alternative against which the costs and benefits of each action alternative are compared.

Table 30 through Table 34 summarize the GOA pollock and Pacific cod TACs, sideboards and sideboard harvest by management area under Alternative 1 during the 2001-2007 period. These baseline conditions were calculated by applying the status quo sideboard percentage to the catch reported in the analysis data on a season by season and year by year basis. NOAA Fisheries policy regarding the protection of confidential data precludes the public disclosure of information collected by NOAA Fisheries on the pollock harvest of non-exempt AFA catcher vessels in Area 640. However, the pollock harvest by non-exempt AFA catcher vessels in Area 640 during the 2001-2007 period was low.

For comparison purposes, data in the summary tables for the GOA pollock harvest were adjusted to eliminate seasonal overages that resulted in an annual pollock harvest that exceeded the cumulative sideboard amount. As described in Section 2.2.2.2, the annual pollock harvest exceeded the cumulative sideboard amount in Area 620 in 2002 and 2007. In order to compare the action alternatives to the baseline conditions in a way that does not overstate the projected impacts of changes to the sideboard limits, the baseline harvest of pollock in Area 620 by non-exempt AFA catcher vessels was adjusted downward by the amounts shown in Table 29.

Table 29. Adjustments to the Baseline Conditions for Pollock Harvest by Non-Exempt AFA Catcher Vessels in Area 620

Pollock in Area 620	A	B	C	D	Total
Actual Non-Exempt AFA CV Catch 2001 - 2007 (mt)	2,447	14,051	2,105	947	19,550
Baseline Non-Exempt AFA CV Catch 2001 - 2007 (mt)	2,447	13,222	1,663	747	18,080
Difference between Actual and Baseline Catches (mt)	0	829	441	199	1,470

Note: Through the 2002 B season the non-exempt AFA CV harvest was less than the pollock sideboard. But the harvest of 1,400 mt during the 2002 C season brought the cumulative total for the first three seasons to 3,316 mt—an amount that exceeded the cumulative sideboard of 2,874 mt by 441 mt. To adjust for this overage the actual catch in the C season was decreased by 441 mt to 958 mt to create the “baseline” harvest for the 2002 C season. The harvest of 614 mt during the 2002 D season brought the actual annual cumulative total to 3,929 mt; however, because the C season harvest was decreased to compensate for the overage, the adjusted annual cumulative total is 3,488 mt (3,929 – 441). This adjusted annual cumulative total exceeds the annual cumulative sideboard limit of 3,289 mt by 199 mt. Thus an additional 199 mt was deducted from the D season harvest so that the “baseline” cumulative total equals the annual cumulative sideboard limit. This process was repeated for each year, and the final adjusted harvest for each season was summed to create the “baseline” non-exempt AFA CV harvest of pollock in Area 620.

Table 30. Summary of Area 610 Pollock Sideboard and Harvest under Alternative 1 (Baseline Conditions), 2001-1007

	A	B	C	D	Total
Sum of Seasonal TAC (mt)	31,020	27,168	58,563	56,731	173,482
Cumulative TAC (mt)	31,020	58,188	116,751	173,482	173,482
Non-Exempt AFA CV Catch (mt)	5,227	2,446	10,173	13,767	31,612
Cumulative Non-Exempt AFA CV Catch (mt)	5,227	7,673	17,846	31,612	31,612
Sideboard Amount (mt) = 61.123 % of TAC	18,960	16,606	35,795	34,675	106,037
Cumulative Sideboard Amount (mt) = 61.123 % of TAC	18,960	35,566	71,361	106,037	106,037
Projected Percent of Cumulative Sideboard Harvested (%)	27.6	21.6	25.0	29.8	29.8

Table 31. Summary of Area 620 Pollock Sideboard and Harvest under Alternative 1 (Baseline Conditions), 2001-1007

	A	B	C	D	Total
Sum of Seasonal TAC (mt)	64,900	68,470	25,220	24,138	182,728
Cumulative TAC (mt)	64,900	133,370	158,590	182,728	182,728
Non-Exempt AFA CV Catch (mt)	2,447	13,222	1,663	747	18,080
Cumulative Non-Exempt AFA CV Catch (mt)	2,447	15,669	17,333	18,080	18,080
Sideboard Amount (mt) = 14.271 % of TAC	9,262	9,771	3,599	3,445	26,076
Cumulative Sideboard Amount (mt) = 14.271 % of TAC	9,262	19,033	22,632	26,076	26,076
Projected Percent of Cumulative Sideboard Harvested (%)	26.4	82.3	76.6	69.3	69.3

Table 32. Summary of Area 630 Pollock Sideboard and Harvest under Alternative 1 (Baseline Conditions), 2001-1007

	A	B	C	D	Total
Sum of Seasonal TAC (mt)	26,003	13,192	38,124	36,689	114,008
Cumulative TAC (mt)	26,003	39,195	77,319	114,008	114,008
Non-Exempt AFA CV Catch (mt)	2,180	819	3,393	3,475	9,867
Cumulative Non-Exempt AFA CV Catch (mt)	2,180	2,999	6,392	9,867	9,867
Sideboard Amount (mt) = 24.375 % of TAC	6,338	3,216	9,293	8,943	27,790
Cumulative Sideboard Amount (mt) = 24.375 % of TAC	6,338	9,554	18,847	27,790	27,790
Projected Percent of Cumulative Sideboard Harvested (%)	34.4	31.4	33.9	35.5	35.5

Table 33. Summary of Western Gulf Pacific Cod Sideboard and Harvest under Alternative 1 (Baseline Conditions), 2001-1007

	A	B	Total
Sum of Seasonal TAC (mt)	66,703	44,469	111,172
Cumulative TAC (mt)	66,703	111,172	111,172
Non-Exempt AFA CV Catch (mt)	616	158	774
Cumulative Non-Exempt AFA CV Catch (mt)	616	774	774
Sideboard Amount (mt) = 14.230 % of TAC	9,492	6,328	15,820
Cumulative Sideboard Amount (mt) = 14.230 % of TAC	9,492	15,820	15,820
Percent of Cumulative Sideboard Harvested (%)	6.5	4.9	4.9

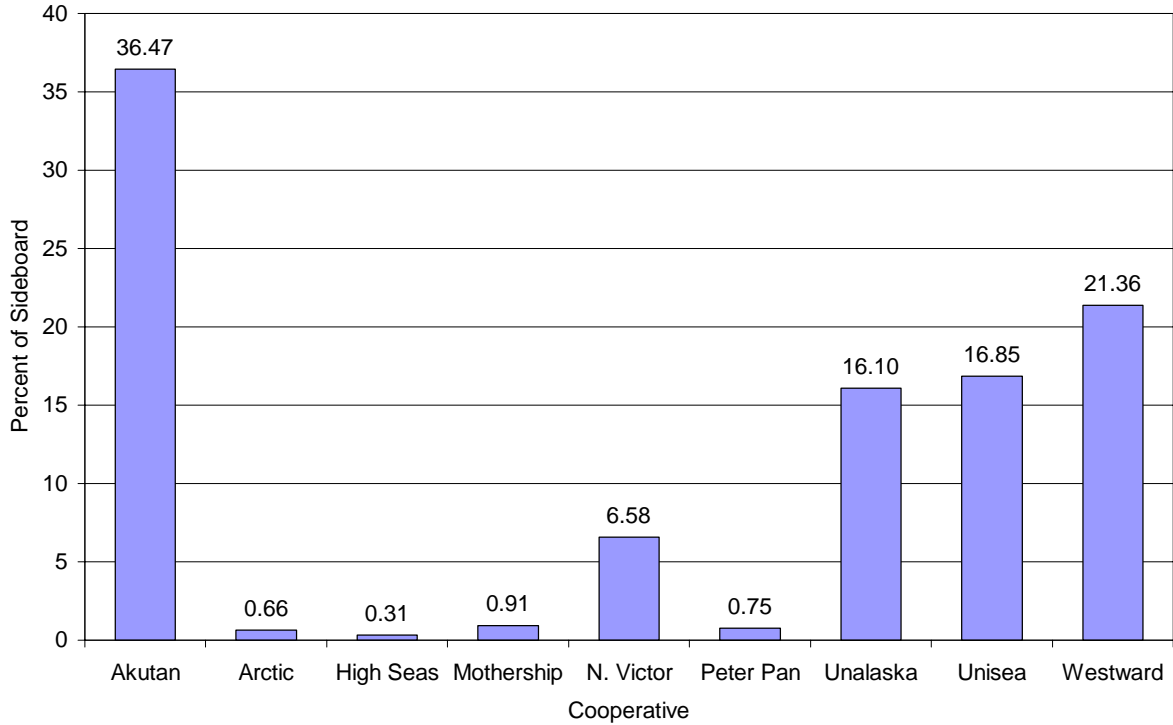
Table 34. Summary of Central Gulf Pacific Cod Sideboard and Harvest under Alternative 1 (Baseline Conditions), 2001-1007

	A	B	Total
Sum of Seasonal TAC (mt)	66,703	67,316	134,019
Cumulative TAC (mt)	66,703	134,019	134,019
Non-Exempt AFA CV Catch (mt)	2,895	1,041	3,936
Cumulative Non-Exempt AFA CV Catch (mt)	2,895	3,936	3,936
Sideboard Amount (mt) = 7.220 % of TAC	4,816	4,860	9,676
Cumulative Sideboard Amount (mt) = 7.220 % of TAC	4,816	9,676	9,676
Percent of Cumulative Sideboard Harvested (%)	60.1	40.7	40.7

As discussed in Section 2.2.1, NOAA Fisheries allocates the catcher vessel sideboard caps in the aggregate to the non-exempt AFA CV fleet, not by individual cooperatives. In turn, the Intercoop Agreement manages the initial distribution, and re-distribution via intercoop transfers, of the aggregate sideboard caps among the nine AFA catcher vessel cooperatives based on their members catch history. Figure 21 through Figure 26 show the status quo distribution of the GOA pollock and

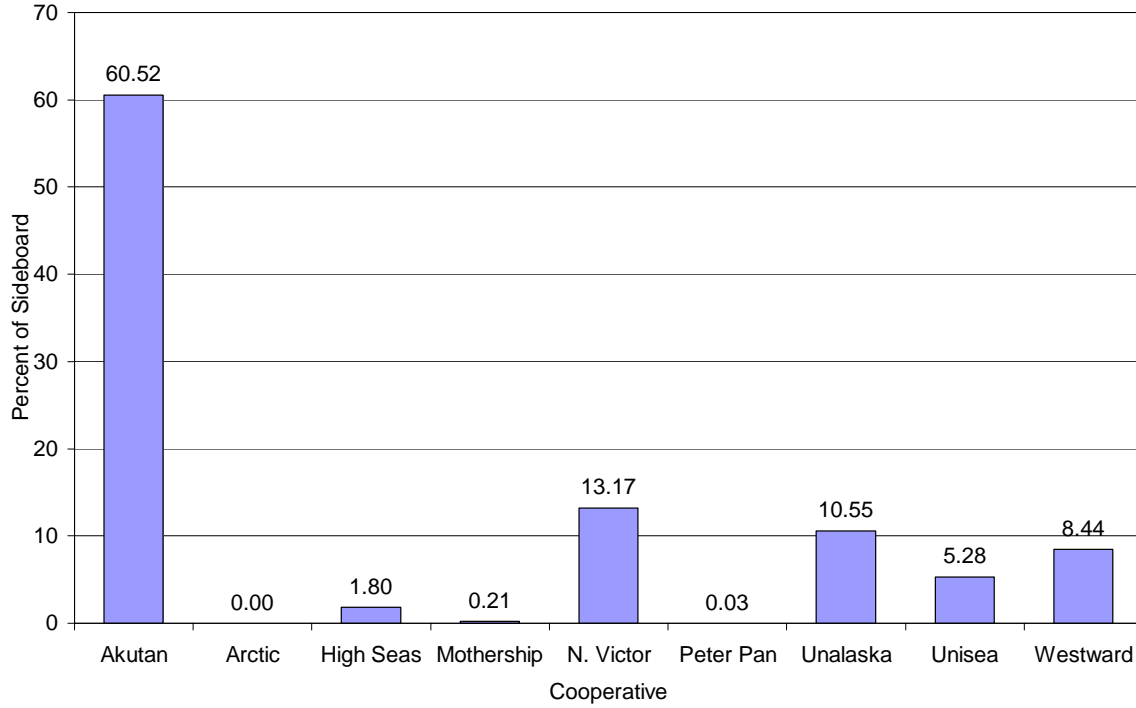
Pacific cod sideboard limits among the AFA cooperatives as described in the American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council. Data were unavailable for the allocation of the pollock sideboard limits in Area 640 and Pacific cod sideboard limits in the Western Gulf.

Figure 21. Area 610 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 1 (Baseline Conditions)



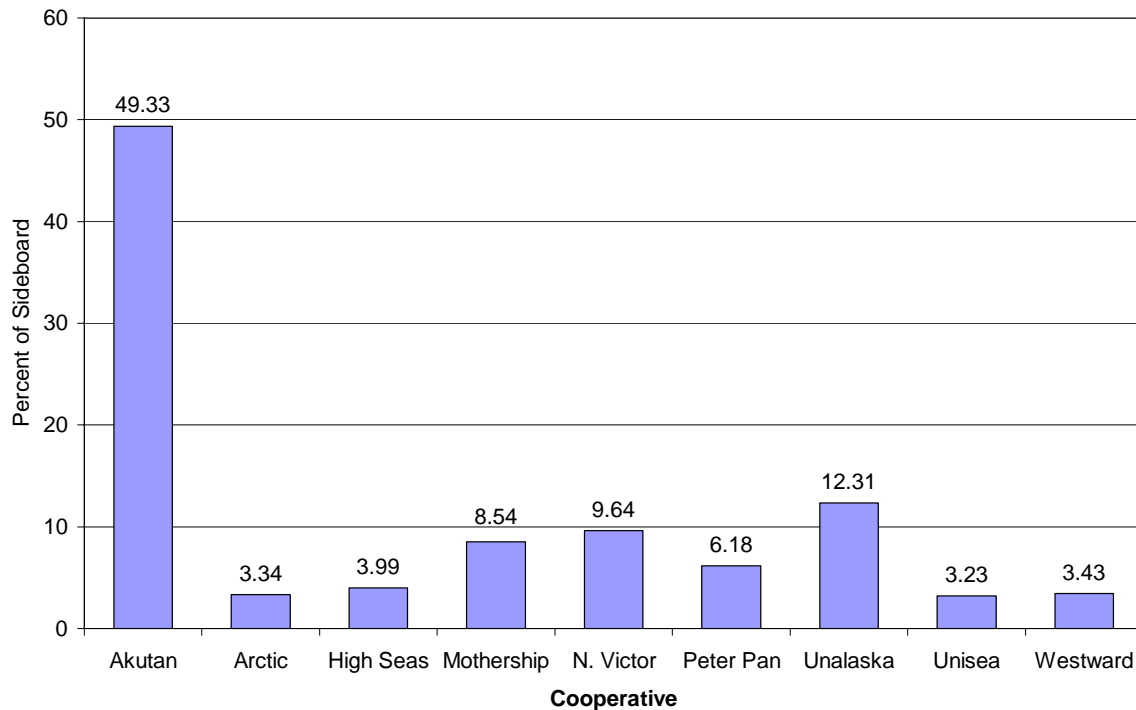
Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Figure 22. Area 620 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 1 (Baseline Conditions)



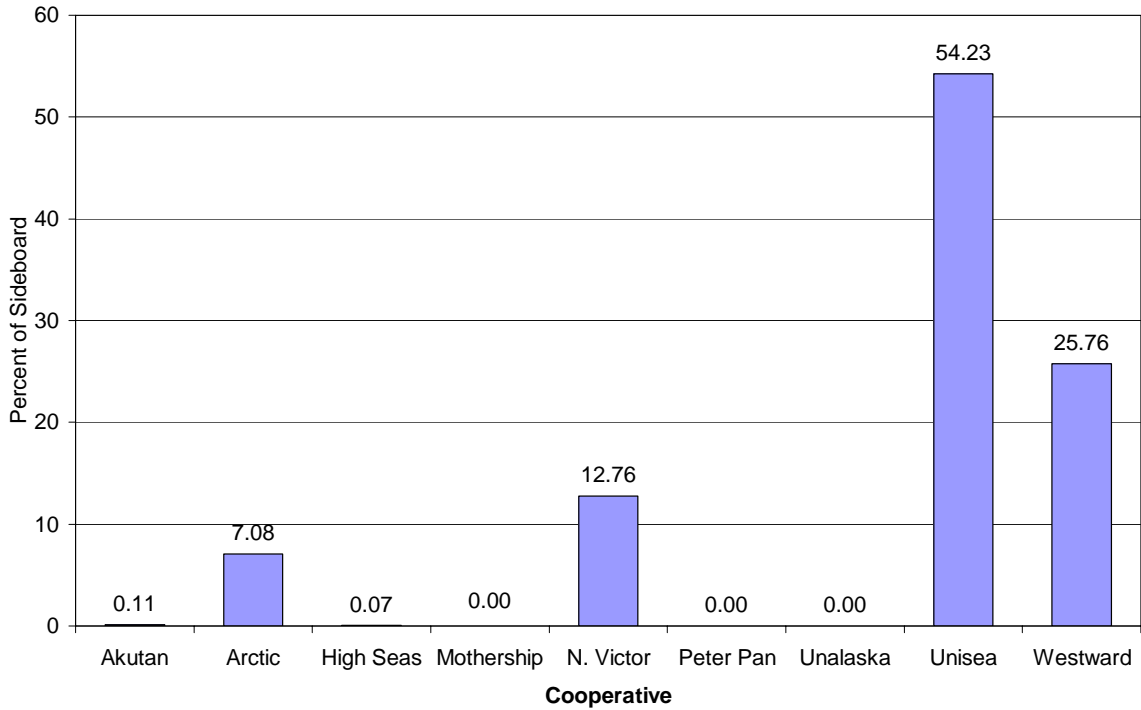
Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Figure 23. Area 630 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 1 (Baseline Conditions)



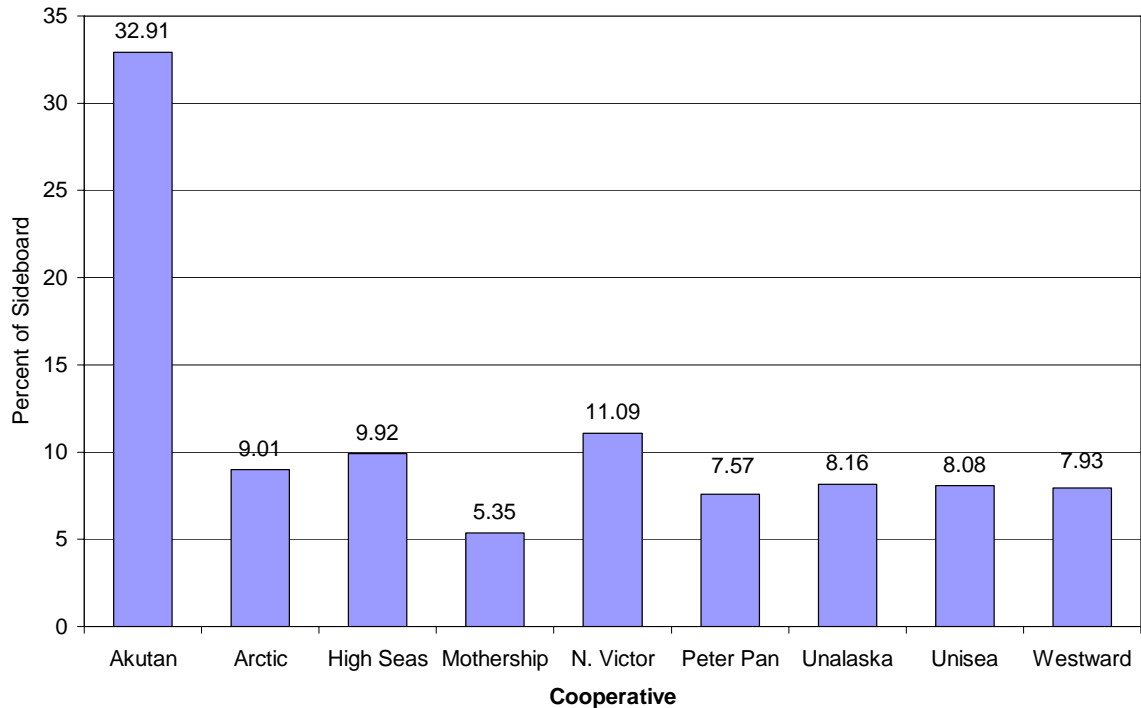
Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Figure 24. Area 640 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 1 (Baseline Conditions)



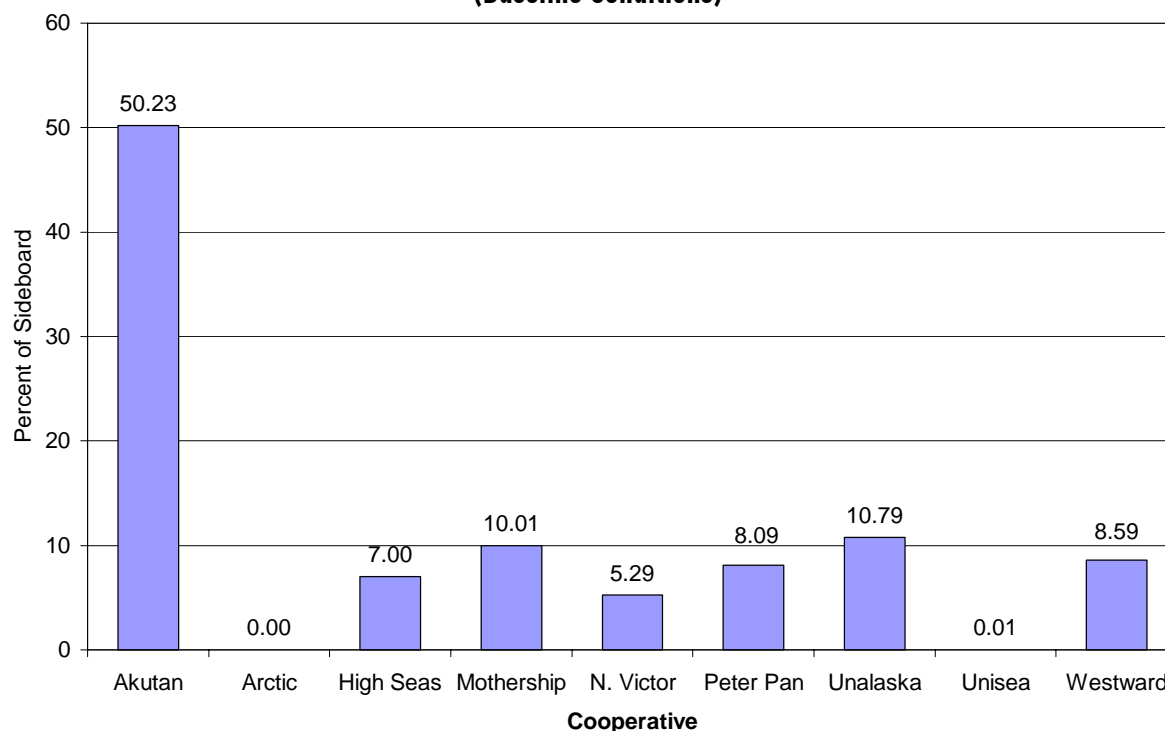
Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Figure 25. Western Gulf Pacific Cod Sideboard Distribution among AFA Cooperatives under Alternative 1 (Baseline Conditions)



Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

Figure 26. Central Gulf Pacific Cod Sideboard Distribution among AFA Cooperatives under Alternative 1 (Baseline Conditions)



Source: American Fisheries Act Catcher Vessel Intercoop Annual Reports to the North Pacific Fishery Management Council

2.5.2 Alternative 2

Alternatives 2 would allow non-exempt AFA catcher vessels to continue to conduct directed fisheries for GOA pollock and Pacific cod, though at reduced levels. Table 35 through Table 39 summarize the GOA pollock and Pacific cod sideboards and sideboard harvest by management area if Alternative 2 had been in effect during the 2001-2007 period instead of the No-Action Alternative. To comply with the annual total sideboards for pollock and Pacific cod under Alternative 2, overall pollock harvest would have had to be reduced by 66.4 percent (Area 640) to 17.3 percent (Area 630), while overall Pacific cod harvest would have had to be reduced by 47.7 percent (Western Gulf) to 41.1 percent (Central Gulf). Across all management areas, the total GOA pollock harvest by the non-exempt AFA CV fleet would have been reduced by 14,677 mt if Alternative 2 had been in effect during the 2001-2007 period instead of the No-Action Alternative, while the total GOA Pacific cod harvest by the non-exempt AFA CV fleet would have been reduced by 1,985 mt.

In addition, the seasonal harvest reductions that would have occurred if Alternative 2 had been in effect would have altered seasonal fishing patterns of non-exempt AFA catcher vessels participating in directed GOA pollock and Pacific cod fisheries.

Table 35. Summary of Area 610 Pollock Sideboard and Harvest under Alternative 2

	A	B	C	D	Total
Baseline Conditions 2001 - 2007					
Seasonal TAC (mt)	31,020	27,168	58,563	56,731	173,482
Cumulative TAC (mt)	31,020	58,188	116,751	173,482	173,482
Non-Exempt AFA CV Catch (mt)	5,227	2,446	10,173	13,767	31,612
Cumulative Non-Exempt AFA CV Catch (mt)	5,227	7,673	17,846	31,612	31,612
Projected Conditions under Alternative 2 with Compliance to Sideboards					
Sideboard Amount (mt) = 13.708 % of TAC	4,252	3,724	8,028	7,776	23,780
Cumulative Sideboard Amount (mt) = 13.708 % of TAC	4,252	7,976	16,004	23,780	23,780
Projected Non-Exempt AFA CV Catch (mt)	3,222	1,946	7,933	9,070	22,171
Projected Cumulative Non-Exempt AFA CV Catch (mt)	3,222	5,168	13,101	22,171	22,171
Projected Percent of Cumulative Sideboard Harvested (%)	75.8	64.8	81.9	93.2	93.2
Difference between Projected and Baseline Conditions					
Harvest Reductions to Comply with Sideboard (mt)	2,005	499	2,240	4,696	9,441
Harvest Reductions to Comply with Sideboard (% of Catch)	38.4	20.4	22.0	34.1	29.9

Table 36. Summary of Area 620 Pollock Sideboard and Harvest under Alternative 2

	A	B	C	D	Total
Baseline Conditions 2001 - 2007					
Sum of Seasonal TAC (mt)	64,900	68,470	25,220	24,138	182,728
Cumulative TAC (mt)	64,900	133,370	158,590	182,728	182,728
Non-Exempt AFA CV Catch (mt)	2,447	13,222	1,663	747	18,080
Cumulative Non-Exempt AFA CV Catch (mt)	2,447	15,669	17,333	18,080	18,080
Projected Conditions under Alternative 2 with Compliance to Sideboards					
Sideboard Amount (mt) = 10.206 % of TAC	6,623	6,988	2,574	2,463	18,648
Cumulative Sideboard Amount (mt) = 10.206 % of TAC	6,623	13,611	16,185	18,648	18,648
Projected Non-Exempt AFA CV Catch (mt)	2,447	10,784	1,001	629	14,862
Projected Cumulative Non-Exempt AFA CV Catch (mt)	2,447	13,231	14,232	14,862	14,862
Projected Percent of Cumulative Sideboard Harvested (%)	36.9	97.2	87.9	79.7	79.7
Difference between Projected and Baseline Conditions					
Harvest Reductions to Comply with Sideboard (mt)	0	2,438	662	118	3,218
Harvest Reductions to Comply with Sideboard (% of Catch)	0.0	18.4	39.8	15.8	17.8

Table 37. Summary of Area 630 Pollock Sideboard and Harvest under Alternative 2

	A	B	C	D	Total
Baseline Conditions 2001 – 2007					
Sum of Seasonal TAC (mt)	26,003	13,192	38,124	36,689	114,008
Cumulative TAC (mt)	26,003	39,195	77,319	114,008	114,008
Non-Exempt AFA CV Catch (mt)	2,180	819	3,393	3,475	9,867
Cumulative Non-Exempt AFA CV Catch (mt)	2,180	2,999	6,392	9,867	9,867
Projected Conditions under Alternative 2 with Compliance to Sideboards					
Sideboard Amount (mt) = 8.830 % of TAC	2,296	1,165	3,366	3,240	10,067
Cumulative Sideboard Amount (mt) = 8.830 % of TAC	2,296	3,461	6,827	10,067	10,067
Projected Non-Exempt AFA CV Catch (mt)	1,410	814	2,898	3,037	8,159
Projected Cumulative Non-Exempt AFA CV Catch (mt)	1,410	2,225	5,122	8,159	8,159
Projected Percent of Cumulative Sideboard Harvested (%)	61.4	64.3	75.0	81.1	81.1
Difference between Projected and Baseline Conditions					
Harvest Reductions to Comply with Sideboard (mt)	770	4	495	438	1,708
Harvest Reductions to Comply with Sideboard (% of Catch)	35.3	0.5	14.6	12.6	17.3

Table 38. Summary of Western Gulf Pacific Cod Sideboard and Harvest under Alternative 2

	A	B	Total
Baseline Conditions 2001 – 2007			
Sum of Seasonal TAC (mt)	66,703	44,469	111,172
Cumulative TAC (mt)	66,703	111,172	111,172
Non-Exempt AFA CV Catch (mt)	616	158	774
Cumulative Non-Exempt AFA CV Catch (mt)	616	774	774
Projected Conditions under Alternative 2 with Compliance to Sideboards			
Sideboard Amount (mt) = 0.554 % of TAC	370	246	616
Cumulative Sideboard Amount (mt) = 0.554 % of TAC	370	616	616
Projected Non-Exempt AFA CV Catch (mt)	353	52	405
Projected Cumulative Non-Exempt AFA CV Catch (mt)	353	405	405
Projected Percent of Cumulative Sideboard Harvested (%)	95.6	65.7	65.7
Difference between Projected and Baseline Conditions			
Harvest Reductions to Comply with Sideboard (mt)	263	106	369
Harvest Reductions to Comply with Sideboard (% of Catch)	42.7	67.3	47.7

Table 39. Summary of Central Gulf Pacific Cod Sideboard and Harvest under Alternative 2

	A	B	Total
Baseline Conditions 2001 – 2007			
Sum of Seasonal TAC (mt)	66,703	67,316	134,019
Cumulative TAC (mt)	66,703	134,019	134,019
Non-Exempt AFA CV Catch (mt)	2,895	1,041	3,936
Cumulative Non-Exempt AFA CV Catch (mt)	2,895	3,936	3,936
Projected Conditions under Alternative 2 with Compliance to Sideboards			
Sideboard Amount (mt) = 2.191 % of TAC	1,462	1,475	2,936
Cumulative Sideboard Amount (mt) = 2.191 % of TAC	1,462	2,936	2,936
Projected Non-Exempt AFA CV Catch (mt)	1,462	859	2,320
Projected Cumulative Non-Exempt AFA CV Catch (mt)	1,462	2,320	2,320
Projected Percent of Cumulative Sideboard Harvested (%)	100.0	79.0	79.0
Difference between Projected and Baseline Conditions			
Harvest Reductions to Comply with Sideboard (mt)	1,433	183	1,616
Harvest Reductions to Comply with Sideboard (% of Catch)	49.5	17.5	41.1

In addition to reducing the amount of GOA pollock and Pacific cod available for harvest by the non-exempt AFA CV fleet as a whole, Alternative 2 could substantially change the distribution of sideboard limits among AFA cooperatives relative to the No-Action Alternative. Figure 27 through Figure 32 compares the distribution of the GOA pollock and Pacific cod sideboard limits among the AFA cooperatives that occurred under Alternative 1 during the 2001-2007 period with the projected distribution under Alternative 2.

Figure 27. Area 610 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 2

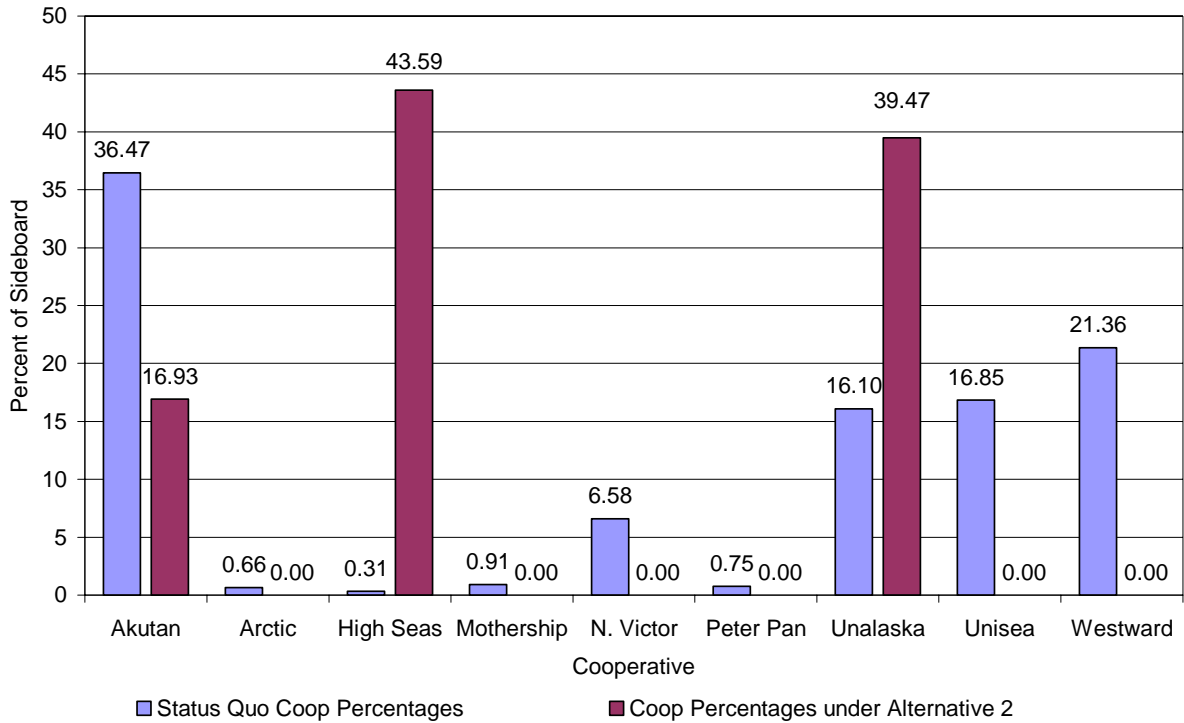


Figure 28. Area 620 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 2

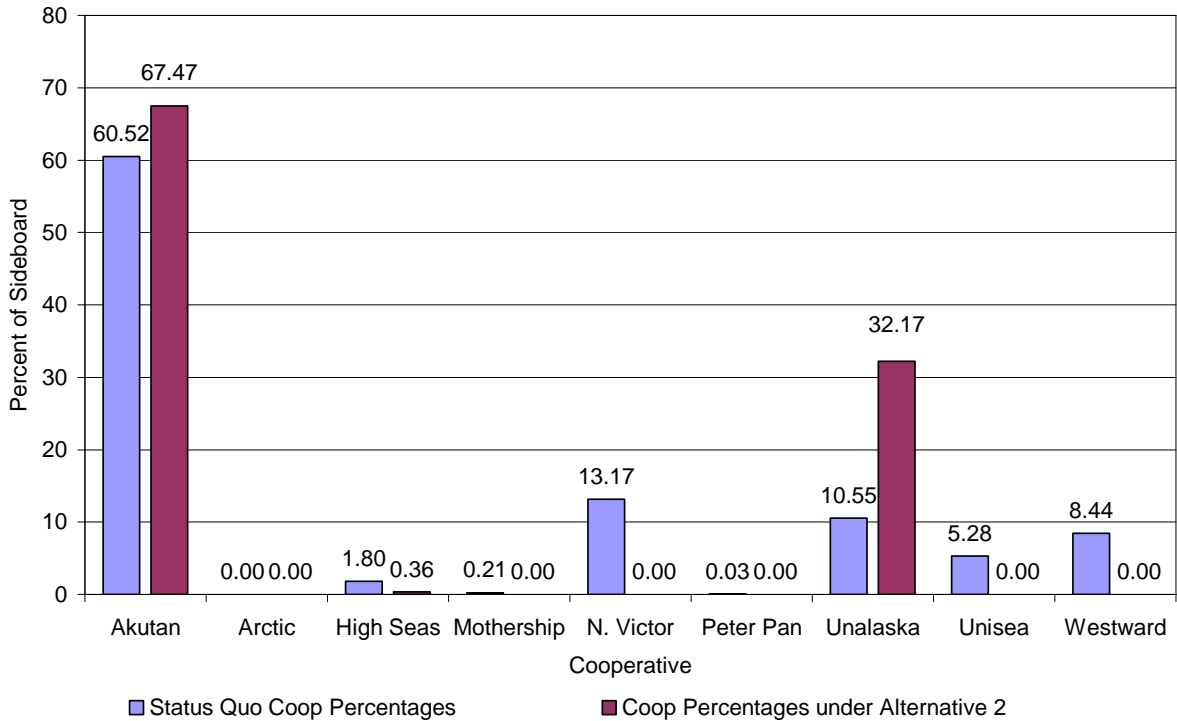


Figure 29. Area 630 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 2

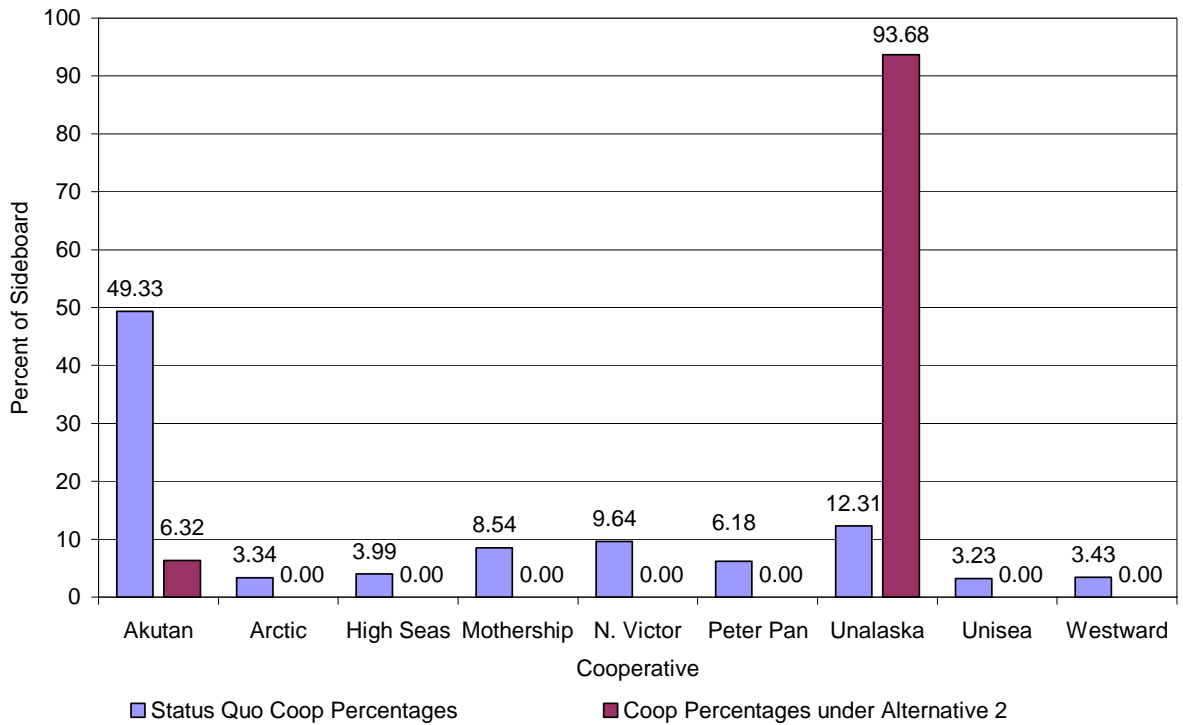


Figure 30. Area 640 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 2

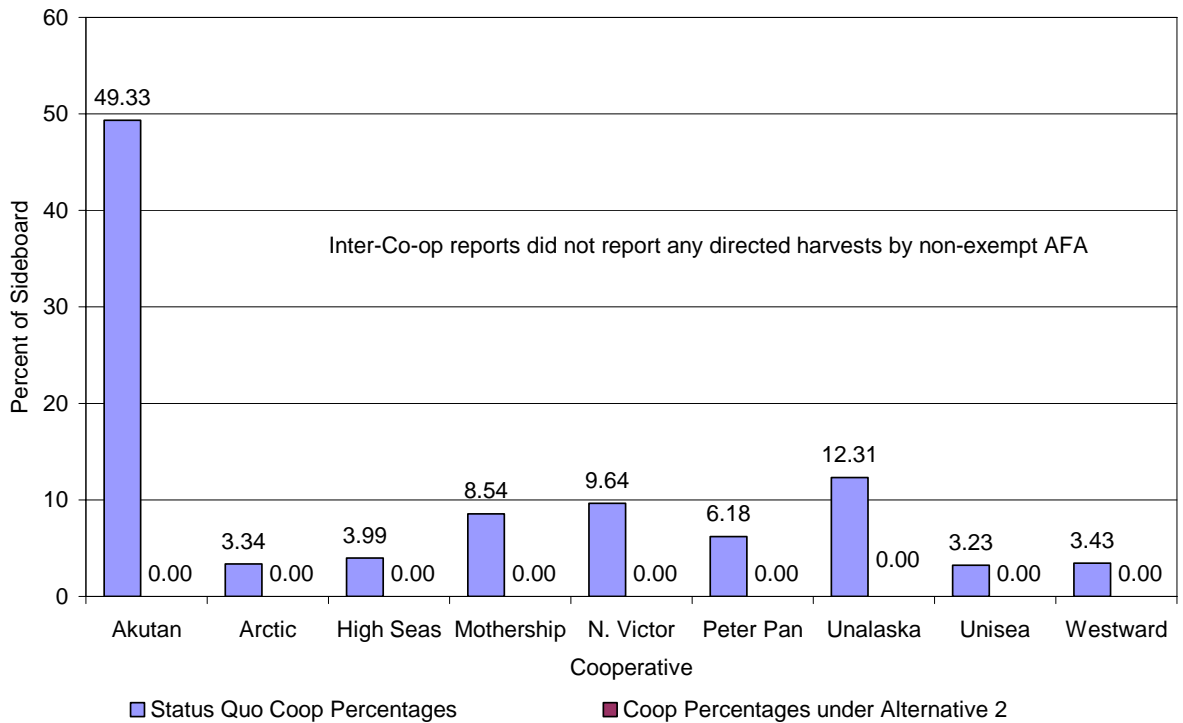


Figure 31. Western Gulf Pacific Cod Sideboard Distribution among AFA Cooperatives under Alternative 2

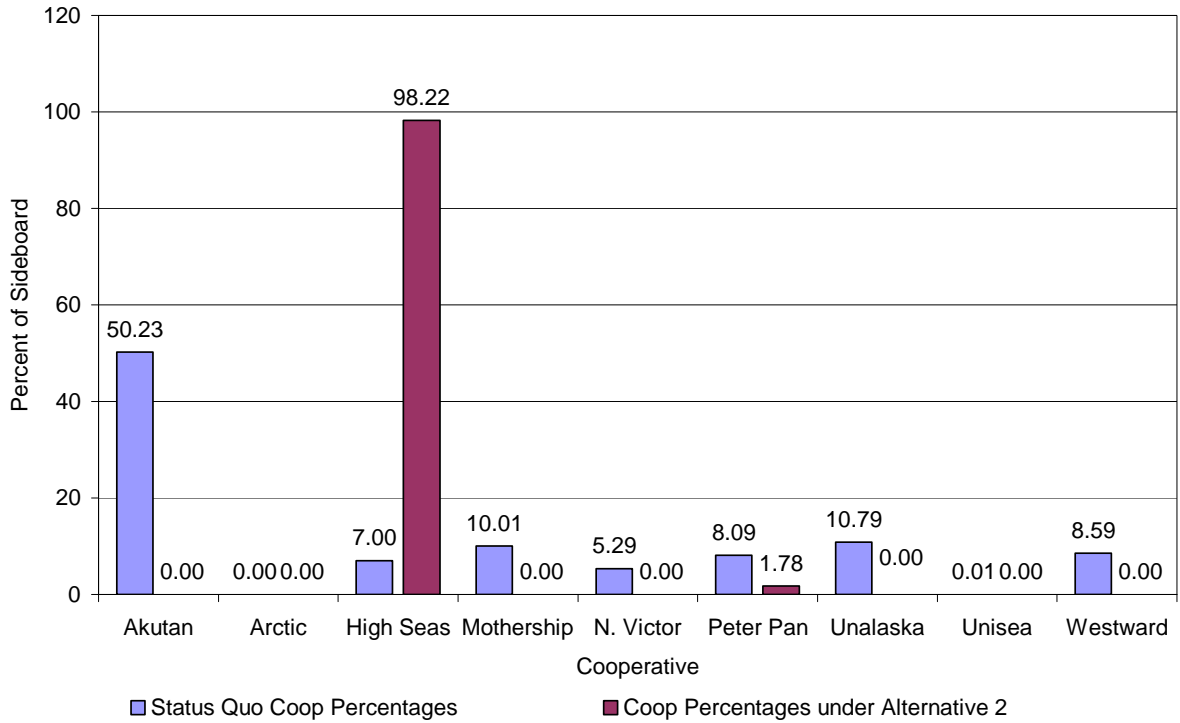
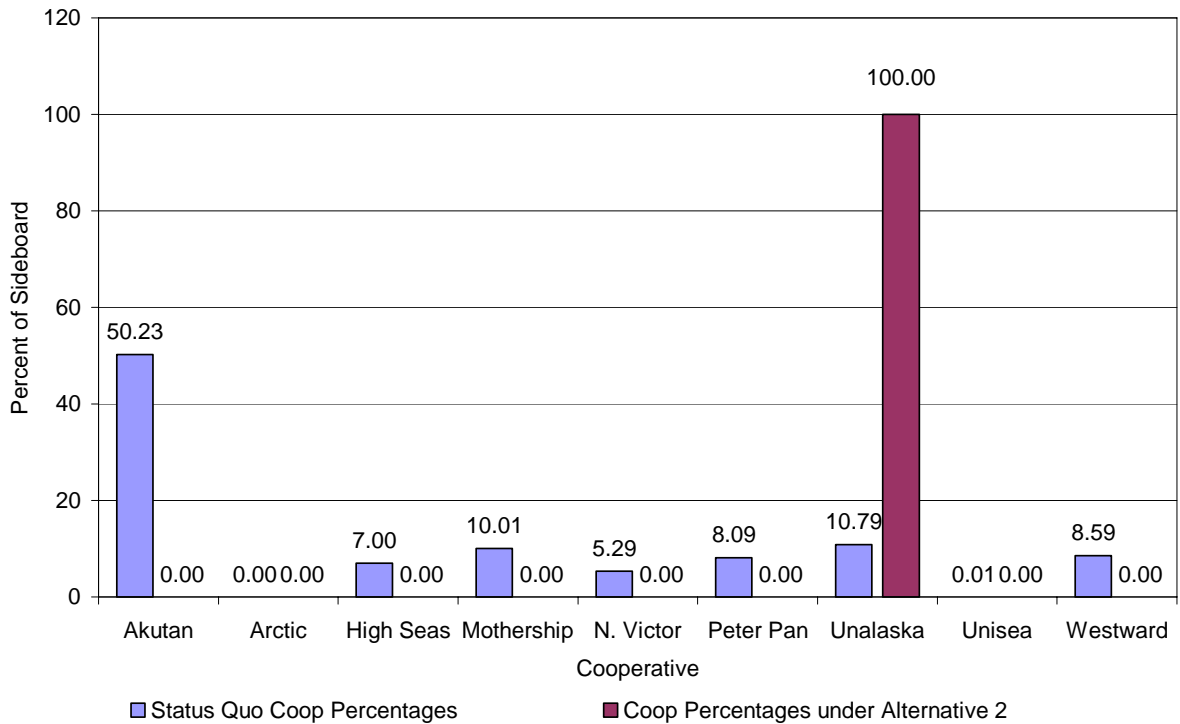


Figure 32. Central Gulf Pacific Cod Sideboard Distribution among AFA Cooperatives under Alternative 2



2.5.3 Alternative 3

Alternatives 3 would allow non-exempt AFA catcher vessels to continue to conduct directed fisheries for GOA pollock and Pacific cod, though at reduced levels. Table 40 through Table 44 summarize the GOA pollock and Pacific sideboards and sideboard harvest by management area if Alternative 3 had been in effect during the 2001-2007 period instead of the No-Action Alternative. To comply with the annual total sideboards for pollock and Pacific cod under Alternative 3, overall pollock harvest would have had to be reduced by 46.3 percent (Area 640) to 7.5 percent (Area 610), while overall Pacific cod harvest would have had to be reduced by 36.6 percent (Western Gulf) to 33.2 percent (Central Gulf). Across all management areas, the total GOA pollock harvest by the non-exempt AFA CV fleet would have been reduced by 7,431 mt if Alternative 3 had been in effect during the 2001-2007 period instead of the No-Action Alternative, while the total GOA Pacific cod harvest by the non-exempt AFA CV fleet would have been reduced by 1,589 mt.

In addition, the seasonal harvest reductions that would have occurred if Alternative 3 had been in effect would have altered seasonal fishing patterns of non-exempt AFA catcher vessels participating in directed GOA pollock and Pacific cod fisheries.

Table 40. Summary of Area 610 Pollock Sideboard and Harvest under Alternative 3

	A	B	C	D	Total
Baseline Conditions 2001 – 2007					
Seasonal TAC (mt)	31,020	27,168	58,563	56,731	173,482
Cumulative TAC (mt)	31,020	58,188	116,751	173,482	173,482
Non-Exempt AFA CV Catch (mt)	5,227	2,446	10,173	13,767	31,612
Cumulative Non-Exempt AFA CV Catch (mt)	5,227	7,673	17,846	31,612	31,612
Projected Conditions under Alternative 3 with Compliance to Sideboards					
Sideboard Amount (mt) = 20.997 % of TAC	6,513	5,705	12,297	11,912	36,426
Cumulative Sideboard Amount (mt) = 20.997 % of TAC	6,513	12,218	24,515	36,426	36,426
Projected Non-Exempt AFA CV Catch (mt)	4,309	2,412	10,140	12,370	29,230
Projected Cumulative Non-Exempt AFA CV Catch (mt)	4,309	6,721	16,860	29,230	29,230
Projected Percent of Cumulative Sideboard Harvested (%)	66.2	55.0	68.8	80.2	80.2
Difference between Projected and Baseline Conditions					
Harvest Reductions to Comply with Sideboard (mt)	918	34	33	1,397	2,382
Harvest Reductions to Comply with Sideboard (% of Catch)	17.6	1.4	0.3	10.1	7.5

Table 41. Summary of Area 620 Pollock Sideboard and Harvest under Alternative 3

	A	B	C	D	Total
Baseline Conditions 2001 - 2007					
Sum of Seasonal TAC (mt)	64,900	68,470	25,220	24,138	182,728
Cumulative TAC (mt)	64,900	133,370	158,590	182,728	182,728
Non-Exempt AFA CV Catch (mt)	2,447	13,222	1,663	747	18,080
Cumulative Non-Exempt AFA CV Catch (mt)	2,447	15,669	17,333	18,080	18,080
Projected Conditions under Alternative 3 with Compliance to Sideboards					
Sideboard Amount (mt) = 10.197 % of TAC	6,618	6,982	2,572	2,461	18,633
Cumulative Sideboard Amount (mt) = 10.197 % of TAC	6,618	13,600	16,171	18,633	18,633
Projected Non-Exempt AFA CV Catch (mt)	2,447	10,776	1,001	629	14,853
Projected Cumulative Non-Exempt AFA CV Catch (mt)	2,447	13,223	14,225	14,853	14,853
Projected Percent of Cumulative Sideboard Harvested (%)	37.0	97.2	88.0	79.7	79.7
Difference between Projected and Baseline Conditions					
Harvest Reductions to Comply with Sideboard (mt)	0	2,446	662	118	3,226
Harvest Reductions to Comply with Sideboard (% of Catch)	0.0	18.5	39.8	15.8	17.8

Table 42. Summary of Area 630 Pollock Sideboard and Harvest under Alternative 3

	A	B	C	D	Total
Baseline Conditions 2001 - 2007					
Sum of Seasonal TAC (mt)	26,003	13,192	38,124	36,689	114,008
Cumulative TAC (mt)	26,003	39,195	77,319	114,008	114,008
Non-Exempt AFA CV Catch (mt)	2,180	819	3,393	3,475	9,867
Cumulative Non-Exempt AFA CV Catch (mt)	2,180	2,999	6,392	9,867	9,867
Projected Conditions under Alternative 3 with Compliance to Sideboards					
Sideboard Amount (mt) = 9.126 % of TAC	2,373	1,204	3,479	3,348	10,404
Cumulative Sideboard Amount (mt) = 9.126 % of TAC	2,373	3,577	7,056	10,404	10,404
Projected Non-Exempt AFA CV Catch (mt)	1,434	819	2,916	3,092	8,260
Projected Cumulative Non-Exempt AFA CV Catch (mt)	1,434	2,252	5,168	8,260	8,260
Projected Percent of Cumulative Sideboard Harvested (%)	60.4	63.0	73.2	79.4	79.4
Difference between Projected and Baseline Conditions					
Harvest Reductions to Comply with Sideboard (mt)	746	0	477	383	1,607
Harvest Reductions to Comply with Sideboard (% of Catch)	34.2	0.0	14.1	11.0	16.3

Table 43. Summary of Western Gulf Pacific Cod Sideboard and Harvest under Alternative 3

	A	B	Total
Baseline Conditions 2001 - 2007			
Sum of Seasonal TAC (mt)	66,703	44,469	111,172
Cumulative TAC (mt)	66,703	111,172	111,172
Non-Exempt AFA CV Catch (mt)	616	158	774
Cumulative Non-Exempt AFA CV Catch (mt)	616	774	774
Projected Conditions under Alternative 3 with Compliance to Sideboards			
Sideboard Amount (mt) = 0.734 % of TAC	490	326	816
Cumulative Sideboard Amount (mt) = 0.734 % of TAC	490	816	816
Projected Non-Exempt AFA CV Catch (mt)	427	64	491
Projected Cumulative Non-Exempt AFA CV Catch (mt)	427	491	491
Projected Percent of Cumulative Sideboard Harvested (%)	87.3	60.2	60.2
Difference between Projected and Baseline Conditions			
Harvest Reductions to Comply with Sideboard (mt)	189	95	283
Harvest Reductions to Comply with Sideboard (% of Catch)	30.6	59.8	36.6

Table 44. Summary of Central Gulf Pacific Cod Sideboard and Harvest under Alternative 3

	A	B	Total
Baseline Conditions 2001 - 2007			
Sum of Seasonal TAC (mt)	66,703	67,316	134,019
Cumulative TAC (mt)	66,703	134,019	134,019
Non-Exempt AFA CV Catch (mt)	2,895	1,041	3,936
Cumulative Non-Exempt AFA CV Catch (mt)	2,895	3,936	3,936
Projected Conditions under Alternative 3 with Compliance to Sideboards			
Sideboard Amount (mt) = 2.617 % of TAC	1,746	1,762	3,508
Cumulative Sideboard Amount (mt) = 2.617 % of TAC	1,746	3,508	3,508
Projected Non-Exempt AFA CV Catch (mt)	1,695	935	2,630
Projected Cumulative Non-Exempt AFA CV Catch (mt)	1,695	2,630	2,630
Projected Percent of Cumulative Sideboard Harvested (%)	97.1	75.0	75.0
Difference between Projected and Baseline Conditions			
Harvest Reductions to Comply with Sideboard (mt)	1,200	106	1,306
Harvest Reductions to Comply with Sideboard (% of Catch)	41.4	10.2	33.2

In addition to reducing the amount of GOA pollock and Pacific cod available for harvest by the non-exempt AFA CV fleet as a whole, Alternative 3 could substantially change the distribution of sideboard limits among AFA cooperatives relative to the No-Action Alternative. Figure 33 through Figure 38 compares the distribution of the GOA pollock and Pacific cod sideboard limits among the

AFA cooperatives that occurred under Alternative 1 during the 2001-2007 period with the projected distribution under Alternative 3.

Figure 33. Area 610 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 3

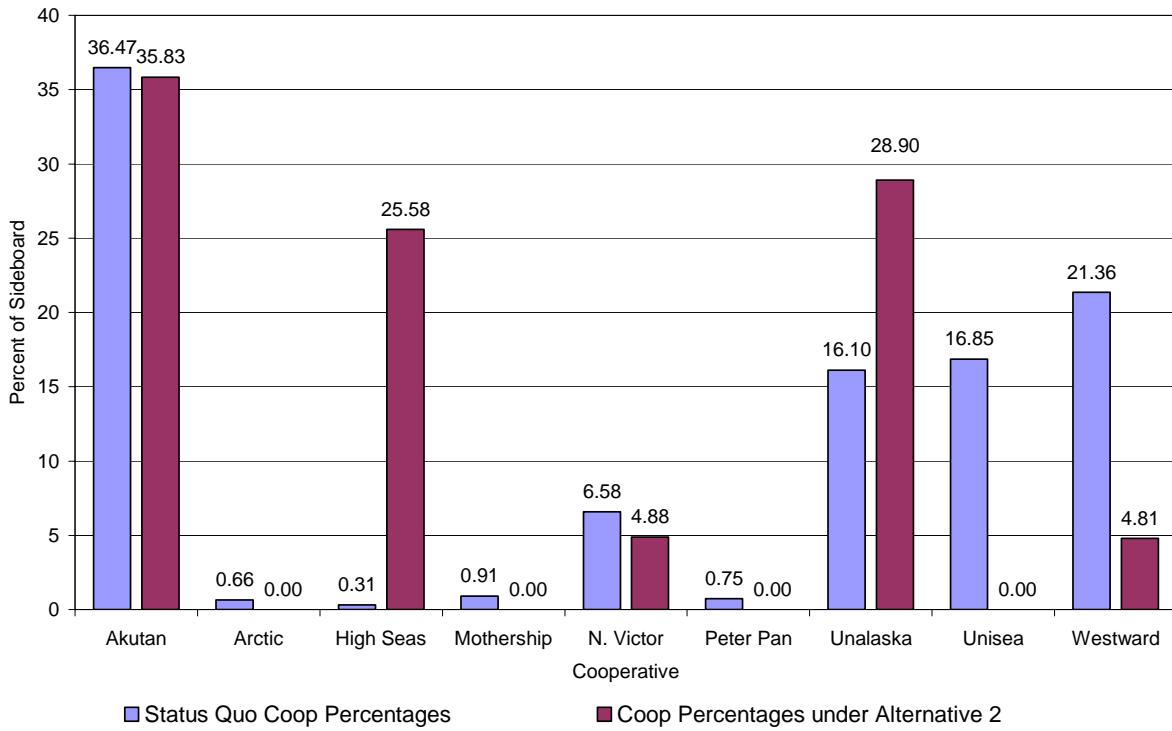


Figure 34. Area 620 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 3

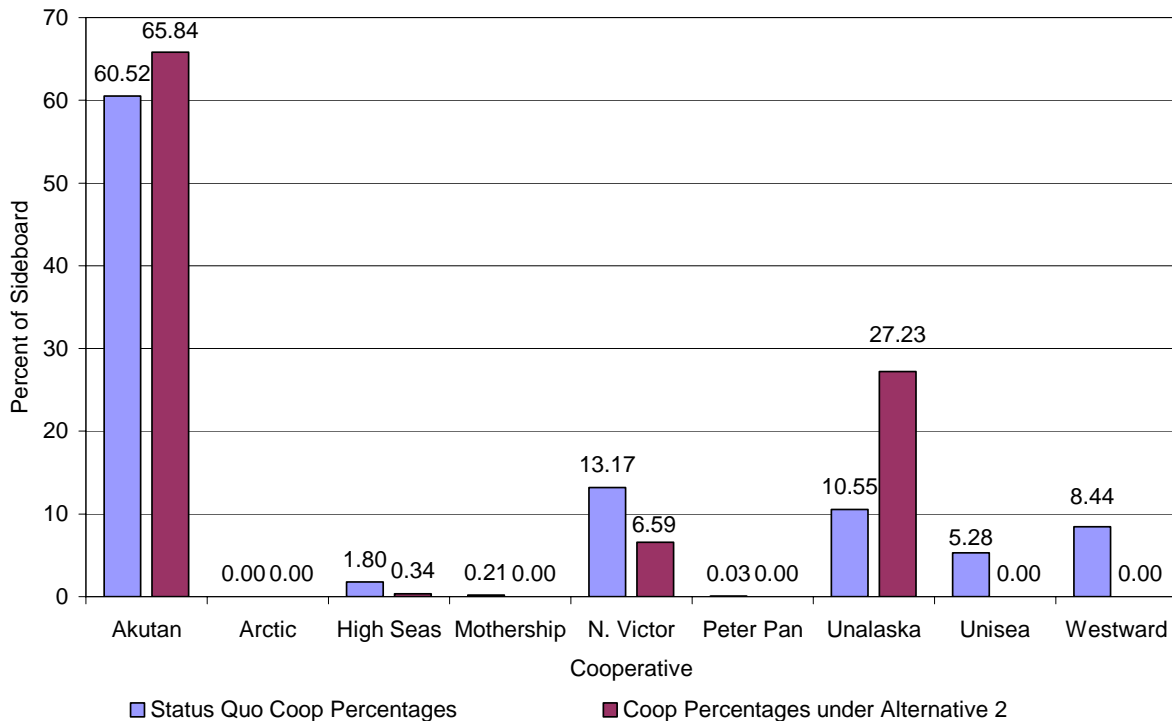


Figure 35. Area 630 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 3

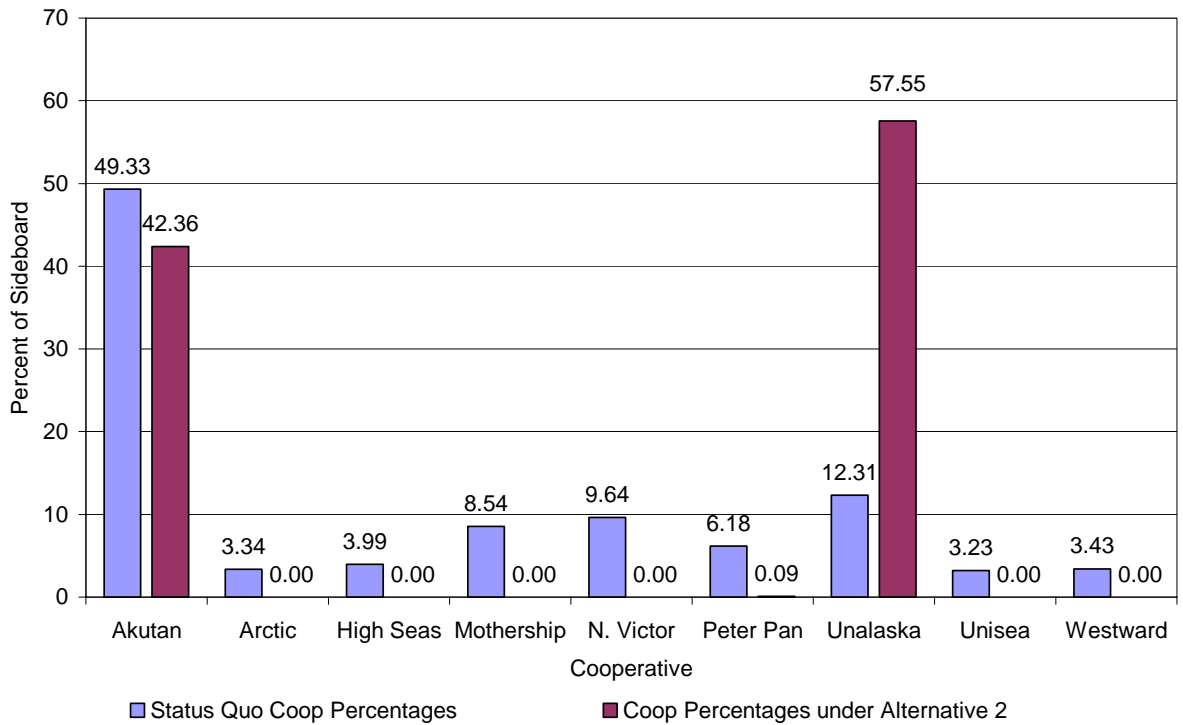


Figure 36. Area 640 Pollock Sideboard Distribution among AFA Cooperatives under Alternative 3

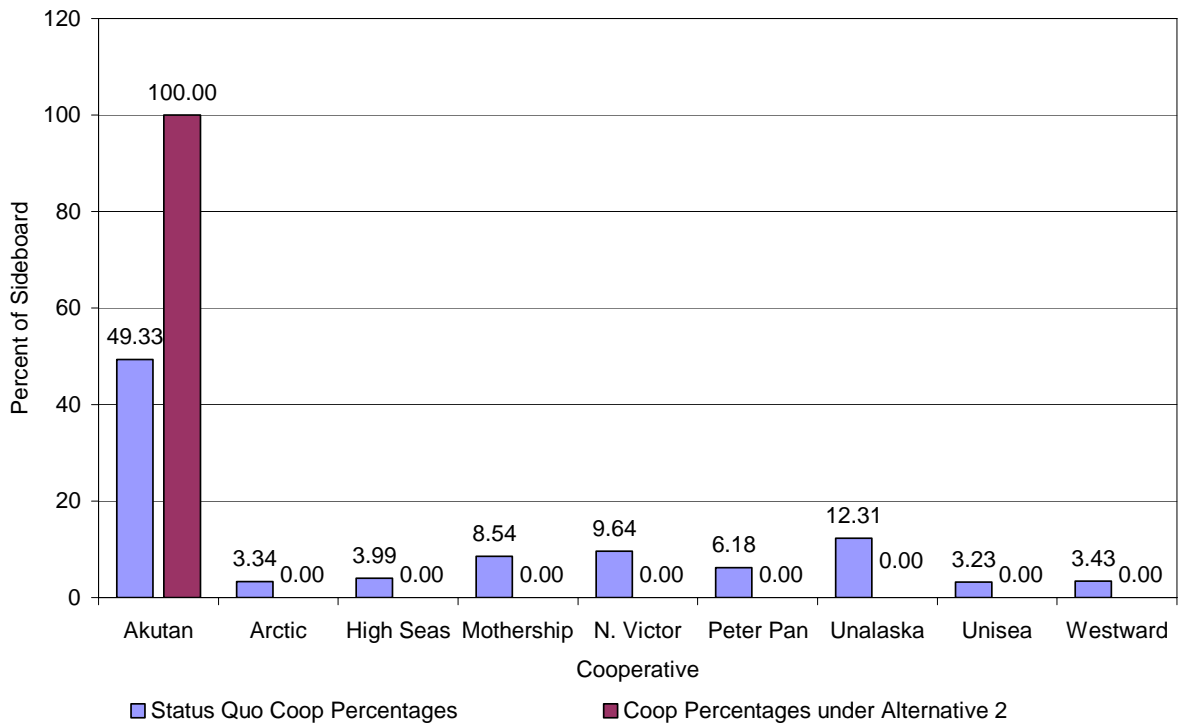


Figure 37. Western Gulf Pacific Cod Sideboard Distribution among AFA Cooperatives under Alternative 3

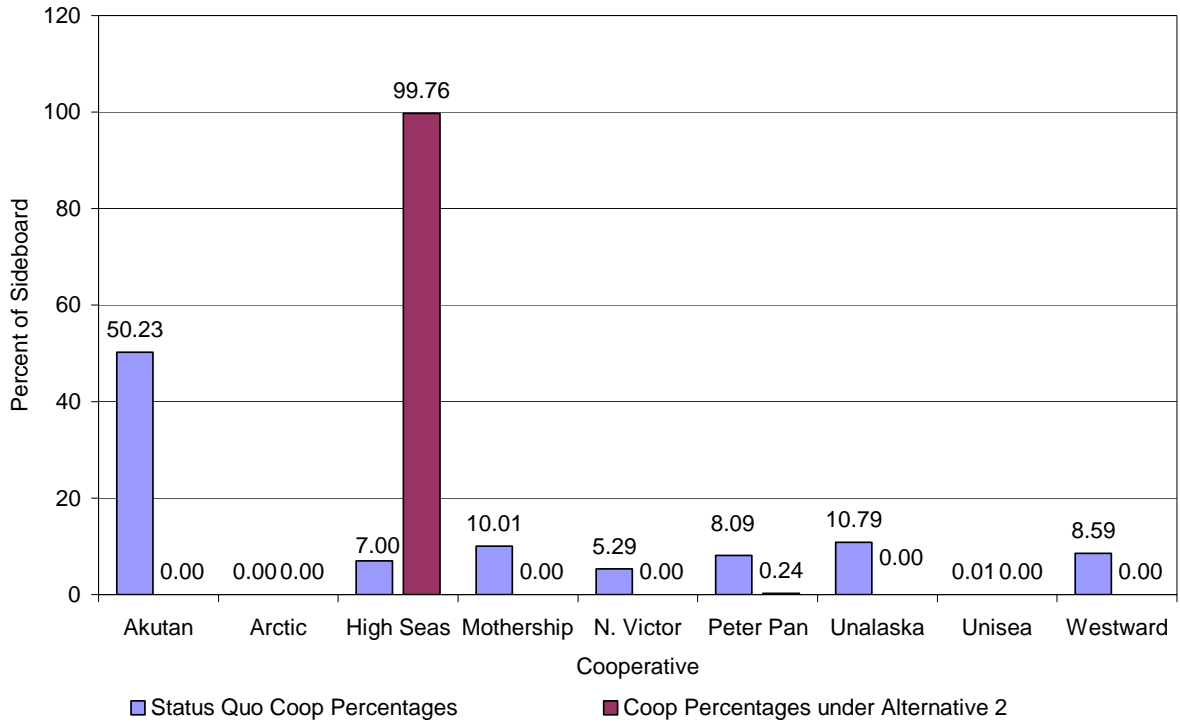
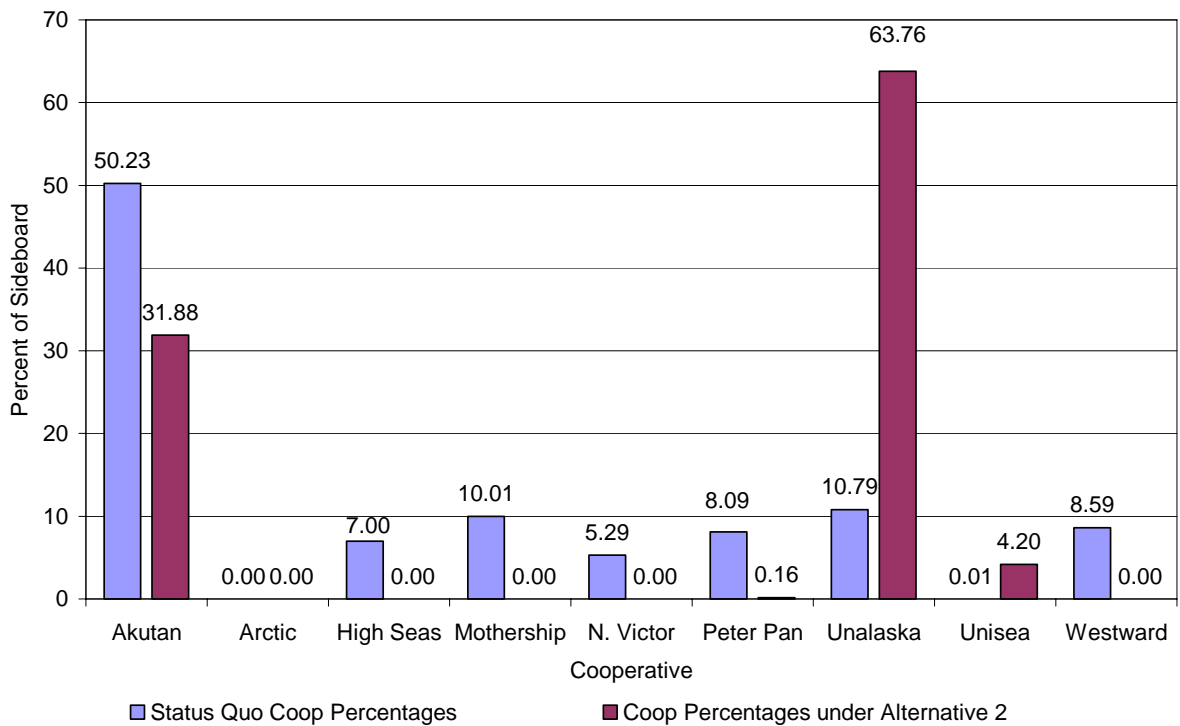


Figure 38. Central Gulf Pacific Cod Sideboard Distribution among AFA Cooperatives under Alternative 3



2.5.4 Alternative 4

Alternative 4 would deny non-exempt AFA catcher vessels access to directed GOA Pacific cod and pollock fisheries altogether. Non-exempt AFA catcher vessels would be allowed to continue to harvest GOA Pacific cod and pollock as incidental catch in other fisheries.

2.6 Net Benefits to the Nation

This section presents a discussion of the net economic effects across alternatives.

Under the status quo (Alternative 1), the existing regulatory measures for GOA Pacific cod and pollock sideboard limits for non-exempt AFA catcher vessels would be maintained. Under that alternative, it is possible that the non-exempt AFA catcher vessel sector would increase their harvest of GOA pollock and Pacific cod at some future time. This increase could contribute to losses of production efficiency due to an increased race for fish. Costs could rise slightly, if other participants in the GOA pollock and Pacific cod fisheries, including exempt AFA vessels and non-AFA vessels, perceive a need to increase rates of effort to maintain their historical share of the overall catch. The increase in effort could contribute to more aggressive fishing practices (e.g., plugging nets, less care for catch brought on board) that lower product quality. The extent of these possible effects is very difficult to predict and depends on several factors, including stock sizes and markets.

Alternatives 2 and 3 would allow non-exempt AFA catcher vessels to continue to conduct directed fisheries for GOA pollock and Pacific cod, though at reduced levels. More restrictive sideboard options would negatively affect entities in the non-exempt AFA CV fleet, relative to the No-Action Alternative, although it is uncertain whether such differences would be significant for the fleet as a whole. For non-exempt AFA catcher vessels which rely to a great extent on GOA pollock and Pacific cod fisheries, reducing the amount of the sideboard limit for pollock and Pacific cod disproportionately burdens those operators, who would now have to compete with other vessels for a relatively smaller quota apportionment. This analysis of the likely economic outcomes of the alternatives presented in Section 2.5 indicates that Alternative 2 would have an overall greater negative effect on entities in the non-exempt AFA CV fleet than would Alternative 3. Alternative 4 would deny non-exempt AFA catcher vessels access to GOA Pacific cod and pollock fisheries altogether. In the case of non-exempt AFA catcher vessels which have significant reliance on these fisheries, losing their ability to fish GOA Pacific cod and pollock at all would be expected to have a significant, negative impact on gross revenues.

Differences among the alternatives for effecting sideboards have the potential for distributional gains and losses across sectors. Given the open access nature of the GOA pollock and Pacific cod fisheries and the capacity that exists in other fleets, any harvest forgone by the non-exempt AFA CV fleet would almost certainly be harvested by members of the exempt AFA and non-AFA fleets. Consequently, the nature of the sideboard measures essentially represents a tradeoff between AFA and non-AFA vessels—reductions in the level of the sideboard limits for non-exempt AFA catcher vessels under Alternatives 2, 3 and 4 would be offset, as the exempt AFA and non-AFA sectors would realize that amount of gain in the amount of harvest available to them. While relative operating costs and other factors may affect the “net” results of such trade-offs, the net benefits to the Nation would be expected to tend towards neutral. Losses experienced by the non-exempt AFA CV fleet would be offset by the gains experienced by the exempt AFA and non-AFA fleets.

3 Initial Regulatory Flexibility Analysis

3.1 Reasons for Considering the Proposed Action

The reasons for considering the proposed action are described in Section 2.1 of the RIR.

3.2 Objectives and Legal Basis of the Proposed Rule

The objectives of the proposed action are described in Section 2.1 of the RIR.

Under the current regulatory structure, GOA groundfish fisheries are managed by NOAA Fisheries, under the GOA Groundfish FMP. The authority for this action and the FMP are contained in the Magnuson-Stevens Act, as amended by the Magnuson-Stevens Fishery Conservation and Management Reauthorization (P.L. 109-479).

With regard to commercial fishing vessels operating in the directed pollock fishery in the BSAI, the American Fisheries Act of 1998 establishes the legal basis for achieving the objective of reducing excessive fishing capacity and management regulatory conditions that could contribute to the creation of an environment capable of fostering operational inefficiencies in this fishery; including co-op formation and development of sideboard measures. Mitigation of potential adverse impacts to non-AFA fishermen and processors is mandated by the Act.

3.3 Description and Number of Small Entities to which the Proposed Rule will Apply

Federal courts and Congress have indicated that a RFA analysis should be limited to small entities subject to the proposed regulation.¹ As such, small entities to which the proposed rule will not apply are not considered in this analysis.

The entities directly regulated by this action are catcher vessels that are permitted under AFA and are not exempt from GOA groundfish catcher vessel sideboard directed fishing closures. As described in Section 1.2, the RFA requires a consideration of affiliations between entities for the purpose of assessing if an entity is small. The fishery cooperative formed under Section 1 of the Fisherman's Collective Marketing Act 1934 (15 U.S.C. 521) for the purpose of cooperatively managing directed fishing for BSAI pollock are an important type of affiliation. A list of AFA catcher vessel permits compiled by NOAA Fisheries Alaska Regional Office (accessed at <http://www.fakr.noaa.gov/ram/afa.htm> on March 4, 2008) indicates that there were 95 non-exempt AFA catcher vessels in 2008. All of these vessels were members of BSAI pollock fishery cooperatives and therefore "affiliated" for RFA purposes with the other operations in their respective co-op fleets. This affiliation would make all of these vessels large entities for RFA purposes, as each AFA fishery cooperative, and its collective membership, is expected to have combined gross annual revenues in excess of \$4 million.

3.4 Description of the Estimated Reporting, Record Keeping and Other Compliance Requirements of the Proposed Rule

None of the alternatives would impose new record keeping or reporting requirements on small entities.

¹ *Mid-Tec Elec. Coop v. FERC*, 773 F.2d 327 (D.C. Cir. 1985); *Cement Kiln Recycling Coalition et. al. v. EPA*, 255 F.3d 855 (2001)..

3.5 Identification of Relevant Federal Rules that may Duplicate, Overlap or Conflict with the Proposed Rule

No duplication, overlap, or conflict between this proposed action and existing Federal rules has been identified.

3.6 Description of Significant Alternatives to the Proposed Rule

The alternatives considered for this action are described in Section 2.4 of the RIR. The detailed economic and operational analysis of alternatives is presented in Section 2.5 of the RIR. As discussed in Section 3.3, no small entities would be directly regulated by this action.