

**INITIAL REVIEW DRAFT**

**REGULATORY IMPACT REVIEW/  
INITIAL REGULATORY FLEXIBILITY ANALYSIS**

For a proposed Amendment to the  
Fishery Management Plan for the Groundfish Fishery of the Bering Sea  
and Aleutian Island

**BSAI Freezer Longline Vessel Replacement**

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## Executive Summary

This document is a Regulatory Impact Review/Initial Regulatory Flexibility Analysis (RIR/IRFA) for a proposed modification to the maximum length overall (MLOA) of the License Limitation Program (LLP) license assigned to the freezer longline vessels to accommodate larger replacement vessels.<sup>1</sup> Implemented on January 1, 2000, the LLP provided separate area endorsements, catcher vessel/catcher processor endorsements, and specified MLOA for licensed vessels. The MLOA for the license was based on the length of the vessel initially receiving the license.

The proposed action would also allow freezer longline replacement vessels that (1) exceed 165 feet in length, or (2) more than 750 gross tons, or (3) with engines capable of producing more than 3,000 shaft horsepower to enter the groundfish fishery. Coast Guard regulation 46 U.S.C. 12106(c)(6) limit vessels greater than 165 feet in length, or more than 750 gross registered tons, or with engines capable of producing more than 3,000 shaft horsepower from entering fisheries unless the vessel carried a fisheries endorsement prior to September 25, 1997 or the Council has recommended and the Secretary of Commerce has approved a conservation and management measure to allow the vessel to be used in fisheries under its authority.

### *Problem Statement*

Recognizing the benefits of vessel replacement program for BSAI freezer longline fleet, which could include vessel safety, improved fuel efficiency, improved resource utilization, and increased economic efficiency, the Council tasked staff to prepare an analysis of alternatives to allow owners of freezer longline vessels to replace their vessels with larger vessels. Provided below is a draft proposed purpose and need that was presented at the February 2011 meeting.

*Allowing for Pacific cod hook and line catcher/processor vessel owners to rebuild or replace their vessels would allow for improved vessel safety, meet international class and loadline requirements that would allow a broader range of onboard processing options, or otherwise improve the economic efficiency of their vessels.*

### *Description of the Alternatives*

Three alternatives, including no action, are provided. Under Alternative 1, the no action alternative, freezer longline vessel length restrictions would continue to apply. Vessel owners could replace their vessels so long as the vessel length did not exceed the MLOA of the LLP license that the vessel is named on. In addition, freezer longline vessels that are (1) greater than 165 feet in length or (2) exceed 750 tons or (3) 3,000 horsepower or greater that do not already have a federal fisheries endorsement will not receive a federal fisheries endorsement and therefore cannot be used to replace an existing freezer longline vessel.

Alternative 2 would limit a replacement vessel to a length 20% greater than the original qualifying vessel the replacement or rebuilt vessel is replacing, not to exceed 150' LOA. However, since the MLOA of the

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<sup>1</sup> The proposed action would modify the criteria to allow freezer longline vessels to be replaced with larger vessels. The proposed change has no effect individually or cumulatively on the human environment (as defined in NAO 216-6). The only effects of the action are improved vessel safety, improved production efficiency, and potential economic redistributive arising from vessel replacement of large freezer longliner vessels. As such, it is categorically excluded from the need to prepare an Environmental Assessment.

LLP license restricts vessel length of assigned vessels and many of the freezer longliners are already at or near the MLOA of the LLP license they are named on, the language in the alternative will need to be modified to accommodate larger replacement vessels that exceed the current MLOA of the LLP license. Possible language for the alternative is provided below:

**For those LLP licenses with catcher processor and hook-and-line Pacific cod endorsements for the BS or AI with an MLOA of less than 150', increase the MLOA of the LLP license 20 percent not to exceed a MLOA of 150'.**

Under Alternative 3, the MLOA of BSAI LLP license with Pacific cod longline endorsements would not apply. This alternative would also allow vessels that are (1) greater than 165 feet in length or (2) exceed 750 tons or (3) 3,000 horsepower or greater that do not already have a federal fisheries endorsement to be eligible to receive a certificate of documentation consistent with 46 U.S.C. 12102(c).

Also include in the proposed action are two options. Suboption 1 would allow any vessel replaced under this proposed action to continue participating in federal fisheries, including those fisheries requiring an LLP license. Suboption 2, would allow replaced freezer longline vessels to be used to replace other freezer longline vessels. The Council could choose both suboptions when selecting Alternatives 2 or 3, but if the Council wanted to remove replaced freezer longline vessels from the federal fisheries, a third suboption would need to be added that states replaced vessels would be ineligible to be designated on an FFP or an LLP.

#### *Potential Effects of the Alternative*

Under the **status quo alternative**, vessel owners wanting to replace their vessels, to take advantage of vessel improvements, are limited by the MLOA of the LLP license the vessel is assigned to. In addition, freezer longline vessels that are (1) greater than 165 feet in length or (2) exceed 750 tons or (3) 3,000 horsepower or greater that do not already have a federal fisheries endorsement will not receive a federal fisheries endorsement and therefore cannot be used to replace an existing freezer longline vessel. In general, this alternative relative to the action alternatives would likely impede vessel replacement for the freezer longline fleet and thus would likely result in limited improvements in vessel safety, processing efficiency, hold design, and engine efficiency for the fleet. This alternative could also jeopardize the safety of the fleet. While the U.S. Coast Guard and freezer longline vessel owners have seen significant improvements in vessel safety as a result of the ACSA program, there are limitations to its long-term effectiveness and this alternative would impede improvements in vessel safety beyond the ACSA program.

**Alternative 2** relative to status quo provides an opportunity for owners of freezer longline vessels to replace their vessels with larger vessels. However, relative to Alternative 3, this alternative would be limited to owners with vessels less than 150'. Under the alternative, a total of 17 LLP licenses would be eligible for larger MLOAs. Of these 17 LLP licenses, 9 licenses would have a MLOA of 150', while the other eight licenses would have a MLOA of 149'.

The benefits of this alternative relative to the other alternatives is that it provides some flexibility for vessel owners to replace their vessels with larger vessels in order to improve safety, processing operation, and engine efficiency while also limiting increases in effort due to significantly larger replacement vessels. Since the average age of the freezer longline vessels less than 150' is approximately 31 years, and since all replacement vessels will either be classed and loadlined or meet the requirements of ACSA, it is likely this alternative will result in the improved safety of the 150' and under vessels. If aging freezer longline vessels were replaced with newly constructed fish processing vessels, those replacement vessels

would be required to meet the full suite of safety standards as indicated in Table 2-12, resulting in an inherently safer vessel.

Another benefit of this alternative is that it limits expansion of effort for the freezer longline fleet. In the past, the Council has relied on vessel length restrictions as method for limiting the potential for expanding fishing effort. However, vessel length restrictions can result in replacement vessels with inefficient hull designs and other compromises in vessel designs. One drawback of vessel length restrictions is the potential for compromise in vessel safety. Vessel length restrictions also indirectly limit the level of processing a replacement vessel can incorporate thereby jeopardizing efficiency. Under a rationalized fishery, it can be argued that companies are better able to determine their long-term input stream. With this financial insight, companies are better able to design vessels to meet their harvesting and processing strategies.

An issue the Council might want to clarify concerning the alternative is its limitation to only include BSAI freezer longline vessels. Limiting MLOA modification to only BSAI freezer longline LLP licenses could disadvantage two freezer longline LLP licenses with GOA only endorsements. Expanding this alternative to include these GOA only LLP licenses in the proposed action could reduce the potential for BSAI participants to disadvantage these GOA vessels. If the Council does modify the alternative to include these LLP licenses endorsed only for the GOA, the Council will need to clarify whether the MLOA modification applies only to hook-and-line endorsements or whether the action also applies to pot endorsements since one of the two GOA only LLP licenses has pot cod endorsement in the GOA.

Under **Alternative 3**, the MLOA of LLP licenses with catcher processor and Pacific cod longline endorsements would no longer apply. This alternative would offer vessel owners, particularly operators of smaller vessels, the greatest flexibility to replace their vessels to incorporate necessary improvements in processing and safety. This alternative would also allow new vessels greater than 165 feet in length or more than 750 gross tons, or that has an engine or engines capable of producing more than 3,000 shaft horsepower to receive a fishery endorsement thereby allowing these vessels to fish in any fishery in the EEZ under the jurisdiction of the Council. Coast Guard regulation 46 U.S.C. 12106(c)(6) limit vessels greater than 165 feet in length, or more than 750 gross registered tons, or with engines capable of producing more than 3,000 shaft horsepower from entering fisheries unless the vessel carried a fisheries endorsement prior to September 25, 1997 or the Council has recommended and the Secretary of Commerce has approved a conservation and management measure to allow the vessel to be used in fisheries under its authority.

Alternative 3 relative to the other alternatives provides the greatest opportunity for owners of freezer longline vessels to replace their vessels with larger vessels. The absence of vessel length restrictions allows vessel owners to design safer and more efficient replacement freezer longline vessels. Given the average age of the fleet (40 years), improving the safety of the fleet is a significant benefit for the vessel replacement action. There does appear to be efficiency limitations that would likely provide operational incentives for limiting vessel lengths in replacement vessels. Also contributing to the operational limitations for replacement vessels are the Pacific cod sector allocations and cooperative fishing amongst all of the BSAI freezer longline owners. All combined, these factors will likely limit vessel lengths for replacement vessels to 180' or less. One potential issue associated with unrestricted vessel length is owners could try to leverage their increased fishing and processing capacity to negotiate greater portions of the cooperative catch share. Ultimately, this issue will be limited by strength of the cooperative agreement and the provisions within the cooperative agreement that discourage cooperative members from leaving the cooperative.

Similar to Alternative 2, the Council might want to clarify two issues. The first issue is whether the alternative is meant to apply only to BSAI freezer longline vessels. The other issue concerns whether

these LLP licenses affected by this action could be used in other fisheries once the MLOA no longer applies.

Included with each of the action alternatives are **two suboptions**. The first suboption would allow any vessel replaced under Alternatives 2 or 3 to continue to be used in North Pacific fishery by being named on FFP or an LLP. The second suboption would allow replaced freezer longline vessels to be used as replacement vessels for Alternatives 2 or 3.

The benefit of these suboptions is that would provide greater flexibility for vessel owners who want to use existing freezer longline vessels to replace other freezer longline vessels currently in use. Although many of these freezer longline vessels were built in 1940s, eight of the vessels were built in the 1980s and eight were built in 1990s. A potential advantage for vessel owners is that the existing freezer longline vessels are fitted for the appropriate fisheries, and may be easier, and cheaper to obtain than newly constructed vessels. It is understood that existing vessels must be classes and loadlined or meet the requirements of ACSA to be used to replace other freezer longline vessels.

One drawback of these suboptions is it could discourage vessel owners from replacing freezer longline vessels with newly constructed vessels if an existing vessel in the freezer longline sector would otherwise meet the needs of a replacement vessel. USCG personnel have indicated a preference for retiring existing freezer longline vessels to encourage newer and safer vessels. Arguably, if a vessel owner replaces one or more freezer longline vessels with an existing freezer longline vessel, that replacement vessel could have improved handling and safety features than the vessel that is being replaced. It is also conceivable that a vessel owner could replace a small vessel that is in good condition with a larger, more efficient vessel that is in poorer material condition. Furthermore, this replacement vessel, if unable to meet ACSA standards, could dis-enroll from ACSA, resulting in a decline in overall safety. Although the existing freezer longline vessels are not subject to the stringent safety requirements that would apply to new construction (see Table 2-12), vessel owners may be able to retrofit their vessels to incorporate improved safety and design features.

## 1.0 INTRODUCTION

The groundfish fisheries in the Exclusive Economic Zone (EEZ) off Alaska are managed by the National Marine Fisheries Service (NMFS) under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Under the authority of the MSA, the North Pacific Fishery Management Council (Council) developed Fishery Management Plans for the groundfish fisheries of the Gulf of Alaska management area (GOA) and Bering Sea and Aleutian Islands management area (BSAI).

This Regulatory Impact Review (RIR) evaluates the costs and benefits of proposed regulatory amendment. The proposed action would modify the criteria that would allow owners of freezer longline vessels to replace or rebuild their vessels. Specifically, the Council proposes to modify the maximum length overall (MLOA) of the License Limitation Program (LLP) license assigned to the freezer longline vessel to accommodate larger replacement vessels. Implemented on January 1, 2000, the LLP provided separate area endorsements, catcher vessel/catcher processor endorsements, and specified MLOA for licensed vessels. The MLOA for the license was based on the length of the vessel initially receiving the license.

The Council also proposes to allow freezer longline replacement vessels that exceed 165 feet in length, or more than 750 gross tons, or with engines capable of producing more than 3,000 shaft horsepower to enter the groundfish fishery. Coast Guard regulation 46 U.S.C. 12106(c)(6) limit vessels greater than 165 feet in length, or more than 750 gross registered tons, or with engines capable of producing more than 3,000 shaft horsepower from entering fisheries unless the vessel carried a fisheries endorsement prior to September 25, 1997 or the Council has recommended and the Secretary of Commerce has approved a conservation and management measure to allow the vessel to be used in fisheries under its authority.

Presidential Executive Order 12866, the National Environmental Policy Act (NEPA), and the Regulatory Flexibility Act (RFA), mandate that certain issues be examined before a final decision is made. The RIR is contained in Chapter 2. Chapter 3 provides an Initial Regulatory Flexibility Analysis. Chapter 4 includes a description of how the proposed action is consistent with the Magnuson-Stevens Act. References and lists of prepares are provided in Chapters 5 and 6.<sup>2</sup>

## 2.0 REGULATORY IMPACT REVIEW

This RIR is required under Presidential Executive Order (E.O.) 12866 (58 FR 51735, September 30, 1993). The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following statement for 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*

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<sup>2</sup> The proposed action would modify the criteria to allow freezer longline vessels to be replaced with larger vessels. The proposed change has no effect individually or cumulatively on the human environment (as defined in NAO 216-6). The only effects of the action are improved vessel safety, improved production efficiency, and potential economic redistributive arising from vessel replacement of large freezer longliner vessels. As such, it is categorically excluded from the need to prepare an Environmental Assessment.

*safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.*

EO 12866 further 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.

## **2.1 Problem Statement**

Recognizing the benefits of vessel replacement, which could include vessel safety, improved fuel efficiency, improved resource utilization, and increased economic efficiency the Council tasked staff to prepare an analysis of alternatives to allow freezer longline vessel owners to replace their vessels with larger vessels. Provided below is the industry proposed purpose and need presented at the February 2011 meeting.

*Allowing for Pacific cod hook and line catcher/processor vessel owners to rebuild or replace their vessels would allow for improved vessel safety, meet international class and loadline requirements that would allow a broader range of onboard processing options, or otherwise improve the economic efficiency of their vessels.*

## **2.2 Description of the Alternatives**

Provide below are the proposed alternatives and options.

*Alternative 1: No Action. Under this alternative, the BSAI Pacific cod hook and line catcher processor vessel length, horsepower, and tonnage restrictions currently in place would continue to apply.*

*Alternative 2: The owner of a BSAI Pacific cod hook and line catcher processor vessel may rebuild that vessel or replace that vessel with another vessel for any purpose. A rebuilt or replaced vessel may have a length overall 20% greater than the original qualifying BSAI Pacific cod hook and line catcher processor it replaces. A rebuilt or replaced vessel cannot exceed 150 feet LOA if the (License Limitation Program) LLP license assigned to that vessel, at the time of rebuilding or replacing, is less than 150 feet MLOA. Rebuilt or replaced vessels assigned LLP licenses with an MLOA greater than 150 feet MLOA would be limited to the length limitation on the LLP.*

*Suboption 1: Any vessel replaced under this program would be eligible to be designated on an FFP or an LLP.*

*Suboption 2: Replaced vessels may be used to replace other BSAI hook and line catcher processor vessels.*

*Alternative 3: No length restriction on rebuild and replacement vessels. The MLOA requirements on LLP licenses assigned to a BSAI Pacific cod hook and line catcher processor vessel would not apply.*

*Suboption 1: Any vessel replaced under this program would be eligible to be designated on an FFP or an LLP.*

*Suboption 2: Replaced vessels may be used to replace other BSAI hook and line catcher processor vessels.*

Three alternatives, including no action, are provided. Under Alternative 1, the no action alternative, freezer longline vessel length restrictions would continue to apply. Vessel owners could replace their vessels so long as the vessel length did not exceed the MLOA of the LLP license that the vessel is named on. In addition, freezer longline vessels that are (1) greater than 165 feet in length or (2) exceed 750 tons or (3) 3,000 horsepower or greater that do not already have a federal fisheries endorsement will not receive a federal fisheries endorsement and therefore cannot be used to replace an existing freezer longline vessel.

Alternative 2 would limit a replacement vessel to a length 20% greater than the original qualifying vessel the replacement or rebuilt vessel is replacing, not to exceed 150' LOA. However, since the MLOA of the LLP license restricts vessel length of assigned vessels and many of the freezer longliners are already at or near the MLOA of the LLP license they are named on, the language in the alternative will need to be modified to accommodate larger replacement vessels that exceed the current MLOA of the LLP license. Possible language for the alternative is provided below:

**For those LLP licenses with catcher processor and hook-and-line Pacific cod endorsements for the BS or AI with an MLOA of less than 150', increase the MLOA of the LLP license 20 percent not to exceed a MLOA of 150'.**

Under Alternative 3, the MLOA of BSAI LLP license with Pacific cod longline endorsements would not apply. This alternative would also allow vessels that are (1) greater than 165 feet in length or (2) exceed 750 tons or (3) 3,000 horsepower or greater that do not already have a federal fisheries endorsement to be eligible to receive a certificate of documentation consistent with 46 U.S.C. 12102(c).

Also include in the proposed action are two options. Suboption 1 would allow any vessel replaced under this proposed action to continue participating in federal fisheries, including those fisheries requiring an LLP license. Suboption 2, would allow replaced freezer longline vessels to be used to replace other freezer longline vessels. The Council could choose both suboptions when selecting Alternatives 2 or 3, but if the Council wanted to remove replaced freezer longline vessels from the federal fisheries, a third suboption would need to be added that states replaced vessels would be ineligible to be designated on an FFP or an LLP.

## 2.3 Description of the freezer longline sector<sup>3</sup>

The vessels in this sector are 110-foot to 180-foot<sup>4</sup> catcher processors using longline gear in the BSAI. Since January 1, 2003, freezer longliners have been required to have a Pacific cod longline catcher processor endorsement on their (License Limitation Program) LLP license to target BSAI Pacific cod with longline gear and process it onboard. The Consolidated Appropriations Act of 2005 (Section 219(a)(1) ) defined eligibility in the longline catcher processor sector as the holder of an LLP license that is transferable, or becomes transferable, and that is endorsed for BS or AI catcher processor fishing activity, Pacific cod, and longline gear.

In the past years, the freezer longliners generally began fishing for Pacific cod on January 1, and continued until the allocation was fully harvested by February, March, or April. They then started fishing Pacific cod again from August 15, when the next halibut PSC allowance became available, through November or December. In 2011, the initial “A” season remained open until June 10, perhaps because the introduction of a fishery cooperative that spread out harvests. Also in 2011, the harvest specifications for halibut PSC in this fleet were modified, to release halibut PSC on June 10 and August 15. Thus, in 2011, this fleet is expected to operate during more of the year than in the past. As of July 17, 2011, this fishery had already had more open days available for fishing than the total days available in each of the full years from 2004 through 2010.

The primary target species in the freezer longline fisheries are Pacific cod, sablefish, and Greenland turbot. In addition, longline vessels also may retain incidentally caught species such as skates, rockfish, arrowtooth flounder, and pollock.

*Sector and Regional Profiles of the North Pacific Groundfish Fisheries* published by Northern Economics in 2001 provide a description of the freezer longliner fleet. This fleet produces headed and gutted products. The reasons for this vessel class producing only headed and gutted products are due to loadline regulations plus a lack of space to accommodate additional crew and equipment. These vessels are able to produce relatively high-value products that compensate for the relatively low catch volumes associated with longline gear. Most of these vessels are steel-hulled, shelter-decked, and predominantly schooner in style. Most vessels are equipped with automatic baiting machines that enable them to bait and haul about 30,000 to 40,000 hooks per day. Below deck, these vessels are set up with heading and gutting machines, plate freezers, and lower level freezer holds for their frozen products. Generally, these vessels are not built to standards that would permit them to be loadline certified—a designation that requires certain standards for production on a vessel. Without loadline certification, a processing vessel cannot produce fillets.

Production capacity are directly related to vessel length and overall vessel design—larger vessels can accommodate larger freezer holds that allow vessels to stay at sea for longer periods. Larger vessels also allow more processing and automated baiting equipment to be installed, which can be optimally located to increase overall daily throughput.

Most vessels were converted to this class from some other use, and were not necessarily fishing vessels before being converted. Vessels with a long history in this class tend to be smaller and limited in number. Vessels that entered the class more recently tend to be larger, as they are designed to specifically target Pacific cod in the BSAI. Larger vessels in this class can operate in the BSAI and GOA during most weather conditions.

Longline are set on the sea floor leaders (gangions) with baited hooks attached. Each longline can be several miles in length and have thousands of hooks. A longline vessel typically sets several lines for

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<sup>3</sup> This section originates from a regulatory amendment analysis to modify monitoring and enforcement requirements in the BSAI freezer longline fleet that was completed by AKR.

<sup>4</sup> Source FFP file, RAM Division, NMFS. October 2011.

varying amounts of time. The lines are retrieved with hydraulic power over a roller mounted on the side of the vessel. Fishing trips tend to range in length from 2 to 3 weeks.

Only 10 percent of the vessels bait hooks by hand; the others use an automatic baiting system. Vessels with an automatic baiter travel about 7 miles per hour when setting gear, which is roughly the speed at which the baiting machine can keep up. The amount of gear set depends on sea conditions and how long the operators want to fish before they pick up the gear. The length of set varies from 3 to 30 miles.

Vessels pick up gear more slowly than when they set it, with the pickup rate governed by how fast they can handle the catch. Fish hauled onboard are immediately shaken loose and thrown into a trough. A crewmember known as a “bleeder” bleeds the fish as soon as possible. Fish are then headed and gutted by hand or by machine. Fish are sorted by size/weight, packed, and frozen. Product is offload to cold storage in port or onto a tramper at sea. The majority of the freezer longline product is marketed overseas, with price determining where product is sold.

#### *Pacific cod freezer longline fishing in the BSAI*

Since 1994, BSAI Pacific cod ITAC<sup>5</sup> has been allocated among the sectors. The freezer longline sector is allocated 48.7% of the BSAI Pacific cod ITAC. In the GOA, the Council in December 2009 recommended allocating Pacific cod TAC among the different sectors. The Council recommended 19.8% of the western GOA TAC to the freezer longline sector and 5.1% of the central GOA TAC to the freezer longline sector. The GOA Pacific cod sector allocation has not yet been approved by the Secretary of Commerce.

Table 2-1 summarizes information on retained Pacific cod harvests by the fleet over the years 2004 to 2011 (data for 2011 only covers the year through early October). In the years for which data is complete, the number of vessels with retained Pacific cod ranged between 36 in 2010, and 39 in the years 2004-2006 and 2008.<sup>6</sup> As shown, harvests for the years with complete data range from about 84,000 metric tons in 2007 to about 113,000 in 2005. Most of the harvest was from targeted non-CDQ fishing in the BSAI, but significant proportions also came from targeted CDQ fishing in the BSAI, and targeted Pacific cod fishing in the GOA. The CDQ and GOA production are discussed in more detail below. Table 2-2, which follows, shows average retained catch estimates.

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<sup>5</sup> ITAC is equal to the TAC minus the 10.7% CDQ allocation. Note also that a 3% percent deduction from ABC is made before calculation of the TAC to accommodate the State of Alaska Aleutian Islands Pacific cod GHL.

<sup>6</sup> This includes activity by small numbers of vessels with low levels of targeted Pacific cod production in the BSAI. Some of this production may actually represent errors in the data, and not BSAI participation by a separate vessel. Of the 295 vessel-years of activity reported in Table 2-1, 3 represented less than 100 metric tons of production, 8 represented less than 200 metric tons, and 10 represented less than 500 metric tons.

**Table 2-1. BSAI Freezer Longline Pacific cod retained harvests in metric tons, by source of harvest**

Year	Number vessels	BSAI target	BSAI incidental	BSAI CDQ	GOA target	GOA incidental	Total Pacific cod
Vessels and metric tons retained round weight							
2004	39	93,811	27	14,582	4,318	29	112,737
2005	39	98,595	23	13,372	934	57	112,924
2006	39	84,453	33	12,723	3,540	48	100,750
2007	37	67,917	16	11,293	4,371	77	83,596
2008	39	75,436	29	16,378	4,707	41	96,550
2009	38	83,113	6	16,702	4,386	50	104,208
2010	36	71,760	19	15,735	7,343	37	94,857
2011*	29	48,210	5	10,155	3,942	7	62,312
Percent of total retained harvest from all sources							
2004		83%	0%	13%	4%	0%	
2005		87%	0%	12%	1%	0%	
2006		84%	0%	13%	4%	0%	
2007		81%	0%	14%	5%	0%	
2008		78%	0%	17%	5%	0%	
2009		80%	0%	16%	4%	0%	
2010		76%	0%	17%	8%	0%	
2011*		77%	0%	16%	6%	0%	
Notes: *2011 is partial year data. Last harvest included was June 5. Includes data for freezer longliners with retained, targeted BSAI Pacific cod. A vessel retaining incidental BSAI Pacific cod without retaining targeted Pacific cod would not be included; a vessel retaining GOA targeted Pacific cod but not BSAI targeted cod would not be included.							
Source: AKFIN data set of June 15 summarized by NMFS AKR.							

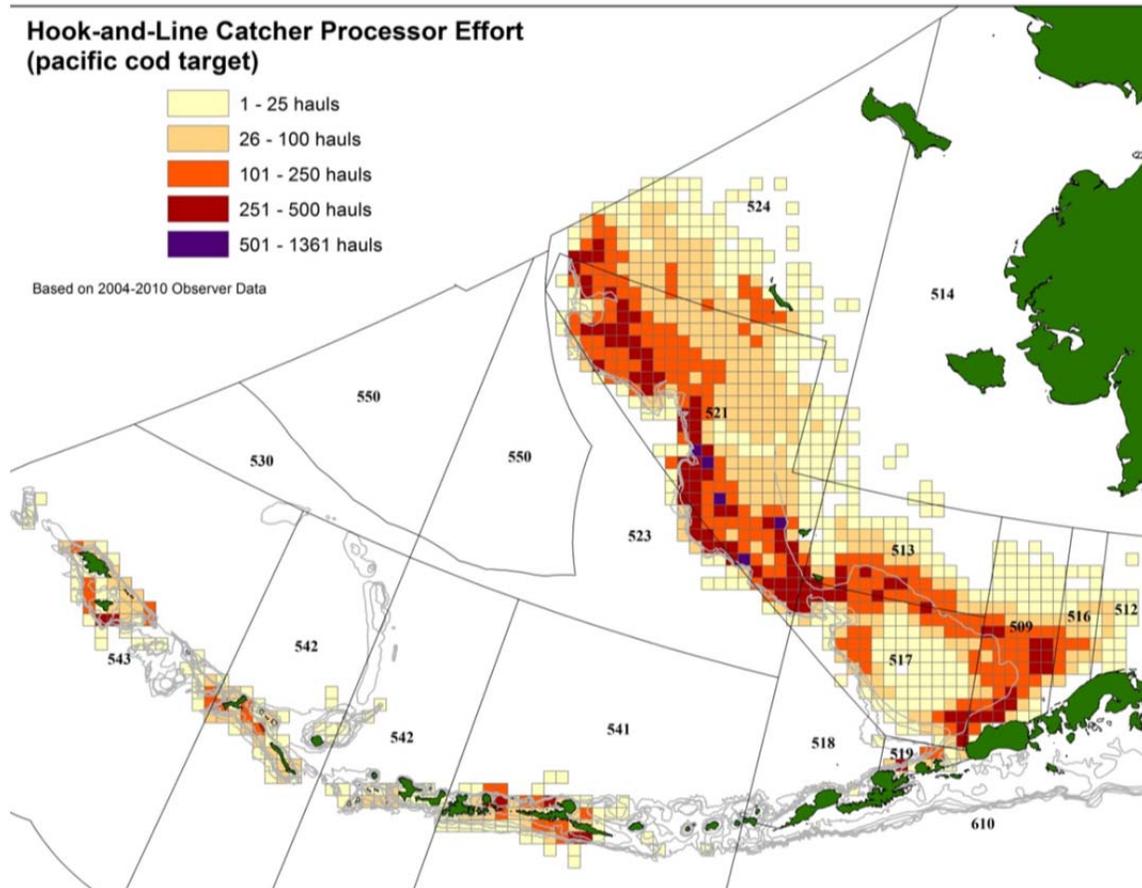
**Table 2-2. Pacific cod production by an average vessel in the BSAI freezer longline fleet (including production by these vessels in the GOA)**

Year	Number vessels	Average targeted BSAI Pacific cod	Average CDQ Pacific cod	Average GOA Pacific cod	Average total harvest Pacific cod
2004	39	2,405	374	111	2,891
2005	39	2,528	343	24	2,895
2006	39	2,165	326	91	2,583
2007	37	1,836	305	118	2,259
2008	39	1,934	420	121	2,476
2009	38	2,187	440	115	2,742
2010	36	1,993	437	204	2,635
2011*	29	1,662	350	136	2,149
Notes: *2011 is only partial year. Includes data for freezer longliners with retained, targeted BSAI Pacific cod. Total harvest includes incidental harvests in the BSAI and GOA.					
Source: Estimates in Table 2-1.					

*Spatial and temporal distribution of freezer longline Pacific cod harvests*

Most fishing activity in the Bering Sea and Aleutian Islands occurs along the continental shelf break in the Bering Sea, and especially along the area of the break to the west and north of the Pribilof Islands (Figure 2-1). Other activity takes place along the Aleutian Islands, although Steller sea lion protection

measures, which because effective in the 2011 season, will limit activity in Area 542, and eliminate it in Area 543, in the future.



**Figure 2-1** Locations of freezer longline hauls in the Bering Sea and Aleutian Islands for the years 2004 through 2010

### *Incidental catch of BSAI freezer longliners*

Table 2-3 contains estimates of the retained incidental catch of species other than Pacific cod by the BSAI freezer longline fleet. The table only includes estimates of the most significant incidental catches.

**Table 2-3. Retained incidental catches of the BSAI Pacific cod freezer longline fleet (metric tons)**

Year	Arrowtooth BSAI	Pollock BSAI	Skates BSAI	Skates GOA
2004	81	4,629	4,442	164
2005	720	3,593	6,354	5
2006	502	2,602	3,879	201
2007	267	2,857	3,202	128
2008	383	4,385	4,614	98
2009	289	3,977	3,253	43
2010	274	3,387	3,390	236
2011	4	1,972	1,634	123

Note: 2011 annual data is incomplete. Only includes retained catches through June 5.  
Source: AKFIN data from June 15, 2011 summarized by NMFS AKR

### *Other targets for this fleet*

Table 2-4 contains estimates of other groundfish species targeted by this fleet. Some of the vessels also target halibut, however, halibut fishing is not managed under the BSAI or GOA FMPs. Some of these vessels may also have other fishery-related activities during the course of the year, for example, tendering or processing salmon during the summer. NMFS does not have data on these activities.

**Table 2-4. Retained incidental groundfish catches of the BSAI Pacific cod freezer longline fleet**

Year	Sablefish BSAI	Turbot BSAI	Sablefish GOA
2004	164	1,486	1,604
2005	288	1,838	1,803
2006	275	1,586	1,437
2007	351	1,664	1,500
2008	235	1,090	1,135
2009	299	1,418	849
2010	209	2,400	646
2011	110	69	530

Note: 2011 annual data is incomplete. Only includes retained catches through June 5.  
Source: AKFIN data from June 15, 2011 summarized by NMFS AKR

### *Pacific cod freezer longline fishing in the GOA*

Freezer longline vessels that target Pacific cod in the Bering Sea and Aleutian Islands also target Pacific cod in the GOA. Table 2-1 above provides estimates of the percentage of total retained Pacific cod harvests for the BSAI freezer longline fleet for targeted harvests from the GOA for the eight years from 2004 through 2011 (2011 data is incomplete). These percentages ranged from one percent in 2005 to 8 percent in 2010. The median annual percentage is 4 percent. However, vessels that operate in both areas are significantly more dependent on production from the GOA than the average vessel in the fleet. Table 2-5 below shows that the number of BSAI freezer longline vessels participating in the GOA Pacific cod fishery ranged from 6 in 2005 to 16 in 2008 and 2010. The percent of production from this source for these vessels ranged from 6 percent in 2005 (when the average for the whole fleet was 1 percent, see

Table 2-1 above) up to 19 percent in 2010 (the last year for which complete annual information is available).

**Table 2-5. GOA activity for BSAI freezer longline vessels targeted GOA Pacific cod**

Year	Number of vessels	CDQ Pacific cod tons	All Pacific cod tons	GOA share (percent)
2004	11	4,318	31,754	14
2005	6	934	15,016	6
2006	15	3,540	39,185	9
2007	13	4,371	32,851	13
2008	16	4,707	40,654	12
2009	15	4,386	40,615	11
2010	16	7,343	38,583	19
2011	8	3,942	16,538	24

Note: 2011 annual data is incomplete. Only includes retained catches through June 5.  
Source: AKFIN data from June 15, 2011 summarized by NMFS AKR

### *Markets*

The most important Pacific cod products produced by this fleet are frozen eastern and western cut headed-and-gutted (H&G) Pacific cod. Over the years 2008 through 2010, eastern cut accounted for between 63 percent and 83 percent of H&G production, and western cut accounted for between 17 percent and 37 percent. Over these years, both together accounted for over 95 percent of total output weight. Other products included whole or bled Pacific cod, and ancillary products such as roe, pectoral girdles, heads, cheeks, chins, belly flaps, milt, stomachs, and other products.

Pacific cod produced by the freezer longliners is ultimately consumed in a wide variety of places (white tablecloth restaurants, fast food restaurants, food service operations in school and hospitals, grocery stores, in the United States or in foreign countries) and in a wide variety of product forms (fillets, sticks, portions, breaded or unbreaded, and salt cod, in addition to the ancillary products listed above).

As described at the start of this section, the BSAI freezer longliner vessels are primarily producing trays of frozen H&G Pacific cod. This product is processed further once it leaves the catcher/processor. Additional processing may take place in the United States. However, much of the processing takes place overseas, as well. Pacific cod processed in second countries may be exported to third countries for consumption. For example, large Pacific cod produced from the Aleutian Islands may be shipped to Norway for further processing, and then shipped to Brazil for final processing and consumption as salt cod. Pacific cod receiving secondary processing overseas may be re-exported, to the United States, for consumption.

### *Revenues from fishing for Pacific cod*

Table 2-6 provides estimates of gross average revenue and the number of freezer longliners fishing for Pacific cod in from 2004 through 2010. Average revenue includes non-CDQ and CDQ, targeted and incidental, and BSAI and GOA Pacific cod revenues. Revenues have been converted to constant 2010 dollars to factor out the impact of inflation. Average revenue appears to have risen over the entire period, until they dropped in 2009 and 2010.

**Table 2-6. Average gross revenue and number of vessels from BSAI and GOA Pacific cod for the BSAI freezer longline fleet**

Year	Number of vessels	Average revenue (\$)
2004	39	4,006,034
2005	39	4,845,300
2006	39	5,551,425
2007	37	5,662,278
2008	39	6,258,223
2009	38	4,260,433
2010	36	5,027,225

## 2.4 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 Longliner Conservation Cooperative. In June 2010, the remaining LLP holders joined the cooperative, so that with the start of the 2010 B season on August 15, all holders of LLPs authorizing the use of these vessels were members of the cooperative. Each year an allocation is made to the freezer longline catcher processor sector through the annual harvest specifications process. Cooperative members each receive a share of the quota for harvest; shares are issued in proportion to historical fishing activity with the LLP. Cooperative members are free to exchange their quota shares among themselves, and to stack shares on individual vessels. Compliance with the agreement is monitored by SeaState, Inc., and the contract signed by the members imposed heavy financial penalties for non-compliance. In the past, even without 100 percent membership, the cooperative has been able to organize GOA harvests, so as to make reliable commitments that members would reach halibut PSC avoidance goals. NMFS has relied on these commitments to open fisheries that would not otherwise have been opened. Cooperative efforts have led to the withdrawal of vessels from the fishery (NMFS 2010).

Long term allocations of the Western and Central GOA Pacific cod TACs to the freezer longline sector, and provisions that limit entry to the directed GOA longline Pacific cod fishery, may provide opportunities for the formation of harvest cooperatives. NMFS does not currently have a mechanism to allocate catch history to cooperatives in the GOA Pacific cod fisheries. All vessel owners within the sector would need to voluntarily join a cooperative and abide by its bylaws, or Congressional action could be taken, or additional Council action, with Secretary of Commerce approval, and implementing regulations would need to be established to provide NMFS with the necessary authority to allocation Pacific cod to individual cooperatives.

In the GOA Pacific cod fisheries, the freezer longline sector may be the sector that is most likely to form a harvest cooperative. As noted above, most of the freezer longliner fleet fishes for Pacific cod in the BSAI, then moves into the GOA, after the BSAI Pacific cod season close. In 2005, the BSAI freezer longliner fleet voluntarily agreed not to fish in the GOA during the B season, because NMFS inseason management was concerned that there was not sufficient halibut PSC to support this fleet. As a result, during 2006 through 2009, the freezer longliners set up an informal “PSC cooperative” with NMFS inseason management. Under this arrangement, halibut PSC was informally divided between catcher/processors and catcher vessels. The freezer longliners then further divided the catcher/processor PSC among vessels. This informal cooperative in sharing PSC suggests that this sector has the potential to establish a formal harvest cooperative.

Once GOA Pacific cod sector allocations are implemented, total catch by longline catcher/processors would be capped by the allocations. If vessels in this sector form a harvest cooperative subsequent to the implementation of the sector allocations, this sector could potentially take advantage of increased

production efficiencies of fishing cooperatively, but would not be able to increase the sector's overall harvest of the Western and Central GOA Pacific cod TACs. However, if vessels fish the catcher/processor allocations cooperatively, some vessels in this fleet could opportunistically act as catcher vessels and fish off the longline catcher vessel allocations, which is presently consistent with present management design in this fishery.

## 2.5 History of BSAI freezer longline regulations<sup>7</sup>

### *License Limitation Program*

Crucial to understanding the details of vessel replacement of BSAI freezer longline fleet, a short overview of the LLP is provided. The LLP became effective on January 1, 2000. This groundfish LLP program was implemented pursuant to BSAI Amendment 39 and GOA Amendment 41, adopted by the Council in 1995. This program provided for separate endorsements for the AI, BS, WGOA, CGOA, and SE Outside. The program also provided for a CV or CP endorsement. LLPs specified a maximum length overall (MLOA) for licensed vessels. Thereafter the MLOA for a license was fixed. Table 2-7 provides the general rules for determining the MLOA on an LLP, while Table 2-8 provides the exceptions to the general determination.

**Table 2-7. Determination of MLOA**

Vessel Length/Status	MLOA
Less than 125' on June 24, 1992	1.2 times the LOA or 125' whichever is less
If vessel is under reconstruction on June 24, 1992	LOA of vessel when completed
LOA greater than 125' on June 24, 1992	LOA

**Table 2-8. Exceptions to the MLOA**

Vessel Length/Status	MLOA
LOA less than 60' on June 17, 1995 or under reconstruction on that date and when completed LOA less than 60'	MLOA cannot exceed 59'
LOA greater than or equal to 60' but less than 125' on June 17, 1995 or under reconstruction on that date and when completed was greater than or equal to 60' but less than 125'	MLOA cannot exceed 124'
LOA greater than 125' on June 17, 1995 or under reconstruction on that date and when completed was greater than 125'	MLOA is the vessels LOA

Amendment 67, approved by the Council in April 2000 under BSAI Amendment 67, introduced a Pacific cod endorsement for BSAI LLPs. Amendment 67 required that fixed gear vessels  $\geq 60'$  participating in the BSAI Pacific cod fishery must qualify for a Pacific cod endorsement, which would be part of the participant's LLP. Eligibility for a BSAI cod endorsement is based on past participation in the BSAI fixed gear fisheries during specific combinations of the years 1995-1999. Four different endorsements are available, depending on the gear used to harvest cod (longline or pot) and whether the cod was processed onboard the harvesting vessel (catcher vessel or catcher processor). Amendment 67 exempts catcher vessels  $< 60'$  LOA from the requirement to have a cod endorsement to participate in the directed BSAI fixed gear Pacific cod fishery. Amendment 67 effectively granted exclusive access to historical participants in the BSAI fixed gear cod fishery, and thus reduced the number of allowable participants. The amendment became effective January 1, 2003. There are 37 LLP licenses that are endorsed with BS longline catcher/processor endorsements and 36 LLP licenses that are endorsed with AI longline catcher/processor endorsements.

<sup>7</sup> Portions of this section originate from a regulatory amendment analysis to modify monitoring and enforcement requirements in the BSAI freezer longline fleet that was completed by AKR.

In the GOA, the freezer longliner fleet is relatively small and the Council's fixed gear recency action (Amendment 86) limits the number of participants in this sector by adding gear-specific Pacific cod endorsements to fixed gear licenses. An estimated 12 Central GOA licenses and 16 Western GOA licenses qualify for a longline catcher/processor endorsement. In addition, an estimated 12 Central GOA and 3 Western GOA licenses qualify for a catcher/processor endorsement, because these licenses qualified under an exemption for participants in the informal halibut PSC cooperative.

Since the proposed action is to modify the MLOA of the LLP licenses assigned to freezer longline vessels, Table 2-9 is included analysis to show the number of LLP licenses by MLOA and the number of vessels assigned to LLP licenses in each MLOA category that are within 5' of the MLOA of that license. The table also shows the range of years in which the vessels were built, and the number of Pacific cod endorsements by area and gear. For example, there are 9 LLP licenses that have an MLOA greater than or equal to 125' but less than 150'. Of these 9 LLP licenses, there are 7 licenses that are within 5' of the MLOA noted on the license. The vessels currently named on these 9 LLP license were built between the years 1944 to 1991. Also included in the table are two LLP licenses that are exclusively GOA. Each of these LLP licenses has a western GOA hook-and-line endorsement, while one license has a central GOA and western GOA pot cod endorsement. These LLP licenses have a MLOA of less than 124' and the vessels currently named on the LLP licenses are not less than 5' within the MLOA. The vessels named on the LLP licenses were built in 1969 and 2001.

**Table 2-9. Number of LLP licenses with fixed gear Pacific cod endorsements**

MLOA	Number of licenses	Number of vessels within 5' of the MLOA	Range of years vessels built*	Number of Pacific cod endorsements							
				BS HAL	AI HAL	CG HAL	WG HAL	BS POT	AI POT	CG POT	WG POT
Less than 124'	2	0	1969 and 2001	0	0	0	2	0	0	1	1
124'	8	7	1945 - 2005	8	8	6	5	0	0	0	0
Greater than or equal to 125' but less than 150'	9	7	1944 - 1991	9	9	7	3	0	0	0	0
Greater than or equal to 150' but less than 165'	6	5	1937 - 1991	6	5	3	0	0	0	0	0
Greater than or equal to 165' but less than 200'	13	7	1942 - 1998	13	13	6	7	3	3	0	1
Greater than 200'	1	0	Unknown	1	1	0	0	0	0	0	0

Source: LLP file and FFP file for vessel length, RAM Division, NMFS. October 2011.

\*Provided by Freezer Longline Coalition

*The AFA and applicability to freezer longline sector vessels*

Important in the proposed action, the American Fisheries Act (AFA) made two amendments to fishery endorsement provisions that effect vessel replacement. First, section 208(g) contains specific vessel replacement provisions that are applicable to vessels eligible to fish in the directed pollock fishery in the Bering Sea. Since vessels in the freezer longline catcher processor fleet are not eligible for the directed pollock fishery, that section does not apply to this fleet. The second provision affecting vessel replacement prohibits vessels exceeding certain length, tonnage, and horsepower limits from entering fisheries from obtaining a fishery endorsement unless specific conditions are met (see 46 U.S.C. 12102(c)(6) and corresponding regulations at 46 C.F.R 356.47). Specifically, greater than 165 feet in length, of more than 750 gross registered tons, or with engines capable of producing more than 3,000 shaft horsepower from obtaining a fishery endorsement unless the vessel carried a fisheries endorsement prior to September 25, 1997 or the regional fishery management council has recommended and the

Secretary of Commerce has approved a conservation and management measure to allow the vessel to be used in fisheries under its authority, since enactment of the AFA. Since the Council has adopted no such measure, any freezer longline catcher processor that does not already have a fishery endorsement and that is greater than 165 feet in length or that exceeds 750 tons and 3,000 horsepower cannot receive a fishery endorsement.

NOAA General Counsel and MARAD staff concur that the required measure would be best adopted through an FMP amendment specifying that hook-and-line catcher processor replacement vessels may exceed the length, horsepower and tonnage requirements in regulation at 46 C.F.R 356.47 when participating in fisheries other than the BSAI directed pollock fishery that are under the Council's authority. MARAD staff have stated that they would request documentation from NMFS of the Secretary's approval of any such FMP amendment prior to issuing a fishery endorsement to a hook and line catcher processor replacement vessel.

## **2.6 Freezer Longline Catcher Processor Safety**

With the notable exception of the loss of the freezer longline vessel *Galaxy* in 2002, there have been no other vessel losses within the freezer longline sector between 2000 – 2010 and individual fatalities have been infrequent during this same time period. The freezer longline sector is nevertheless considered to be high-risk primarily due to the area in which these fish processing vessels (FPV) operate, the average vessel age, the large number of crew on each vessel, and the potential for high consequences such as multiple loss of life should a marine casualty occur. This section characterizes the operational risks associated with the work environment of this fleet, the fleet's fatality rates, the applicable safety regulations (including the Alternate Compliance and Safety Agreement), and the safety implications of vessel replacement.

### *Aging Fleet Linked to Negative Safety Events*

A literature review found a few studies that evaluated the association of vessel age with the probability of a negative safety event. The first study reviewed USCG accident investigations of non-fatal crew injuries, fatal crew injuries and missing crew incidents on freight ships, tankers and tugboats that occurred during 1991 through 2001. Authors found that fatal injuries on freight ships increased with vessel age.<sup>8</sup> Another study from the British Shipbuilders Technology Department concluded that in general a positive relationship exists between ship casualty rates and ship age.<sup>9</sup> Only one study was found that looked at the issue of age as a predictor for vessel losses and fatalities in the commercial fishing fleet. The authors found that an increase in vessel age increases the probability of a total loss due to a collision, fire/explosion, material/equipment failure, capsizing and sinking.<sup>10</sup>

### *High-Risk / High Consequence Work Environment*

Unlike catcher vessels which catch fish and deliver fish in the round to shore plants, freezer longline FPVs have added hazards because they catch, sort, head, eviscerate, clean and prepare fish into various fish products on board the vessel. To conduct these operations, these vessels have large crew complements ranging from 15-25 people, with an average size of 19 crew members. In contrast, the size of a typical catcher vessel crew ranges between 4-6 people. The majority of the crew on freezer longline

<sup>8</sup> Talley, WK, Jin D, Kite-Powell, H. *Determinates of Crew Injuries in Vessel Accidents. Marit. Pol. Mgmt., July-Sept 2005. Vol. 32. No. 3, pg. 263-278.*

<sup>9</sup> Meek M, Brown WR, Fulford KG. *A shipbuilders' view of safety. Marit. Pol. Mgmt., 1985, Vol. 12, No. 4, pg. 251-262.*

<sup>10</sup> Jin D, Kite-Powell H, Talley W. *The safety of commercial fishing: Determinants of vessel total losses and injuries. Journal of Safety Research 32 (2001) 209-228.*

vessels are not professional mariners, but instead are fish processing workers. In addition to large crews, these vessels carry processing and freezing machinery, hazardous gases for refrigeration, and large amounts of flammable packaging materials which pose hazards that do not exist on catcher vessels. The freezer longline vessels typically operate from January through May and then from July through November, with some vessels extending their seasons through December. However, in 2011, it appears likely that the fishing season will extend to cover the entire year due to slower harvest rates and halibut PSC availability. Because of their ability to freeze, package, and store frozen catch, these vessels can operate in the most remote areas of the BSAI region for extended periods of time, hours away from search and rescue support.

### *History of Fatalities and Fatality Rates*

Since 1990, the National Institute for Occupational Safety and Health (NIOSH) Alaska Pacific Regional Office has monitored safety performance of individual fishing fleets throughout Alaska. NIOSH collects information for each fatality that occurs in the fishing industry, and also estimates the size of the workforce for each fleet to calculate rates and make comparisons across fleets. Fatality rates are calculated by dividing the number of fatalities by the estimated workforce. These workforce estimates are based on the number of vessels operating, the number of days the vessel is at sea, and the number of crewmen on board. Based upon these variables, the freezer longline fleet had an average annual fatality rate of 117 per 100,000 workers per year from 2000-2009. In comparison, the average annual fatality rate for the entire Alaskan fishing fleet was 109 per 100,000 workers per year from 2000-2009. Table 2-10 is a summary of all fatalities occurring on Freezer Longline vessels since 2000.

During 2000-2010, there has been one major vessel loss in this fleet, the Galaxy. The loss of the Galaxy demonstrated the significant consequences resulting from a large crew having to abandon a vessel. The risks for high numbers of fatalities increase if crews are forced to abandon ship. Other fatalities within this freezer longline fleet are caused by falls overboard and industrial injuries occurring in the processing spaces.

**Table 2-10. Fatalities on freezer longline catcher processor vessels, 2000 through 2010**

Year	Fatality Type	# of Fatalities	# Crew at risk	Length
2002	Vessel Loss	3	26	180
2002	Fall Overboard	1	1	161
2002	Fall Overboard	1	1	166
2003	Fall Overboard	1	1	124
2008	On-board Injury	1	1	137
2008	On-board Injury	1	1	124
2010	On-board injury	1	1	137

### *Review of Freezer Longline Fleet Safety Regulations*

Safety regulations for commercial fishing industry vessels are largely based upon the function of the vessel. More specifically, existing U.S. Coast Guard safety regulations make a significant distinction between a fishing vessel (a vessel which catches fish), and a fish processing vessel, which is a vessel that “commercially prepares fish or fish products other than by gutting, decapitating, gilling, skinning, shucking, icing, freezing or brine chilling.” The most stringent safety regulations of vessel classification and loadline are reserved for fish processing vessels which are built after July 1991. A vessel which does not prepare fish beyond these eight statutory limitations is regulated to a significantly lesser degree as a “fishing vessel” in accordance with 46 USC 2101 (11a).

Prior to 2006, the USCG enforced the safety regulations for the freezer longline fleet (as well as the freezer trawl fleet) as if they were “fishing vessels” that produced head and gut (H&G) products as described in Table 2-11. In terms of required safety equipment, this designation as a fishing vessel meant that these vessels only had to meet minimal standards for the carriage of primary lifesaving and fire-fighting equipment but were not required to be classed or loadlined.

The formal USCG investigations into the loss of the Arctic Rose (2001) and Galaxy (2002) found most freezer longline and freezer trawl vessels were actually operating (and had been operating for some time) as “fish processing vessels” and were producing fish products in described in Table 2-11. As fish processing vessels, these freezer longline vessels were required to be classed or loadlined. Due to a vessel age limitations of 20 years imposed by the classification societies of Det Norske Veritas and American Bureau of Shipping, the vast majority of the freezer longline fleet could not be either loadlined or classed, unless that vessel was already constructed to class and loadline standards. In other words, freezer longline vessels built before 1991 cannot be classed and loadlined. A summary of the freezer longline fleets age and length is provided in Table 2-9.

### *Alternate Compliance and Safety Agreement*

Because of this inability to meet current safety regulations of loadline and classification, the USCG and owners of freezer longline and freezer trawl vessels collaborated to develop an alternative program to address the safety risks of this fleet.<sup>11</sup> This collaborative effort is known as the Alternative Compliance and Safety Agreement (ACSA). ACSA development began in June 2005 and was implemented between June 2006 and January 2009. The ACSA program is designed to achieve a similar level of safety as classification and loadline provide and in certain ways exceeds the standards of classification and loadline. However, it is important to note that because most freezer longline vessels were not constructed to meet the requirements of classification and loadline, there are some inherent limitations in achieving a total safety equivalency.

ACSA has both a preventative safety regime as well as a reactive one. Preventative safety components of the ACSA program focus on maintaining hull condition and watertight integrity, preventing down flooding, ensuring adequate vessel stability, requiring fire detection and suppression systems. ACSA also requires regular maintenance for machinery and critical piping systems. Reactive safety components of ACSA include enhanced emergency training, improved lifesaving equipment and additional firefighting capabilities for the vessel and crew. These standards are enforced through mandatory annual inspections and regular drydock examinations (twice in five years).

### *ACSA and Fish Products*

Table 2-11 provides a list of fish products that can be processed by safety standard. For those fishing vessels and freezer longline vessels not in compliance with ACSA they are limited to only those H&G fishing products allowed for fishing vessels. Freezer longline vessel that are ACSA compliant are allowed to produce fish products which the statutory definition of fish processing as noted in the table below in addition to fishing vessel products. Classed and loadlined fish processing vessels are allowed to produce all fish products noted in the table.

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<sup>11</sup> U.S. Coast Guard, Exemption Letters for Existing Fish Processing Vessels. G-PCV Policy Letter 06-03 dated July 1, 2006.

**Table 2-11. H&G fish products by safety standard**

<b>H&amp;G fish products allowed for fishing vessels</b>		
Bled Only	Headed & Gutted, Western Cut	Whole Fish (for) Meal
Gutted, Head On	Headed & Gutted, Eastern Cut	Bled Fish destined for Meal
Gutted, Head Off	Wings	
Head & Gutted with Roe	Mantles, Octopus or Squid	
<b>Fish processing products allowed on ACSA vessels</b>		
Headed & Gutted, Tail Removed	Pectoral Girdle	Stomach
Kirimi (Steak)	Heads	Milt
Roe	Chins	Stomachs
<b>Fish processing products allowed on classed/loadlined vessels</b>		
Salted and Split	Filletts, Skinless / Boneless	Fish Meal
Belly Flaps	Filletts, Deep Skin	Fish Oil
Filletts with Skin & Ribs	Surimi	Butterfly, No Backbone
Filletts with Skin, No Ribs	Minced	Bones

### *Safety Regulations for Freezer Longline Vessels*

With the inclusion of the ACSA program, freezer longline vessels will generally fall into sub-categories with different safety regulations that must be followed. These are described below and are found in Table 2-12 on a continuum of the most lenient to the most robust safety regulations.

- **Fishing Vessel (H & G Products Only):** A vessel under this safety regime is only required to meet safety standards 46 CFR 28 subparts A-C. These fishing vessels may only produce those products found in Table 2-11. These grandfathering provisions will expire in July 2020 at which time these vessels will either have to be replaced with newly constructed fish processing vessels or will have to meet ACSA standards as previously described.
- **Pre 1991 Fish Processing Vessel:** A vessel under this safety regime is required to meet safety standards 46 CFR 28 subparts A-C and is also required to be examined by a USCG 3<sup>rd</sup> party surveyor every two years. These fish processing vessels have no processing limitation and may produce any product described in Table 2-11. Two freezer longline vessels fall into this category. These grandfathering provisions will expire in July 2020 at which time these vessels will either have to be replaced with newly constructed fish processing vessels or will have to meet ACSA standards as previously described.

- ACSA Enrolled Vessels: These vessels are neither classed or loadlined, but they produce fish products which classify them as “fish processing vessels.” To continue to be allowed to produce fish products in Table 2-11, these vessels must be in compliance with the ACSA program. Twenty-two freezer longline vessels fall into this category. These vessels are also required to meet 46 CFR 28 Subparts A-C standards, as well as 46 CFR 28.710 Subpart F Standards.
- ACSA Enrolled & Loadlined: These freezer longline fish processing vessels are not classed, but do have a current loadline. They produce fish products which classify them as “fish processing vessels.” To continue to be allowed to produce fish products in Table 2-11, these vessels must be in compliance with the ACSA program. Six freezer longline vessels fall into this category. In addition to meeting requirements for loadline, they are also required to meet 46 CFR 28 Subparts A-C standards, as well as 46 CFR 28.710 Subpart F Standards.
- Vessels with Classification and Loadline: These freezer longline vessels are fish processing vessels that were built or converted for use as a fish processor after 1991. These vessels represent the highest safety standards for fish processing vessels in the United States. There are no limits on the products that can be made by these vessels, and may produce any product listed in Table 2-11. Three freezer longline vessels are classed and loadlined. A newly constructed fish processing vessels would have to meet all new construction, stability, safety and manning requirements, making such a vessel inherently safer.

**Table 2-12. Safety regulations applying to freezer longline vessels**

Type of Vessel	46 CFR 28 Subparts A-C <sup>1</sup>	46 CFR 28 Subpart F <sup>2</sup>	ACSA Program	Loadline 46 USC 5101 <sup>3</sup>	Class 46 USC 4503 <sup>4</sup>	46 CFR 28 Subpart D <sup>5</sup>	46 CFR 28, Subpart E Damage Stability <sup>6</sup>	Current # of Vessels
H & G Fishing Vessel	X							0
Pre 1991 Fish Processing Vessel	X	X						2
ACSA Vessel	X	X	X					22
ACSA Vessel w/ Loadline	X	X	X	X				6
Classed & Loadlined Vessel	X	X		X	X	X	X	2

<sup>1</sup> All fishing and fish processing vessels, regardless of type, must be in compliance with 46 CFR 28, subparts A-C. These regulations require the carriage of primary lifesaving equipment.

<sup>2</sup> All fish processing vessels, except for H&G vessels, must meet the requirement of passing a mandatory compliance examination every two years to confirm compliance with safety standards.

<sup>3</sup> A loadline is an international shipping safety convention which establishes standards for hull construction, watertight integrity, vessel stability, and maximum loading. Loadlined vessels are required to successfully complete annual surveys and dry dockings every fifth year. Fish processing vessels built after 1974 or converted for use as a fish processor after 1983 must be loadlined.

<sup>4</sup> Vessel classification is an international shipping safety convention which establishes standards for design and installation of propulsion, electrical, and refrigeration machinery, electrical wiring and distribution, and critical piping. Additionally, classification establishes standards for structural fire protection and other fire prevention measures. Classed vessels are required to complete annual surveys. Classed vessels are almost always loadlined. All fish processing vessels built or converted for use as a fish processor after July 1990 must be classed.

<sup>5</sup> All commercial fishing vessels that carry more than 16 people on board, that are built or had undergone a major conversion after September 15, 1991 must meet additional safety requirements found in 46 CFR 28 Subpart D.

<sup>6</sup> All commercial fishing vessels constructed after September 15, 1991, must meet additional safety requirements for damage stability found in 46 CFR 28, Subpart E.

## 2.7 Potential Effects of the Alternative

### 2.7.1 Alternative 1: No Action

Under status quo alternative, the BSAI freezer longline vessel length, horsepower, and tonnage restrictions currently in place would continue to apply. Vessel owners can replace their vessels but the vessel cannot exceed the MLOA of LLP licenses that the vessel is assigned to. This alternative would also not allow freezer longline catcher processor that do not already have a fishery endorsement and that is greater than 165 feet in length or that exceeds 750 gross tons, or that has an engine or engines capable of

producing more than 3,000 shaft horsepower will not receive a fishery endorsement under this alternative and therefore cannot be used replaced existing freezer longline vessels. Coast Guard regulation 46 U.S.C. 12106(c)(6) limit vessels greater than 165 feet in length, or more than 750 gross registered tons, or with engines capable of producing more than 3,000 shaft horsepower from entering fisheries unless the vessel carried a fisheries endorsement prior to September 25, 1997 or the Council has recommended and the Secretary of Commerce has approved a conservation and management measure to allow the vessel to be used in fisheries under its authority.

One of the primary impacts of this alternative is that vessel owners wanting to replace their vessels to take advantage of vessel improvements are limited by the MLOA of the LLP license the vessel is assigned to. As seen in Table 2-9, 27 of the 36 active freezer longline vessels are within 5' of the MLOA of the LLP license they are named on, and therefore the 27 owners of these vessels would be limited in their ability to take advantage of vessel replacement under this alternative. One of the primary advantages of replacing a fishing vessel is it can incorporate improved hold design, processing plant construction, engines, and other advancements in marine design that improve a vessels capacity and safety. As an example, many of the existing freezer longline catcher processor vessels were not fishing vessels when initially constructed. Inherently, these vessels are less well designed for fishing than a newly constructed fishing vessel would be.

Another impact of the status quo alternative is that limitations on vessel replacement could jeopardize the safety of the fleet. While the U.S. Coast Guard and freezer longline vessel owners have seen significant improvements in vessel safety as a result of the ACSA program, there are limitations to its long-term effectiveness and this alternative would impede improvements in vessel safety beyond the ACSA program. As noted in the National Transportation and Safety Board's (NTSB) investigation into the sinking of the *Alaska Ranger*, "While the NTSB finds that ACSA has improved the safety of the vessels enrolled in the program, the effectiveness of ACSA is limited because it is a voluntary program." A freezer longline fish processing vessel owner could decide to stop producing fish products found in Table 2-11, remove the vessel from the ACSA program, and operate as a fishing vessel that only produces H&G products found in Table 2-11. Such a decision would degrade the vessel's safety regime, without reducing the vessel's risk profile. In addition, the average age of the approximately 36 vessels currently operating in the freezer longline fleet is 40 years old. These are, on average, the oldest of any catcher processors in the BSAI fisheries. For freezer longline vessels less than 150' LOA, the average age is 31 years, and for freezer longline vessels greater than 150' LOA the average age is 50 years. The age of the fleet is such a safety concern that U.S. Coast Guard marine inspectors in charge of implementing the ACSA program continue to express serious concern over the material condition and long-term viability of this aging fleet.

In summary, the status quo alternative relative to Alternatives 2 and 3 would likely impede vessel replacement for the freezer longline fleet. This impediment would likely result in limited improvements in vessel safety, processing efficiency, hold design, and engine efficiency for the fleet relative to Alternatives 2 and 3.

### **2.7.2 Alternatives 2: Vessel Replacement for 150' and Under**

Alternative 2 would limit a replacement vessel to 20% greater than the original qualifying vessel the replacement or rebuilt vessel is replacing, not to exceed 150' LOA. However, since the MLOA of the LLP license restricts vessel length of assigned vessels and many of the freezer longliners are already at or near the MLOA of the LLP license they are named on, the language in the alternative will need to be modified to accommodate larger replacement vessels that exceed the current MLOA of the LLP license. Possible language for the alternative is provided below:

**For those LLP licenses with catcher processor and hook-and-line Pacific cod endorsements for the BS or AI with an MLOA of less than 150', increase the MLOA of the LLP license 20 percent not to exceed a MLOA of 150'.**

This language would allow vessel owners to replace or rebuild their vessels currently named on the LLP license. Assuming the alternative language is modified to increase the MLOA of the LLP license, a total of 17 LLP licenses would be eligible for larger MLOAs. Of these 17 LLP licenses, 9 LLP licenses would have a MLOA of 150', while the other eight LLP licenses would have a MLOA of 149'.

The benefits of this alternative relative to other alternatives is that it provides some flexibility for vessel owners to replace their vessels with larger vessels in order to improve safety, processing operation, and engine efficiency while also limiting increases in effort due to larger replacement vessels. Since the average age of the freezer longline vessels less than 150' is approximately 31 years, and since all replacement vessels will either be classed and loadlined or meet the requirements of ACSA, it is likely this alternative will result in the improved safety of the 150' and under vessels. If aging freezer longline vessels were replaced with newly constructed fish processing vessels, those replacement vessels would be required to meet the full suite of safety standards as indicated in Table 2-12, resulting in an inherently safer vessel.

In addition to safety improvements inherent in the construction of new vessels, there are also several statutory requirements associated with larger vessels (approximately 135' in length) and larger fish processing crews (greater than 16 fish processing workers) which may also translate into improved safety protections. These additional safety and crewing requirements and their regulatory thresholds are provided in Table 2-13. Of the 17 vessels that would qualify for replacement under this alternative no freezer longliner vessels have 16 or more processor workers, but 5 vessels exceed the 135' thus triggering additional safety and crewing requirements.

**Table 2-13. Potential additional safety benefits to larger fish processing vessels**

<b>Description</b>	<b>Regulatory Trigger</b>	<b>Safety Improvements</b>
Licensed Masters, Mates & Engineers	>200 Gross Tons ~ (135 MLOA)	Professionally Trained, Licensed Crew
Watch Keeping	> 16 Processing Workers	Work Hour Limitations for Wheelhouse & Engine Room
Able – Bodied Seamen	> 16 Processing Workers	Additional formal training & competency

Although this alternative increase efficiency and safety of the fleet for vessels less than 150', this alternative limits improvements in efficiency and safety for freezer longline vessels over 150'. Vessel length restrictions often lead to inefficient hull designs and other comprises in vessel design. One drawback of vessel length restrictions is the potential for compromise in vessel safety. The average length of the three existing classed and loadlined freezer longline vessels is approximately 165 feet. Arguably, vessels of this size provide a more stable work platform and are better able to withstand the harsh weather found when operating in the Bering Sea and Aleutian Islands. Allowing owners and naval architects maximum flexibility in vessel design, and vessel dimensions within the well-established rules of classification and loadline requirements would enhance the safety of new fish processing vessels. Vessel length restrictions also indirectly limit the level of processing a replacement vessel can incorporate thereby jeopardizing efficiency. (Parrott, pers. Comm. June 30, 2011). Under a rationalized fishery, it can be argued that companies are better able to determine their long-term input stream. With this financial insight, companies are better able to design vessels to meet their harvesting and processing strategies.

Another drawback concerning this alternative is limited to BSAI freezer longline vessels only. Limiting MLOA modification to only BSAI freezer longline LLP licenses could disadvantage two freezer longline LLP licenses with GOA only endorsements. As noted in Table 2-9, the GOA only LLP licenses have MLOAs of less than 124' and a longline endorsement for western GOA. One of these LLP licenses also has a pot cod endorsement for both western and central GOA. With the advantage of cooperative fishing amongst the BSAI freezer longliners, combined with vessel replacement, larger replacement vessels could consolidate BSAI harvests within the cooperative allowing the use of their increased processing capacity to garner a greater proportion of the GOA groundfish fisheries relatively to their historic catch. By increasing their historic catch in the GOA, these vessels would negatively impact the two GOA only freezer longline vessels. Expanding this alternative to include these GOA only LLP licenses in the proposed action could reduce the potential for BSAI participants to disadvantage these GOA vessels.

If the Council does modify the alternative to include these two LLP licenses endorsed only for the GOA, the Council will need to clarify whether the MLOA modification applies only to hook-and-line endorsements or whether the action also applies to pot endorsements, since one of the LLP licenses has pot cod endorsements. The concern is that the LLP license could be transferred to a larger pot vessel for use in the pot cod fishery. This is only an issue if the alternative is modified to include these GOA endorsed LLP license, since none of the 17 eligible BSAI LLP licenses under this alternative have pot cod endorsements. If the Council's intent is to limit modification of the MLOA to the freezer longline endorsed LLP licenses only (and not include licenses with pot cod endorsement), the Council should restrict the proposed action to hook-and-line endorsements only.

In summary, Alternative 2 relative to status quo provides an opportunity for owners of freezer longline vessels to replace their vessels with larger vessels. Having the ability to replace vessels with larger vessels could improve processing efficiency while at the same time allow for increased vessel safety. At the same time, the limitations on vessel replacement length for this alternative relative to Alternative 3, which has no length restriction for replacement vessels, could limit the expansion in effort of the freezer longline fleet. In the past, the Council has relied on vessel length restrictions as method for limiting the potential for expanding fishing effort. However, vessel length restrictions can result in replacement vessels with inefficient hull designs and other compromises in vessel designs to include vessel safety.

### **2.7.3 Alternatives 3: Vessel Replacement with No Length Restriction**

Under Alternative 3, the MLOA of LLP licenses with catcher processor and Pacific cod longline endorsements would no longer apply. This alternative would offer vessel owners, particularly operators of smaller vessels, the greatest flexibility to replace their vessels to incorporate necessary improvements in processing and safety. This alternative would also allow new vessels greater than 165 feet in length or more than 750 gross tons, or that has an engine or engines capable of producing more than 3,000 shaft horsepower to receive a fishery endorsement thereby allowing these vessels to fish in any fishery in the EEZ under the jurisdiction of the Council. Coast Guard regulation 46 U.S.C. 12106(c)(6) limit vessels greater than 165 feet in length, or more than 750 gross registered tons, or with engines capable of producing more than 3,000 shaft horsepower from entering fisheries unless the vessel carried a fisheries endorsement prior to September 25, 1997 or the Council has recommended and the Secretary of Commerce has approved a conservation and management measure to allow the vessel to be used in fisheries under its authority.

The primary benefit of Alternative 3 relative to Alternative 2 is that it allows all owners of BSAI freezer longliners to replace their vessels without vessel length restrictions. Absent length restrictions, new replacement vessels would likely be safer and more efficient than their replacement vessels. One of the primary issues facing the freezer longline fleet is the age of the vessels. The average age of the fleet is 40 years old, which is, on average, the oldest catcher processor fleet in the BSAI fisheries. Since newly built

replacement vessels and replacement vessels that undergo major modification must meet the full suite of safety standards as indicated in Table 2-12, and since this alternative allows all owners of BSAI freezer longline vessels to replace their current vessels with larger vessels, a larger share of the freezer longline fleet could see improvements in safety.

Despite the appearance of unlimited vessel size replacement under this action, there appear to be some efficiency limitations for the freezer longline sector which may suggest a limit on the size of replacement vessels. Jonathan Parrott of Jensen Maritime Consultants, Inc., suggests that freezer longliners are limited operationally since a vessel can haul only one longline at time. This harvest limitation tends to limit the rate at which fish enter the processing plant. As such, differences in freezer longline vessel lengths tend to be dictated by the processing spaced necessary for the level of valued added product produced and the size of freezer storage space. Based on current operational practices, the operational efficiency of the freezer longline vessel appears to be limited to vessels 180' or less.

Also limiting the size of replacement vessels is Pacific cod sector allocations. The BSAI freezer longline catch processor fleet is limited by Pacific cod quota in the BSAI and potentially in the GOA in the coming year. These sector allocations likely have a reduced incentive to expand vessel lengths for the purpose of being more competitive in a race for fish. In addition, all persons holding an LLP license endorsed for BSAI freezer longline vessel are members of the Freezer Longliner Conservation Cooperative that functions as a harvest cooperative. In the recent past, the cooperative has been able to organize their harvests so as to make reliable commitments concerning halibut PSC avoidance goals, which has allowed NMFS to open BSAI and GOA fisheries that would not otherwise have been opened. As for other fisheries, the sector does target Greenland turbot and sablefish in the BSAI, but effort by the sector in these fisheries is significantly lower than Pacific cod. Overall, an unrestricted replacement vessel program could expand effort into their current fisheries and other unperceived fisheries in the future, but the ability to increase the vessel length would likely not create a significant incentive for vessel owners to expand their replacement lengths for the purpose of being more competitive in a race for fish in these fisheries.

One potential issue with unrestricted vessel lengths is that cooperative negotiations may be effected. Currently, vessel owners rely heavily on historical catch in negotiating catch shares within the cooperative. However, under Alternative 3, vessel owners recognizing a significantly larger replacement vessel could harvest and process more groundfish in an open access fishery, might try to leverage their increased fishing and processing capacity for a larger share of the catch within the cooperative. With a greater fishing and processing capacity, vessel owners with larger replacements have a greater incentive to negotiate a larger catch share or, failing to negotiation their desired catch share, they could utilize their greater fishing capacity to try to harvest more of the groundfish in the open access fishery. Limiting the potential for replacement vessels to negotiate a larger proportion of the cooperative catch shares are cooperative agreements and provisions that discourage cooperative members from leaving the cooperative. In addition, limits on replacement vessel length would reduce the ability to leverage increased fishing and processing capacity in member negotiations.

As noted in Alternative 2, the Council may want to clarify some ambiguous language associated with Alternative 3. The first issue is whether the Council wants to limit the alternative to only the BSAI freezer longline vessels or whether the action should be expanded to include the two GOA LLP licenses with GOA longline endorsements. Limiting vessel replacement to only BSAI freezer longline vessels could leave these GOA freezer longline vessels that operate exclusively in the GOA at a disadvantage. Combining the vessel replacement action with the advantages of cooperative fishing, the cooperative could consolidate BSAI harvest allowing replacement vessels to increase their fishing effort in the GOA relatively to their historic catch, which could negatively impact the GOA freezer longliners that operators

exclusively in the GOA. Expanding this alternative to include these GOA only LLP licenses in the proposed action could reduce the potential for BSAI participants to disadvantage these GOA vessels.

The only other issue the Council should clarify concerning this alternative is whether these LLP licenses affected by this action could be used in other fisheries once the MLOA no longer applies. For example, there are four LLP licenses with MLOAs over 150' that would be eligible for vessel replacement under this action that also have pot cod endorsements. Since the MLOA would no longer apply for these LLP licenses under Alternative 3, these LLP licenses could be transferred to a larger Pacific cod pot vessel thereby negatively impacting existing Pacific cod pot participants. To limit the likelihood that LLP licenses without an MLOA could be used to gain an advantage in the pot cod fishery or other groundfish fisheries, the Council could restrict the use of these licenses while participating in the pot cod fishery by maintaining the original MLOA of the LLP license for pot endorsements.

In conclusion, Alternative 3 relative to the other alternatives provides the greatest opportunity for owners of freezer longline vessels to replace their vessels with larger vessels. The absence of vessel length restrictions allows vessel owners to design safer and more efficient replacement freezer longline vessels. Given the average age of the fleet (40 years), improving the safety of the fleet is a significant benefit for the vessel replacement action. There does appear to be efficiency limitations that would likely provide operational incentives for limiting vessel lengths in replacement vessels. Also contributing to the operational limitations for replacement vessels are the Pacific cod sector allocations and cooperative fishing amongst all of the BSAI freezer longline owners. All combined, these factors will likely limit vessel lengths for replacement vessels to 180' or less. One potential issue associated with unrestricted vessel length is owners could try to leverage their increased fishing and processing capacity to negotiate greater portions of the cooperative catch share. Ultimately, this issue will be limited by strength of the cooperative agreement and the provisions within the cooperative agreement that discourage cooperative members from leaving the cooperative.

#### **2.7.4 Suboptions for replaced vessels**

Included with each of the action alternatives are two suboptions. The first suboption would allow any vessel replaced under Alternatives 2 or 3 to continue to be used in North Pacific fishery by being named on FFP or an LLP. The second suboption would allow replaced freezer longline vessels to be used as replacement vessels for Alternatives 2 or 3.

The benefit of these suboptions is that would provide greater flexibility for vessel owners who want to use existing freezer longline vessels to replace other freezer longline vessels currently in use. Although many of these freezer longline vessels were built in 1940s, eight of the vessels were built in the 1980s and eight were built in 1990s. A potential advantage for vessel owners is that the existing freezer longline vessels are fitted for the appropriate fisheries, and may be easier, and cheaper to obtain than newly constructed vessels. It is understood that existing vessels must be classes and loadlined or meet the requirements of ACSA to be used to replace other freezer longline vessels.

One drawback of these suboptions is it could discourage vessel owners from replacing freezer longline vessels with newly constructed vessels if an existing vessel in the freezer longline sector would otherwise meet the needs of a replacement vessel. USCG personnel have indicated a preference for retiring existing freezer longline vessels to encourage newer and safer vessels. Arguably, if a vessel owner replaces one or more freezer longline vessels with an existing freezer longline vessel, that replacement vessel could have improved handling and safety features than the vessel that is being replaced. It is also conceivable that a vessel owner could replace a small vessel that is in good condition with a larger, more efficient vessel that is in poorer material condition. Furthermore, this replacement vessel, if unable to meet ACSA standards, could dis-enroll from ACSA, resulting in a decline in overall safety. Although the existing freezer

longline vessels are not subject to the stringent safety requirements that would apply to new construction (see Table 2-12), vessel owners may be able to retrofit their vessels to incorporate improved safety and design features.

### **2.7.5 Potential effects on net benefits to the Nation**

Overall, this action is likely to have a limited effect on net benefits realized by the Nation. Alternatives 2 and 3 provide a clear regulatory framework for vessel replacement and are more likely to result in vessel replacement. To the extent that vessel replacement allows harvesters additional time to focus on improving quality, retention, market development, and product forms, there may be some consumer benefits realized by the proposed action. Conceivably, the proposed alternatives may increase the economic efficiency of a harvester by allowing the use of more efficient vessels. Alternative 3 would provide vessel owners with the greatest flexibility to realize these benefits, whereas Alternative 2 would limit vessel replacement for vessels under 150’.

## **3.0 INITIAL REGULATORY FLEXIBILITY ANALYSIS**

The Regulatory Flexibility Act (RFA), first enacted in 1980, and codified at 5 U.S.C. 600–611, 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 impacts on small entities as a group distinct from other entities and on the consideration of alternatives that may minimize the 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 will not have a significant adverse 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 proposed alternatives, it appears that “certification” would not be appropriate. Therefore, this IRFA has been prepared. Analytical requirements for the IRFA are described below in more detail.

The IRFA must contain:

1. A description of the reasons why action by the agency is being considered;
2. A succinct statement of the objectives of, and the legal basis for, the proposed rule;
3. 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);
4. A description of the projected reporting, record keeping, 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;
5. An identification, to the extent practicable, of all relevant federal rules that may duplicate, overlap, or conflict with the proposed rule;

6. A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the 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 entities to be considered in an IRFA generally includes only those small entities that can reasonably be expected to be directly regulated by the proposed action. 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.

### **3.1 Definition of a Small Entity**

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

Small businesses: 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 not dominate in its field of operation. The U.S. Small Business Administration (SBA) has further defined a “small business concern” as one “organized for profit, with a place of business located in the United States, and which operates primarily within the United States, or which makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials, or labor. A small business concern may be in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust, or cooperative, except that where the form is a joint venture there can be no more than 49 percent participation by foreign business entities in the joint venture.”

The 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 \$4.0 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 \$4.0 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 be based on common management or joint venture arrangements. Affiliation arises where one or more officers, directors, or general partners control 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 joint venturers 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.

Small organizations: The RFA defines “small organizations” as any nonprofit enterprise that is independently owned and operated and is not dominant in its field.

Small governmental jurisdictions: The RFA defines small governmental jurisdictions as governments of cities, counties, towns, townships, villages, school districts, or special districts with populations of fewer than 50,000.

### **3.2 Reason for Considering the Proposed Action**

Recognizing the benefits of vessel replacement, which includes vessel safety, improved fuel efficiency, improved resource utilization, and increased economic efficiency the Council tasked staff to prepare an analysis of alternatives to allow freezer longline vessel owners to replace their vessels with larger vessels. Provided below is a proposed purpose and need statement that was presented at the February 2011 meeting.

*Allowing for Pacific cod hook and line catcher/processor vessel owners to rebuild or replace their vessels would allow for improved vessel safety, meet international class and loadline requirements that would allow a broader range of onboard processing options, or otherwise improve the economic efficiency of their vessels.*

### **3.3 Objectives of, and the Legal Basis for, the Proposed Rule**

The objective for this proposed action is to provide an opportunity for owners of the freezer longline vessels to replace their aging vessels for purposes of improving vessel safety and processing efficiency. This objective is encompassed by authorities contained in the Magnuson-Stevens Act. Under the Magnuson-Stevens Act, the United States has exclusive management authority over all living marine resources found within the EEZ. The management of marine fishery resources is vested in the Secretary of Commerce, with advice from the Regional Fishery Management Councils. The groundfish fisheries in the EEZ off Alaska are managed under the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area and the Fishery Management Plan for Groundfish of the Gulf of Alaska.

Statutory authority for measures designed to consider efficiency in the use of fishery resources is specifically addressed in section 301 of the Magnuson-Stevens Act. That section establishes National Standard 5, which directs the Councils to “consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocations as its sole purpose.” There is no allocative provision to this action beyond those already established in the FMP and regulation.

The Magnuson-Stevens Act is the legal umbrella under which the groundfish fisheries of the BSAI and GOA are managed. In the Alaska region, the Council is responsible for preparing management plans for marine fishery resources requiring conservation and management. NMFS, under the U.S. Department of Commerce, is charged with carrying out the federal mandates with regard to marine fish, once they are approved by the Secretary of Commerce. NMFS Alaska Regional Office reviews the management actions recommended by the Council.

### **3.4 Number and Description of Small Entities Regulated by the Proposed Action**

The entities directly regulated by this action are those catcher processors operating in the EEZ of the BSAI and GOA, using longline gear. Earnings from all Alaskan fisheries for 2009 were matched with the vessels that participated in the freezer longline fisheries for that year. Of the CP vessels directly regulated by this action, only 11 had gross earnings less than \$4 million, thus categorizing them as small entities. The remaining 28 freezer longline vessels had gross earnings more than \$4 million, categorizing them as large entities<sup>12</sup>.

### **3.5 Recordkeeping and Reporting Requirements**

Recordkeeping and reporting requirements are not expected to change as a result of the proposed action. The action under consideration requires no additional reporting, recordkeeping, or other compliance requirements that differ from the status quo.

### **3.6 An identification, to the extent practicable, of all relevant federal rules that may duplicate, overlap, or conflict with the proposed rule**

No relevant federal rules were identified as duplicating, overlapping, or conflicting with the proposed action under consideration herein.

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<sup>12</sup>Includes freezer longline vessels that operate exclusively in the GOA.

### **3.7 Description of Significant Alternatives**

Three alternatives, including no action, are under consideration. Under Alternative 1, the no action alternative, freezer longline vessel length restriction would continue to apply. Vessel owners could replace their vessels so long as the vessel length did not exceed the MLOA of the LLP license that the vessel is named on. Freezer longline vessels that do not already have a fishery endorsement and that is greater than 165 feet in length or that exceeds 750 tons and 3,000 horsepower cannot receive a fishery endorsement and therefore cannot be used to replace an existing freezer longline vessel. Alternative 2 would limit vessel replacement for the BSAI freezer longline vessels to 20% greater than the original vessel the replacement or rebuilt vessel is replacing not to exceed 150' LOA. Under Alternative 3, the MLOA of the LLP license with fixed gear Pacific cod endorsements would not apply. Also included in the proposed action are two options. Suboption 1 would allow any vessel replaced under this proposed action to continue to be used in North Pacific fishery by being named on FFP or an LLP. Suboption 2 would allow replaced freezer longline vessels to be used to replace other freezer longline vessels.

Upon final action, this section will be updated to provide the Council's preferred alternative and an explanation as to why the remaining alternatives did not address the stated purpose and need for the proposed action.

### **4.0 CONSISTENCY WITH APPLICABLE LAW AND POLICY**

This section examines vessel replacement for the freezer longline sector with the National Standards and Fishery Impact Statement requirements in the Magnuson-Stevens Act and Executive Order 12866.

#### **4.1 National Standards**

Below are the ten National Standards as contained in the Magnuson-Stevens Act, and a brief discussion of the consistency of the proposed alternatives with each of those National Standards, as applicable.

National Standard 1 - Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery.

None of the alternatives considered in this action would affect overfishing of groundfish in the BSAI or GOA since the action will continue to be managed under the current harvest specifications process. The alternatives would also not affect, on a continuing basis, the ability to achieve the optimum yield from each groundfish fishery for the same reasons.

National Standard 2 - Conservation and management measures shall be based upon the best scientific information available.

This analysis is based on the most current, comprehensive data available, recognizing that some information (such as operating costs) is unavailable.

National Standard 3 - To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

The BSAI and GOA groundfish TACs are established on an annual basis during the harvest specifications process. NMFS conducts the stock assessments for these species and makes allowable biological catch recommendations to the Council. The Council sets the TAC for these species based on the most recent

stock assessment and survey information. These BSAI and GOA stocks will continue to be managed as a single stock under the alternatives in this analysis.

National Standard 4 - Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various U.S. fishermen, such allocation shall be (A) fair and equitable to all such fishermen, (B) reasonably calculated to promote conservation, and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

Nothing in the alternatives considers residency as a criterion for the Council's decision, therefore the proposed alternatives treats all vessel owners the same regardless of residency. The proposed alternatives would be implemented without discrimination among participants and are intended to promote conservation of the groundfish resources in the BSAI and GOA.

National Standard 5 - Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources, except that no such measure shall have economic allocation as its sole purpose.

This action will potentially provide opportunities for vessel owners to replace vessels. To the extent that the vessel owners exercise the vessel replacement opportunity provided in this proposed action, this could allow more complete use of the fishery resources and improve efficiency in utilization of the longline groundfish resource in the BSAI and GOA.

National Standard 6 - Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

Since the proposed action would likely improve vessel safety and processing efficiency, none of the proposed alternatives are expected to affect the availability of and variability in the groundfish resources in the BSAI and GOA in future years. The harvest would be managed to and limited by the TACs for each species, regardless of the proposed action considered in this amendment.

National Standard 7 - Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

Since this proposed action would only modify the MLOA of LLP licenses for the freezer longline sector to allow larger replacement vessels, this action would not impose additional costs for compliance, and does not duplicate any other management action.

National Standard 8 - Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

This action is not expected to have adverse impacts on communities or affect community sustainability, primarily because now of the action alternatives would result in extinguishing harvest opportunities for vessels with a high degree of economic dependence upon the freezer longline groundfish fisheries. This action would not remove the ability of fishing vessels, communities, or crew to continue to sustain participation in the freezer longline fishery.

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

This proposed action could help to minimize bycatch by providing the opportunity for owners of freezer longline vessels to replacing their aging vessels. Replacing aging vessels with newer more sophisticated vessels could provide more opportunity for vessels to minimize bycatch.

National Standard 10 - Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

The alternatives proposed should help improve safety at sea because it would allow vessel owners to replace existing vessels with newer vessels that can accommodate improved safety designs. The action alternatives would likely provide incentives for the participants to remove aging vessels from the fishery that do incorporate the latest safety designs thereby allowing vessel operators to minimize the risks faced by vessels or crew.

#### **4.2 Section 303(a)(9) – Fisheries Impact Statement**

Section 303(a)(9) of the Magnuson-Stevens Act requires that any management measure submitted by the Council take into account potential impacts on the participants in the fisheries, as well as participants in adjacent fisheries. The impacts on participants in the freezer longline groundfish fisheries in the BSAI and GOA have been discussed in previous sections of this document (see Chapter 2). The proposed action is not anticipated to have effects on participants in other fisheries.

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