

## Revising Freezer Longline GOA Pacific Cod Sideboards Discussion Paper June 2012

### Introduction

In October 2011, the Council tasked staff to prepare a discussion paper on the impacts of non-AFA crab sideboard limits for Gulf of Alaska (GOA) Pacific cod for freezer longline vessels. The non-AFA crab sideboard limits were originally included in the crab rationalization program, which was implemented in 2005. When implemented, the non-AFA crab sideboard limits were aggregated at the inshore and offshore level and were shared by all gear types. However, as part of the GOA Pacific cod sector splits implemented in 2012, the non-AFA crab sideboard limits were modified from an inshore and offshore limit shared by all gears to a narrower sector limit that was specific to the freezer longline vessels. Concerned that this modification to the GOA Pacific cod sideboard limit could constrain the ability of the freezer longline vessels subject to sideboards to participate in this fishery, the Council approved a motion tasking staff to prepare a discussion paper that analyzes the impacts of the modified non-AFA crab sideboard limit on these freezer longline vessels.

The discussion paper first looks at the management of the non-AFA crab sideboard limits prior to and after implementation of the GOA sector allocations. Next, the discussion paper provides an overview of the BSAI freezer longline cooperative and its role in the GOA Pacific cod fishery. The discussion paper provides fishing activity for freezer longline vessels operating in the GOA Pacific cod fishery and freezer longline vessels subject to the sideboard. Finally, the paper provides a discussion on the impacts of the GOA Pacific cod sideboard limit on the sideboarded freezer longline vessels and the potential impacts of removing these sideboard limits on other members of the sector.

### Management of the GOA non-AFA crab sideboards

Recognizing that rationalizing the BSAI crab fisheries could provide opportunities for fishermen to alter their crab fishing patterns and take greater advantage of other fisheries, the Council established GOA sideboard limits for vessels and LLP licenses that had Bering Sea snow crab history and generated crab quota shares. Sideboards are intended to limit the ability of vessels in rationalized fisheries from exceeding historic levels of participation in other fisheries, which otherwise might exacerbate a “race for fish.” Sideboards can be collective catch limits that apply to all vessels in a particular sector. Vessels subject to a sideboard limit are allowed to fish up to that limit but may not exceed it. Sideboards do not guarantee a specific amount of TAC.

GOA Pacific cod sideboard limits for non-AFA crab vessels were based on retained catch of Pacific cod by vessels subject to the limit, divided by the total retained catch of GOA Pacific cod by all groundfish vessels from 1996 through 2000. In contrast, GOA groundfish sideboard limits for non-AFA crab vessels are based on GOA groundfish landings by vessels subject to the sideboard, relative to groundfish landings by all vessels.

In addition to the GOA groundfish sideboards for the non-AFA crab vessels, participation in the GOA Pacific cod fishery is restricted. Vessels that qualified for Bering Sea snow crab quota share must have landed more than 50 mt of groundfish harvested from the GOA between January 1, 1996, and December

31, 2000, in order to qualify to participate in the GOA Pacific cod fishery. This restriction also applies to any vessel named on an LLP license that generated Bering Sea snow crab fishery quota share.

To protect non-AFA crab vessels that demonstrated dependence on the GOA Pacific cod fishery, an exemption from the Pacific cod sideboards was included in the crab rationalization program. The catch history of the exempt vessels was not included in the sideboard calculations. Since their historical catch was not included in the sideboard limits, catch by these vessels does not count towards the sideboard caps, nor are the exempt vessels required to stop fishing when the sideboard limit is reached, if the directed fishery is open.

Of the 227 non-AFA crab vessels that made a landing of Bering Sea snow crab during the 1996 to 2000 period, 82 vessels are allowed to target GOA Pacific cod, but are limited by GOA Pacific cod sideboards. Of those 82 non-AFA crab vessels restricted by GOA Pacific cod sideboard limits, six are freezer longline vessels. LLP licenses that originated on a qualified non-AFA crab vessel are also subject to the GOA Pacific cod sideboard limits. Of the 37 LLP licenses that are restricted by GOA Pacific cod sideboards, five are freezer longline licenses. Currently all five of these LLP licenses are on freezer longline vessels that are also restricted by Pacific cod sideboards.

Prior to implementation of GOA Pacific cod sector allocations in 2012, NMFS managed the sideboard limit for Pacific cod by setting an inshore and offshore sideboard cap. Those amounts were then made available to all vessels subject to the sideboard limit, on a seasonal basis, at the beginning of the year. All targeted or incidental catch of the sideboard species made by the non-AFA crab vessels subject to the sideboard was applied to the sideboard limit. See Table 1 for the 2011 sideboard limits for Western and Central GOA Pacific cod.

**Table 1 2011 non-AFA crab sideboard limits for Western and Central GOA Pacific cod**

Season	Area/component	Ratio of 1996-2000 non-AFA crab vessel catch to 1996-2000 total harvest	2011 TAC (mt)	2011 non-AFA crab vessel sideboard limit (mt)
A season January 1 - June 10	W inshore	0.0902	13,877	1,252
	W offshore	0.2046	1,542	315
	C inshore	0.0383	24,583	942
	C offshore	0.2074	2,731	566
B season September 1 - December 31	W inshore	0.0902	9,252	835
	W offshore	0.2046	1,028	210
	C inshore	0.0383	16,389	628
	C offshore	0.2074	1,821	378

Source: Final specifications 2011

As part of the GOA Pacific cod sector allocation in 2012, the Council recommended operational and gear-specific non-AFA crab sideboards based on participation in the GOA Pacific cod from 1996 through 2000. The Council considered and rejected combining the GOA inshore and offshore non-AFA crab sideboards into a single Central GOA and a single Western GOA sideboard limit. The Council was concerned that combining the inshore and offshore sideboards into a single amount for both catcher processors and catcher vessels sectors could result in one gear or operational type preempting the other in a race for the sideboards. The Council was also concerned that an aggregate sideboard limit could have a negative impact on non-sideboarded vessels since the sideboard limit could be greater than some sector specific allocations. The recalculated sideboard ratios are shown in Table 2. Note that NMFS in 2012 determined that the sideboard limits for the freezer longline sector were insufficient to support a direct fishery, so the fishery was closed.

Finally, in cases where vessels are subject to one sideboard (e.g., GOA Pacific cod sideboard) and the LLP license used on that vessel is not, the more restrictive measure applies.

**Table 2 2012 non-AFA crab sideboard limits for Western and Central GOA Pacific cod freezer longliner sector**

Season	Area/Gear/Component	Ratio of 1996-2000 non-AFA crab vessel catch to 1996-2000 total harvest	2012 TAC (mt)	Final 2012 non-AFA crab vessel sideboard limit (mt)
A season January 1 - June 10	W Hook and line C/P	0.0018	12,614	23
	C Hook and line C/P	0.0012	25,623	31
B season June 10 - December 31	W Hook and line C/P	0.0018	8,410	15
	C Hook and line C/P	0.0012	17,082	20

Source: Final specifications 2012

### Pacific cod sector allocation

Amendment 83 establishes sector allocations for each gear and operation type in the Western and Central GOA Pacific cod fisheries. The GOA Pacific cod TACs is divided among the different gears and operations based primarily on historical dependency and catch history by each sector. The action is intended to stabilize sector allocations for each gear and operation type in the Western and Central GOA Pacific cod fisheries. The Pacific cod allocations to the freezer longline sector in the Western GOA are 10.9% for the A season and 8.90% in the B season, while in the Central GOA the allocations are 4.1% in the A season and 1.0% in the B season. Table 3 provides the 2012 GOA Pacific cod allocations for the freezer longline sector.

**Table 3 2012 Seasonal apportionment for Western and Central GOA Pacific cod to the freezer longline sector**

Season	Area/Gear/Component	Annual sector allocation (mt)	Sector percentage of annual non-jig TAC	Seasonal allowance (mt)
Western GOA	A season Jan 1 - Jun 10	4,100	10.9	2,257
	B Season Jun 10 - Dec 31		4.11	1,736
Central GOA	A season Jan 1 - Jun 10	2,158	8.9	1,843
	B Season Jun 10 - Dec 31		1	422

### Freezer Longline Conservation Cooperative

Given the GOA Pacific cod sideboarded freezer longline vessels are members of the BSAI Freezer Longline Conservation Cooperative and this cooperative plays an important role in the GOA Pacific cod fishery, a brief description of the cooperative is provided. Information on cooperative membership and activities in the GOA Pacific cod fishery was provided by Kenny Down, President of the BSAI Freezer Longline Conservation Cooperative.

Since 2006, most of the holders of LLP licenses endorsed for BSAI freezer longliner catcher processors have been members of the freezer longline cooperative. In June 2010, the remaining LLP holders joined the cooperative. Each year an allocation of BSAI Pacific cod is made to the freezer longline catcher processor sector through the annual harvest specifications process. Cooperative members each receive a share of the BSAI Pacific cod quota for harvest; shares are issued in proportion to historical BSAI Pacific cod fishing activity. Cooperative members are free to exchange their shares among themselves, and to stack shares on individual vessels.

In the GOA, long term allocations of the Western and Central GOA Pacific cod TACs to the freezer longline sector may provide opportunities for the formation of harvest cooperative similar to the BSAI harvest cooperative. Currently, all active GOA freezer longline vessel owners are in discussions concerning the development of a GOA freezer longline cooperative similar to the BSAI freezer longline cooperative.

Despite having no GOA cooperative agreement yet, the BSAI freezer longline cooperative operates informally in the GOA. Its members agree each season to carry 100% observer coverage any time they operate in the GOA to limit halibut PSC to a predetermined amount, and to limit the amount of Pacific cod its member vessels catch in the GOA. The intent of this coordination is to lengthen the fishing season for management purposes and to limit the cooperative's fishing activities on non-member vessels

### Freezer longline fishing in the GOA Pacific cod fishery

Historically, some freezer longline vessels that targeted Pacific cod in the BSAI also targeted GOA Pacific cod. Table 4 shows the number of BSAI freezer longline cooperative vessels active in the GOA Pacific cod fishery and the number of vessels that are not members of the BSAI cooperative that are active in the GOA Pacific cod fishery. The number cooperative vessels active in the GOA Pacific cod fishery has ranged from a low four in 2005 to high of 15 in 2010. Their associated GOA Pacific cod catch has ranged from a low of 679 mt in 2005 to a high of 7,657 mt in 2010. The number of non-member freezer longline vessels active in the GOA Pacific cod fishery has ranged from no vessels in 2007 to a high of four vessels in 2008. Given the number of non-member vessels fell below four in all years except 2008, catch data was reported only for 2008. For that year, four non-member freezer longline vessels were active in the GOA Pacific cod fishery and their catch was 510 mt.

**Table 4 Activity for BSAI freezer longline vessels targeting GOA Pacific cod**

Year	Number of FLL cooperative vessels	Catch (mt) of GOA Pacific cod by FLL cooperative vessels	Number of FLL non-cooperative vessels	Catch (mt) of GOA Pacific cod by FLL non-cooperative vessels
2004	10	4,285	1	*
2005	4	679	2	*
2006	13	3,510	2	*
2007	13	4,530	0	0
2008	14	4,407	4	510
2009	14	4,376	2	*
2010	15	7,657	3	*
2011	11	7,408	1	*

Source: AKFIN report on May 1, 2012, from weekly production reports

Cooperative member vessels provided by Kenny Down n, BSAI Freezer Longline Conservation Cooperative

\* denotes confidential data

### Freezer longline sideboard activity

As indicated earlier, there are six freezer longline vessels that are limited by GOA Pacific cod sideboards. Table 5 shows that the number of sideboarded vessels that were active in GOA Pacific cod fishery over the last eight years was five. The sixth sideboarded vessel was not active in the GOA Pacific cod fishery because the vessel lacked an LLP license with GOA area endorsement. During this eight year period, the number of sideboarded freezer longline vessels active in the GOA Pacific cod fishery on an annual basis has ranged from a low of one in 2005 and 2007 to a high of five in 2009. However, despite the

inconsistency in the GOA Pacific cod fishery, all GOA Pacific cod sideboarded vessels participated in the BSAI Pacific cod fishery every year since 2004.

**Table 5** Number of GOA Pacific cod sideboarded freezer longline vessels fishing in the BSAI groundfish fishery, GOA groundfish fishery, and GOA Pacific cod fishery

Year	BSAI	GOA	GOA Pacific cod
2004	6	2	2
2005	6	3	1
2006	6	3	2
2007	6	3	1
2008	6	4	3
2009	6	5	5
2010	6	4	3
2011	6	5	4

Source:AKFIN report on April 27, 2012, from weekly production reports

Cooperative member vessels provided by Kenny Dow n, BSAI Freezer Longline Conservation Cooperative

Catch of GOA groundfish for the sideboarded freezer longline vessels over the past eight years was mostly Pacific cod. In the two years that data could be reported, Pacific cod made up over 85% of all groundfish harvested in the GOA. However, as seen in Table 6, it is obvious their primary focus has been the BSAI groundfish fisheries. For example, in 2009 and 2011, GOA Pacific cod was 6% of the BSAI groundfish catch.

**Table 6** Catch activity (mt) for GOA Pacific cod sideboarded freezer longline vessels in all BSAI groundfish fisheries, GOA groundfish fisheries, and GOA Pacific cod fishery

Year	BSAI	GOA	GOA Pacific cod
2004	8,456	*	*
2005	8,989	*	*
2006	7,572	*	*
2007	7,576	*	*
2008	8,478	467	*
2009	8,887	614	516
2010	9,181	462	*
2011	13,095	899	772

Source:AKFIN report on April 27, 2012, from weekly production reports

Cooperative member vessels provided by Kenny Dow n, BSAI Freezer Longline Conservation Cooperative

\* denotes confidential data

The first wholesale value of the GOA Pacific cod fishery for the sideboarded freezer longline vessels is relatively modest when compared to the total first wholesale value of BSAI groundfish fishery (Table 7). For example, in 2009, the sideboarded freezer longline harvested \$1.3 million in GOA Pacific cod compared to over \$23 million for BSAI groundfish. Overall, based on the historical fishing patterns of these five sideboarded vessels, these vessels appear dependent on the GOA Pacific cod fishery, albeit less than their dependence on the BSAI groundfish fisheries.

**Table 7 First wholesale value of catch activity (in dollars) for GOA Pacific cod sideboarded freezer longline vessels in all BSAI groundfish fisheries, GOA groundfish fisheries, and GOA Pacific cod fishery**

Year	BSAI	GOA	GOA Pacific cod
2004	19,953,183	*	*
2005	25,833,796	*	*
2006	27,121,194	*	*
2007	30,030,922	*	*
2008	35,116,944	2,331,609	*
2009	23,374,409	2,300,537	1,387,432
2010	28,840,290	2,162,082	*

Source: AKFIN report on April 27, 2012, from weekly production reports

Cooperative member vessels provided by Kenny Down, BSAI Freezer Longline Conservation Cooperative

\* denotes confidential data

### Potential impacts of GOA Pacific cod sideboard limits (status quo)

As noted above, non-AFA crab sideboards in the GOA Pacific cod recently underwent a modification that narrowed the sideboard limit from a non-gear specific sideboard to sector specific sideboard. As seen in the sideboard limits in Table 1 and Table 2, this modification significantly reduced the sideboard limits for those sideboarded freezer longline vessels active in the GOA Pacific cod fishery. Since their participation in the GOA Pacific cod fishery was very limited during the years used to calculate the sideboard, the sector specific sideboard is extremely small and therefore will eliminate these five active sideboarded freezer longline vessels from the GOA Pacific cod fishery.

The difficulty for the five sideboarded vessels is their recent eight years of participation in the GOA Pacific cod fishery. Capitalizing on the aggregate GOA Pacific cod sideboard limits implemented in 2005, the five sideboarded vessels increased their effort in the GOA Pacific cod fishery relative to the years used to calculate the sideboard limit (Table 2 and Table 6). With the increase in effort by these sideboarded vessels, there was a correlated increase in their dependency on this fishery. As a result, the continued use of the GOA Pacific cod sideboard limits will likely have a negative impact on the sideboarded vessels.

Compounding the impacts of the GOA Pacific cod sideboards on the sideboarded freezer longline vessels is the difficulty in recouping their historic GOA Pacific cod revenue in other BSAI and GOA fisheries. Cooperative members determine their BSAI Pacific cod based on their historical fishing activity in that fishery and the cooperative has indicated that this calculation is fixed with no potential for adjustment in the future. The cooperative has also indicated that other fishing opportunities for freezer longline vessels to recoup lost revenue are also extremely limited. Likely, the only opportunity would be BS and AI Greenland turbot, but that fishery has proven difficult to generate a profit for freezer longline vessels according to Kenny Down of the BSAI Freezer Longline Conservation Cooperative.

From the perspective of the non-sideboarded cooperative member vessels and non-member vessels, the current GOA Pacific cod sideboard limit does provide more GOA Pacific cod TAC. If these non-sideboarded vessels capitalize on the modified sideboard limits by increasing their catch of GOA Pacific cod, this increase in catch could generate more GOA Pacific cod quota for a GOA cooperative if created in the future.

Overall, if the current GOA Pacific cod sideboards are maintained, five freezer longline vessels restricted by GOA Pacific cod sideboards will no longer be allowed to participate in the GOA Pacific cod fishery. If historical GOA Pacific cod fishing is an indication of future lost revenue, the GOA Pacific cod sideboard

restrictions could represent an approximate five percent loss of annual revenue for these vessels, based on releasable data.

### **Potential impacts of removing non-AFA crab sideboard limits**

GOA Pacific cod sideboards developed during the crab rationalization program, were intended to limit the ability of vessels in rationalized fisheries from exceeding historic levels of participation in other fisheries, which otherwise might exacerbate a “race for fish” and negatively impact non-rationalized participants. In other words, sideboard limits would protect non-crab vessels historical fishing in the GOA Pacific cod fishery. However, with the recent implementation of sector specific GOA Pacific cod allocations, sector specific sideboard limits, and BSAI freezer longline cooperative coordination of their fishing in the GOA activity, there could be less concern of exacerbating a “race for fish” or negatively impacting non-rationalized cooperative members and non-member vessels. Given there appears to be less concern for sideboard protection in the freezer longline GOA Pacific cod fishery, the Council tasked staff to include a discussion on the potential impacts of removing GOA Pacific cod freezer longline sideboards on sideboarded vessels and on cooperative member and non-members vessels.

#### *Impacts to Sideboarded Vessels*

Removing the GOA Pacific cod sideboard limits for the freezer longline vessels allows these vessels that were restricted by sideboards to expand their effort in the GOA Pacific cod fishery. However, since the BSAI cooperative coordinates their fishing activities in the GOA Pacific cod fishery and since these sideboarded vessels are members of the cooperative, their potential for expanding their effort in the fishery could be curtailed. The cooperative could continue to maintain the GOA Pacific cod fishery restriction, which leaves in place the same economic hardship created under the sideboard limits. On the other hand, the cooperative could also allow these vessels to increase their fishing effort to levels seen during the 2004 through 2011 period. This, in all likelihood, would result in a positive impact for these vessels. The cooperative could also allow these vessels to increase their fishing effort beyond their 2004 through 2011 period, but this appears unlikely based on their fishing pattern over the past eight years. As indicated in Table 5, not all of these sideboarded vessels participated in the GOA Pacific cod fishery every year, but these vessels have consistently participated in the BSAI groundfish fisheries. Their consistent and significant participation in the BSAI groundfish fisheries is reflected in their GOA Pacific cod catch, which was five percent of their total catch of groundfish, based on releasable data. In other words, despite having the ability to lease some or all of their BSAI Pacific cod to expand their effort in the GOA Pacific cod, they have primarily focused their effort in the BSAI Pacific cod fishery.

In the future, if the cooperative no longer coordinates their activities in the GOA Pacific cod fishery, the incentive to “race for fish” increases as more freezer longline vessels chase a fixed allocation of GOA Pacific cod. In an environment with no cooperative coordination, the absence of sideboards would allow these sideboarded vessels to expand their effort in the GOA Pacific cod fishery. However, in a “race for fish” environment, the seasons could be shortened relatively to status quo, which could have a negative impact on these vessels.

#### *Impacts to non-sideboarded cooperative member vessels*

Removing the GOA Pacific cod sideboard limits for the freezer longline vessels could impact non-sideboarded BSAI cooperative member vessels. As seen in Table 4, the number of BSAI cooperative vessels active in the GOA Pacific cod fishery has ranged from a low of four in 2005 to a high of 15 in 2010. The historical catch data indicate that the BSAI freezer longline cooperative is active in the GOA Pacific cod fishery.. Currently, the BSAI cooperative coordinates the fishing activity of its member vessels in the GOA Pacific cod fishery, including the five sideboarded freezer longline vessels. Coordination of its cooperative member vessel activities in the GOA Pacific cod fishery would likely reduce the incentive for a “race for fish” within the freezer longline sector. Among the many scenarios,

the cooperative could continue to preclude the sideboarded vessels from participating in the fishery, which would continue to free up GOA Pacific cod TAC for non-sideboarded cooperative member vessels. Cooperative coordination could also allow these five sideboarded vessels to participate in the GOA Pacific cod fishery at a direct cost to non-sideboarded cooperative member vessels since there will be less TAC available in an already fully utilized fishery.

Despite the advantages of cooperative coordination in the GOA Pacific cod fishery to member vessels, there is the possibility that the members could choose to no longer coordinate their activities in this fishery. The disadvantage of no cooperative coordination is potential for a “race for fish” to form amongst the active freezer longline vessels. Absent sideboard limits, the incentive to “race for fish” increases as more freezer longline vessels chase a fixed allocation of GOA Pacific cod. In a “race for fish” environment, there is strong potential for non-sideboard member vessels to be negatively impacted by the removal of sideboard limits.

#### Impacts to non-sideboarded non-member vessels

Similar to member vessels, removing GOA Pacific cod sideboards could impact non-member vessels. As seen in Table 4, the number of non-cooperative freezer longline vessels that have participated in the GOA Pacific cod fishery has ranged from none in 2007 to a high of four vessels in 2008. Potentially reducing the impacts to non-member vessels from sideboard removal is the coordinating activities of the BSAI freezer longline cooperative in the GOA Pacific cod fishery. Currently the BSAI cooperative coordinating fishing activity of its member vessels in the GOA Pacific cod fishery, including the five sideboarded freezer longline vessels. The advantages of coordination the GOA Pacific cod fishery is to lengthen the fishing season and reduce cooperative impacts to non-member vessels. In other words, the presence of cooperative coordination in the GOA Pacific cod fishery reduces the incentive to “race for fish.”

Despite cooperative coordination, non-member vessels can still be negatively impacted if sideboards are removed, since these sideboarded vessels could expand their effort in the GOA Pacific cod fishery. Of course, if the cooperative continues to restrict the sideboarded vessels from participating in the GOA Pacific cod fishery, removing the sideboards would not impact the non-member vessels. If the cooperative allows these sideboarded vessels to expand their effort in the GOA Pacific cod fishery to the 2004 through 2011 average or greater, their fishing activity could impact the non-member vessels since there would be less available TAC to harvest in fully utilized sector allocation.

If in the future, the cooperative no longer coordinates their activities in the GOA Pacific cod fishery, the absences of sideboards could increase the incentive to “race for fish.” In a “race for fish” environment, there is the good likelihood that non-member vessels would be negatively impacted by the removal of sideboard limits.