

PUBLIC REVIEW DRAFT

Regulatory Impact Review

Elimination of AFA and Non-AFA Small Sideboards

February 5, 2018

For further information contact: Jon McCracken, North Pacific Fishery Management Council
605 W 4th Ave, Suite 306, Anchorage, AK 99501
(907) 271-2809

Obren Davis, Alaska Regional Office
National Marine Fisheries Service
P.O. Box 21668, Juneau, AK 99802-1668
(907) 596-7241

Accessibility of this Document: Every effort has been made to make this document accessible to individuals of all abilities and compliant with Section 508 of the Rehabilitation Act. The complexity of this document may make access difficult for some. If you encounter information that you cannot access or use, please email us at Alaska.webmaster@noaa.gov or call us at 907-586-7228 so that we may assist you.

Abstract: This proposed action would revise the federal regulations to close directed fishing for those species (and future breakouts of a complex) with sideboard limits that are not large enough to support directed fishing by non-exempt American Fisheries Act (AFA) vessels and crab vessels in the Crab Rationalization Program (CR Program) in the Gulf of Alaska (GOA) or for those species that are fully allocated to other programs (e.g., flathead sole, rock sole, Western Aleutian Islands Atka mackerel). NMFS would then no longer publish AFA and CR Program sideboard amounts for those species in the annual harvest specifications. In addition, the proposed action would remove the sideboard limit on AFA catcher/processors for Central Aleutian Islands Atka mackerel because the sideboard limit under the AFA (11.5%) is constrained by the allocation to the trawl limited access sector that was established by the Amendment 80 Program (10%).

List of Acronyms and Abbreviations

ABC	acceptable biological catch
AFA	American Fisheries Act
AKFIN	Alaska Fisheries Information Network
AI	Aleutian Islands
BSAI	Bering Sea and Aleutian Islands
BS	Bering Sea
C	Central
CAI	Central Aleutian Islands
CAS	Catch Accounting System
CDQ	Community Development Quota
CFR	Code of Federal Regulations
CG	Central Gulf of Alaska
Council	North Pacific Fishery Management Council
CP	catcher/processor
CR	Crab Rationalization Program
CV	catcher vessel
CVO	Catcher vessel owner
E	East
E.O.	Executive Order
EA	Environmental Assessment
EAI	Eastern Aleutian Islands
EEZ	Exclusive Economic Zone
EG	Eastern Gulf of Alaska
FMP	fishery management plan
FR	<i>Federal Register</i>
FRFA	Final Regulatory Flexibility Analysis
GOA	Gulf of Alaska
IFQ	Individual fishing quota
ITAC	Initial total allowable catch
IRFA	Initial Regulatory Flexibility Analysis
LLP	license limitation program
mt	Metric tone
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MRA	Maximum retainable allowance

NMFS	National Marine Fishery Service
NOAA	National Oceanic and Atmospheric Administration
NPFMC	North Pacific Fishery Management Council
Observer Program	North Pacific Groundfish and Halibut Observer Program
PSC	prohibited species catch
PPA	Preliminary preferred alternative
QS	quota share
RFA	Regulatory Flexibility Act
RIR	Regulatory Impact Review
SBA	Small Business Act
Secretary	Secretary of Commerce
SEO	South east outside
TAC	total allowable catch
U.S.	United States
U.S.C.	United States Code
W	West
WAI	Western Aleutian Islands
WG	West Gulf of Alaska
WYK	West Yakutat

Table of Contents

EXECUTIVE SUMMARY	5
1 INTRODUCTION	7
2 REGULATORY IMPACT REVIEW	8
2.1 Statutory Authority	8
2.2 Purpose and Need for Action.....	9
2.3 History of the Action.....	9
2.4 Alternatives.....	10
2.5 Methodology for analysis of impacts.....	16
2.6 Background	16
2.6.1 Description of AFA Program.....	16
2.6.1.1 Description of AFA sideboards.....	17
2.6.1.2 Catcher vessels BSAI groundfish harvesting sideboard limits	18
2.6.1.3 Catcher vessels GOA groundfish harvesting sideboard limits	20
2.6.1.4 Catcher/processors BSAI groundfish harvest sideboard limits	22
2.6.2 Description of CR Program Sideboard Limits.....	24
2.6.2.1 Catcher vessels	25
2.7 Analysis of Impacts: Alternative 1, No Action	28
2.8 Analysis of Impacts: Alternative 2	28
2.8.1 Option 1.....	34
2.9 Number and Description of Directly Regulated Small Entities	35
2.10 Summation of the Alternatives with Respect to Net Benefit to the Nation.....	35
3 MAGNUSON-STEVENS ACT AND FMP CONSIDERATIONS	36
3.1 Magnuson-Stevens Act National Standards	36
3.2 Council's Ecosystem Vision Statement.....	37
4 PREPARERS AND PERSONS CONSULTED	39
5 REFERENCES	40

List of Tables

Table 2-1	AFA catcher vessel BSAI sideboard species for which directed fishing would be prohibited under Alternative 2.....	11
Table 2-2	AFA catcher vessel GOA sideboard species for which directed fishing would be prohibited under Alternative 2.....	12
Table 2-3	AFA catcher/processor sideboard species for which directed fishing would be prohibited under Alternative 2.....	13
Table 2-4	Non-AFA CR Program GOA groundfish sideboard species for which directed fishing would be prohibited under Alternative 2.....	14
Table 2-5	AFA catcher vessel BSAI sideboard species that would be replaced with a prohibition on directed fishing, along with their sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits.....	19
Table 2-6	AFA sideboard limits open for directed fisheries along with their AFA catcher vessel BSAI sideboard ratios, 2011-2017 average sideboard limits (mt), and 2017 sideboard limit (mt).....	20
Table 2-7	AFA catcher vessel GOA sideboard species limits that would be replaced with a prohibition on directed fishing, along with their sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits.....	21
Table 2-8	AFA sideboard limits open for directed fisheries along with their AFA catcher vessel GOA sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits.....	22
Table 2-9	AFA catcher/processor sideboard species that would be replaced with a prohibition on directed fishing, their AFA catcher/processor vessels BSAI sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits.....	23
Table 2-10	AFA sideboard limits that have remained open for directed fisheries along with their AFA catcher vessel GOA sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits.....	24
Table 2-11	Non-AFA CR Program sideboard species that are proposed for replacement with a prohibition on directed fishing, their sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits.....	26
Table 2-12	Non-AFA sideboard limits that have remained open for directed fisheries along with the sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits.....	28
Table 2-13	AFA catcher vessel BSAI count, retained catch, and sideboard limit from 2015-2017 for each aggregated sideboard limit that is proposed for replacement with a prohibition on directed fishing.....	31
Table 2-14	AFA catcher vessel GOA count, retained catch, and sideboard limit from 2015-2017 for each aggregated sideboard limit that is proposed for replacement with a prohibition on directed fishing.....	32
Table 2-15	AFA catcher/processor vessel count, retained catch, and sideboard limit from 2015-2017 for each aggregated sideboard limit in the BSAI that is proposed for replacement with a prohibition on directed fishing.....	33
Table 2-16	Non-AFA crab vessel count, retained catch, and sideboard limit from 2015-2017 for each aggregated sideboard species in the GOA that is proposed for replacement with a prohibition on directed fishing.....	34
Table 2-17	AFA catcher/processor vessel count, retained catch, aggregated sideboard limit, and aggregated trawl limited access allocation for Central AI Atka mackerel from 2015-2017.....	35

Executive Summary

This proposed action would revise the federal regulations to prohibit directed fishing for those species (and future breakouts of a complex) with sideboard limits that are not large enough to support directed fishing by non-exempt American Fisheries Act (AFA) vessels and crab vessels in the Crab Rationalization Program (CR Program) in the Gulf of Alaska (GOA) or for those species that are fully allocated to other programs (e.g., flathead sole, rock sole, Western Aleutian Islands Atka mackerel). NMFS would then no longer publish AFA and CR Program sideboard amounts for those species in the annual harvest specifications. In addition, the proposed action would remove the sideboard limit on AFA catcher/processors for Central Aleutian Islands Atka mackerel because the sideboard limit under the AFA (11.5%) is constrained by the allocation to the trawl limited access sector that was established by the Amendment 80 Program.

Purpose and Need

The Council adopted the following purpose and need statement in June 12, 2017:

Many of the sideboards for non-exempt American Fisheries Act (AFA) vessels and Crab Rationalization Program vessels for groundfish species in the Bering Sea and Aleutian Islands and the Gulf of Alaska are not opened for directed fishing because the sideboard limits are not large enough to support a directed fishery. Additionally, other sideboards are fully allocated to programs such as the Amendment 80 Program or have no prohibited species catch apportioned to them so therefore NMFS cannot open them to directed fishing. NMFS must annually close these sideboard fisheries to directed fishing through the groundfish harvest specifications. Closing these sideboard fisheries could be simplified administratively by prohibiting directed fishing by regulation. There are also some sideboard limits that may not be required due to other regulatory limits on harvests. The purpose of this action is to simplify the administration of the fisheries by establishing prohibited fishery closures instead of sideboard limits, or by removing sideboard limits that are no longer required.

Alternatives

Alternative 1. No Action

Alternative 2. Prohibit directed fishing by regulation for AFA and CR sideboard limits listed in Tables 2-1, 2-2, 2-3, and 2-4.

Option 1. Remove the sideboard limit on AFA catcher/processors for Central Aleutian Islands Atka mackerel.

Regulatory Impact Review

Alternative 1: Status Quo

Alternative 1 would result in NMFS continuing to utilize time and monetary resources to calculate and establish sideboard limits for these species in the annual harvest specifications. NMFS would also continue to generate and publish in the Federal Register tables of sideboard limits that would likely continue to be closed to directed fishing prior to the start of the fishing. AFA Program and CR Program vessels that are restricted by the sideboard limits listed in Table 2-1, Table 2-2, Table 2-3, and Table 2-4 would continue to target species not restricted by sideboards and those sideboard species that are sufficient for directed fishing. AFA or crab sideboarded vessels would likely continue to retain some incidental catch of species that are closed to directed fishing due to insufficient sideboard limits. NMFS

accommodates these overages through the incidental catch allowance rather than prohibiting the retention of these sideboard species by putting their target fisheries on prohibited species status.

Alternative 2:

The primary benefit of this alternative relative to Alternative 1 is that it would streamline the annual harvest specifications, reduce the annual costs of publishing the annual harvest specifications in the Federal Register, and simplify NMFS's annual programming changes to the agency's groundfish catch accounting system. This action would not incur any negative impacts to AFA and crab sideboard limited vessels for the foreseeable future. This alternative supports the original intent of creating such limits to protect non-AFA and non-CR Program fisheries from the adverse impacts of the rationalization of the AFA and CR Programs.

This action would not modify that ability of sideboard restricted vessels from retaining incidental catch of species closed to directed fishing while targeting other species. AFA or crab sideboarded vessels would likely continue to retain incidental catch amounts similar to those shown in Table 2-13, Table 2-14, Table 2-15, and Table 2-16. Any catch of these regulatory closed species must comply with the maximum retainable allowance (MRA) regulations at § 679.20(e). Amounts that are caught in excess of the MRA percentage in Tables 10 and 11 to 50 CFR part 679 must be discarded.

One potential adverse impact of this proposed regulatory change is if the TACs for these closed sideboard species were to increase dramatically or Amendment 80 allocations changed in the future, vessel owners or operators who may wish to conduct directed fishing for the sideboard closed species, would not be able to do so without a regulatory action. This potential adverse impact would not affect any current sideboard restricted participants relative to opportunities available to them currently, because directed fishing for these sideboard species have been closed since the implementation of the AFA Program (1998) and CR Program (2005). If circumstances were to change in the future, the Council and NMFS could choose to reestablish the calculation and publication of specific sideboards through a regulatory change.

Another potential adverse impact is the cost of preparing the regulatory analysis and regulations for authorizing directed fishing, if sufficient TACs exist. Although it is unlikely that the TACs for these sideboard fisheries will ever be sufficiently high enough to open them for directed fishing, nevertheless, the costs of preparing the regulatory analysis and regulations could exceed the benefits of this proposed action. Given that the sideboard limits for this proposed action have been closed to directed fishing since their implementation and the probability of opening these small sideboard fisheries in the future is extremely low, the likelihood of preparing a future analysis and regulations to authorizing directed fishing for these sideboard fisheries is negligible.

1 Introduction

This proposed action would revise the federal regulations to prohibit directed fishing for those species (and future breakouts of a complex) with sideboard limits that are not large enough to support directed fishing by non-exempt American Fisheries Act (AFA) vessels and crab vessels in the Crab Rationalization Program (CR Program) in the Gulf of Alaska (GOA) or for those species that are fully allocated to other programs (e.g., flathead sole, rock sole, Western Aleutian Islands Atka mackerel). NMFS would then no longer publish AFA and CR Program sideboard amounts for those species in the annual harvest specifications. In addition, the proposed action would remove the sideboard limit on AFA catcher/processors for Central Aleutian Islands Atka mackerel because the sideboard limit under the AFA (11.5%) is constrained by the allocation to the trawl limited access sector that was established by the Amendment 80 Program.

This document is a Regulatory Impact Review (RIR). An RIR provides assessments of the economic benefits and costs of the action alternatives, as well as their distribution. This RIR addresses the statutory requirements of the Magnuson Stevens Fishery Conservation and Management Act and Presidential Executive Order 12866.

The proposed action has no potential to effect individually or cumulatively on the human environment. The only effects of the action are economic, as analyzed in this RIR. As such, it is categorically excluded from the need to prepare an Environmental Assessment.

2 Regulatory Impact Review

This Regulatory Impact Review (RIR)¹ examines the benefits and costs of a proposed regulatory amendment to revise the federal regulations to prohibit directed fishing for those species (and future breakouts of a complex) with sideboard limits that are not large enough to support directed fishing by non-exempt AFA vessels and crab vessels in the CR Program in the GOA or for those species that are fully allocated to other programs (e.g., flathead sole, rock sole, Western Aleutian Islands Atka mackerel). NMFS would then no longer publish AFA and CR Program sideboard amounts for those species in the annual harvest specifications. In addition, the proposed action would remove the sideboard limit on AFA catcher/processors for Central Aleutian Islands Atka mackerel because the sideboard limit under the AFA (11.5%) is constrained by the allocation to the trawl limited access sector that was established by the Amendment 80 Program.

The preparation of an RIR is required under Presidential Executive Order (E.O.) 12866 (58 FR 51735, October 4, 1993). The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following Statement from the E.O.:

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nonetheless essential to consider. Further, in choosing among alternative regulatory approaches agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

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

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

2.1 Statutory Authority

Under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801, *et seq.*), the United States has exclusive fishery management authority over all marine fishery resources found within the exclusive economic zone (EEZ). The management of these marine resources is vested in the Secretary of Commerce (Secretary) and in the regional fishery management councils. In the Alaska Region, the Council has the responsibility for preparing fishery management plans

¹ The proposed action has no potential to effect individually or cumulatively on the human environment. The only effects of the action are economic, as analyzed in this RIR/IRFA. As such, it is categorically excluded from the need to prepare an Environmental Assessment.

(FMPs) and FMP amendments for the marine fisheries that require conservation and management, and for submitting its recommendations to the Secretary. Upon approval by the Secretary, NMFS is charged with carrying out the Federal mandates of the Department of Commerce with regard to marine and anadromous fish.

The Council has authority under Section 211 of the AFA to modify the current administration measures developed to limit adverse impacts from the AFA on other fisheries (the sideboards). The Council also has authority under Section 213 of the AFA to develop measures that supersede the limitations in Section 211.

2.2 Purpose and Need for Action

The Council adopted the following purpose and need statement in June 12, 2017:

Many of the sideboards for non-exempt American Fisheries Act (AFA) vessels and Crab Rationalization Program vessels for groundfish species in the Bering Sea and Aleutian Islands and the Gulf of Alaska are not opened for directed fishing because the sideboard limits are not large enough to support a directed fishery. Additionally, other sideboards are fully allocated to programs such as the Amendment 80 Program or have no prohibited species catch apportioned to them so therefore NMFS cannot open them to directed fishing. NMFS must annually close these sideboard fisheries to directed fishing through the groundfish harvest specifications. Closing these sideboard fisheries could be simplified administratively by prohibiting directed fishing by regulation. There are also some sideboard limits that may not be required due to other regulatory limits on harvests. The purpose of this action is to simplify the administration of the fisheries by establishing prohibited fishery closures instead of sideboard limits, or by removing sideboard limits that are no longer required.

2.3 History of the Action

The Council received a report on the AFA Program review at the February 2017 meeting (Northern Economics 2017). The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires a formal and detailed review of a limited access privilege program five years after the implementation of the program, and thereafter to coincide with scheduled regional fishery management council review of the relevant FMP (but no less frequently than once every 7 years). The AFA Program was reviewed under this mandate in 2017.

As part of the review, NMFS identified an area for improvement in the management of the AFA Program. To streamline and simplify the management of the sideboard limits included under the AFA, NMFS recommended revising regulations to prohibit directed fishing by non-exempt AFA vessels for those species (and any future break-out or combination of these species) where the sideboard limits are not large enough to support directed fishing. NMFS would then no longer publish AFA sideboard amounts for these species in the *Federal Register* (FR). The Council requested a discussion paper to analyze this proposed action.

At the April 2017 Council meeting, NMFS notified the Council that it would expand the discussion paper to include an analysis of revising regulations to prohibit directed fishing by crab vessels in the CR Program in the GOA for those species with sideboard limits that are not large enough to support a directed fishery.

At its June 2017, the Council reviewed the discussion paper examining the potential for using regulations to close directed fishing for species from both AFA and CR Programs that have sideboard limits that are

not large enough to support directed fishing or for those species that are fully allocated to other programs. After reviewing the discussion paper, the Council adopted a purpose and need statement and alternatives for analysis.

The proposed action is to prohibit directed fishing by regulation for all species with insufficient sideboard limits for directed fishing from both AFA and Crab Rationalization Programs, except catcher/processors fishing for Central Aleutian Islands Atka mackerel. The Council also included an option to remove the sideboard limit on AFA catcher/processors for Central Aleutian Islands Atka mackerel since the sideboard limit for this fishery is non-constraining.

During the December 2017 meeting, the Council reviewed the initial review draft and released the document for public review.

2.4 Alternatives

Alternative 1. No Action

Alternative 2. Prohibit directed fishing by regulation for AFA and CR sideboard limits listed in Tables 2-1, 2-2, 2-3, and 2-4.

Option 1. Remove the sideboard limit on AFA catcher/processors for Central Aleutian Islands Atka mackerel.

Table 2-1 AFA catcher vessel BSAI sideboard species for which directed fishing would be prohibited under Alternative 2

Target species	Area	Gear types
Pacific cod	BSAI	jig
		hook-and-line CV \geq 60 ft
		pot gear
		hook-and-line or pot \leq 60 ft
Sablefish	BS	trawl
	AI	trawl
Atka mackerel	Eastern AI/BS	all
	Central AI	all
	Western AI	all
Greenland turbot	BS	all
	AI	all
Arrowtooth flounder	BSAI	all
Kamchatka flounder	BSAI	all
Alaska plaice	BSAI	all
Other flatfish	BSAI	all
Flathead sole	BSAI	all
Rock sole	BSAI	all
Pacific ocean perch	BS	all
	EAI	all
	CAI	all
	WAI	all
Northern rockfish	BSAI	all
Shortraker rockfish	BSAI	all
Rougheye rockfish	BS/Eastern AI	all
	Central AI/Western AI	all
Other rockfish	BS	all
	AI	all
Skates	BSAI	all
Sculpins	BSAI	all
Sharks	BSAI	all
Squids	BSAI	all
Octopuses	BSAI	all

Table 2-2 AFA catcher vessel GOA sideboard species for which directed fishing would be prohibited under Alternative 2

Target species	Area
Pacific cod	Eastern inshore Eastern offshore
Shallow-water flatfish	Eastern
Deep-water flatfish	Western
Rex sole	Western Eastern
Arrowtooth flounder	Western Eastern
Flathead sole	Western Eastern
Pacific ocean perch	Western
Northern rockfish	Western
Dusky rockfish	Western Central Eastern
Demersal shelf rockfish	SEO district
Sablefish	Western Central Eastern
Shortraker rockfish	Western Central Eastern
Rougheye rockfish	Western Central Eastern
Thornyhead rockfish	Western Central Eastern
Other rockfish	Central Eastern
Atka mackerel	GOA
Big skate	Western Central Eastern
Longnose skate	Western Central Eastern
Other skates	GOA
Sharks	GOA
Squids	GOA
Octopuses	GOA
Sculpins	GOA

Table 2-3 AFA catcher/processor sideboard species for which directed fishing would be prohibited under Alternative 2

Target species	Area
Sablefish trawl	BS AI
Rock sole	BSAI
Greenland turbot	BS AI
Arrowtooth flounder	BSAI
Kamchatka flounder	BSAI
Alaska Plaice	BSAI
Other flatfish	BSAI
Flathead sole	BSAI
Atka mackerel	Western AI A season ³
Pacific ocean perch	BS Eastern AI Central AI Western AI
Northern Rockfish	BSAI
Shortraker Rockfish	BSAI
Rougheye Rockfish	Eastern BS/Eastern AI Central AI/Western AI
Other rockfish	BS AI
Skates	BSAI
Sculpins	BSAI
Sharks	BSAI
Squids	BSAI
Octopuses	BSAI

Table 2-4 Non-AFA CR Program GOA groundfish sideboard species for which directed fishing would be prohibited under Alternative 2

Target species	Area/Season	Area/component/gear
Pollock	A Season - Jan 20 - Mar 10	Shumagin (610)
		Chirikof (620)
		Kodiak (630)
	B Season - Mar 10 - May 31	Shumagin (610)
		Chirikof (620)
		Kodiak (630)
	C Season - Aug 25 - Oct 1	Shumagin (610)
		Chirikof (620)
		Kodiak (630)
	D Season - Oct 1 - Nov 1	Shumagin (610)
		Chirikof (620)
		Kodiak (630)
Annual	WYK (640)	
	SEO (650)	
Pacific cod ²	A Season - Jan 1 - Jun 10	WG Jig
		WG Hook-and-line CV
		WG Trawl CV
		CG Jig
		CG Hook-and-line CV
		CG Trawl CV
	B Season Jig Gear - Jun 10 – Dec 31	WG Jig
		WG Hook-and-line CV
		WG Trawl CV
	All other gears - Sept 1 - Dec 31	CG Jig
		CG Hook-and-line CV
		CG Trawl CV
Annual	EG inshore	
	EG offshore	
Sablefish	Annual, trawl gear	W
		C
		E
Shallow-water flatfish	Annual	W
		C
		E
Deep-water flatfish	Annual	W
		C
		E

Table 2-4 (continued) Non-AFA CR Program GOA groundfish sideboard species for which directed fishing would be prohibited under Alternative 2

Target species	Area/Season	Area/component/gear
Rex sole	Annual	W
		C
		E
Arrowtooth flounder	Annual	W
		C
		E
Flathead sole	Annual	W
		C
		E
Pacific ocean perch	Annual	W
		C
		E
Northern rockfish	Annual	W
		C
Shortraker rockfish	Annual	W
		C
		E
Dusky rockfish	Annual	W
		C
		E
Rougheye rockfish	Annual	W
		C
		E
Demersal shelf rockfish	Annual	SEO
Thornyhead rockfish	Annual	W
		C
		E
Other rockfish	Annual	W/C
		E
Atka mackerel	Annual	Gulfwide
Big skate	Annual	W
		C
		E
Longnose skate	Annual	W
		C
		E
Other skates	Annual	Gulfwide
Sculpins	Annual	Gulfwide
Sharks	Annual	Gulfwide
Squids	Annual	Gulfwide
Octopuses	Annual	Gulfwide

2.5 Methodology for analysis of impacts

The evaluation of impacts in this analysis is designed to meet the requirement of E.O. 12866, which dictates that an RIR evaluate the costs and benefits of the alternatives, to include both quantifiable and qualitative considerations. Additionally, the analysis should provide information for decision makers “to maximize net benefits (including potential economic, environment, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.” The costs and benefits of this action with respect to these attributes are described in the sections that follow, comparing the No Action Alternative 1 with the action alternatives. The analyst then provides a qualitative assessment of the net benefit to the Nation of the action alternative, compared to no action.

This analysis was prepared using data from the NMFS catch accounting system, which is the best available data to estimate total catch in the groundfish fisheries off Alaska. Total catch estimates are generated from information provided through a variety of required industry reports of harvest and at-sea discard, and data collected through an extensive fishery observer program. In 2003, NMFS changed the methodologies used to determine catch estimates from the NMFS blend database (1995 through 2002) to the catch accounting system (2003 through present).

The catch accounting system was implemented to better meet the increasing information needs of fisheries scientists and managers. Currently, the catch accounting system relies on data derived from a mixture of production and observer reports as the basis of the total catch estimates. The 2003 modifications in catch estimation included providing more frequent data summaries at finer spatial and fleet resolution, and the increased use of observer data. Redesigned observer program data collections were implemented in 2008, and include recording sample-specific information in lieu of pooled information, increased use of systematic sampling over simple random and opportunistic sampling, and decreased reliance on observer computations. Because of these modifications, NMFS is unable to recreate blend database estimates for total catch and retained catch after 2002. Therefore, NMFS is not able to reliably compare historical data from the blend database to the current catch accounting system.

2.6 Background

2.6.1 Description of AFA Program

Congress passed the AFA² in October 1998 to implement additional U.S. ownership requirements for vessels harvesting fish from the exclusive economic zone. The AFA was implemented as Amendment 61 to the Fishery Management Plan (FMP) for Groundfish of the Bering Sea and Aleutian Islands Management Area/Amendment 61 to the Fishery Management Plan for Groundfish of the Gulf of Alaska/Amendment 13 to the Fishery Management Plan for King and Tanner Crab of the Bering Sea and Aleutian Islands/Amendment 8 to the Fishery Management Plan for the Scallop Fishery off Alaska (67 FR 79692; December 30, 2002).

The purpose of the AFA was to tighten U.S. ownership standards that had been exploited under the Commercial Fishing Industry Vessel Anti-Reflagging Act of 1987 (Public Law 100–239) and to provide the Bering Sea (BS) pollock fleet the opportunity to conduct their fishery in a more rational manner (i.e., stopping the race for fish) while protecting non-AFA participants in the other fisheries. The AFA established sector allocations in the Bering Sea pollock fishery, determined eligible vessels and processors, allowed the formation of cooperatives, set limits on the participation of AFA vessels in other fisheries (sideboards), and imposed special catch weighing and monitoring requirements on AFA vessels.

² Enacted as Title II of Division C – Other Matters, of Public Law 105–277, approved October 21, 1998 (112 STAT. 2681, 2681-616), the Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999.

The AFA divided the available BS pollock directed fishing allowance among three harvesting sectors, after Community Development Quota (CDQ) allotments and an allowance for incidental catch of pollock harvested by vessels targeting non-pollock species were deducted (NMFS 2015).

2.6.1.1 Description of AFA sideboards

Portions of the following discussion on AFA sideboards are excerpted from the AFA Program Review (Northern Economics 2017) and AFA and CR Program Sideboard Limit Discussion Paper (NPFMC 2017). By providing AFA vessel owners with fixed allocations and the ability to effectively consolidate or otherwise improve the efficiency of their BS pollock operations, the AFA could potentially have provided an opportunity for AFA vessel owners to expand into other fisheries that would not otherwise have been available. To limit these expansions, the AFA allows the Council to develop and recommend conservation and management measures necessary to protect other fisheries from potential adverse impacts from the AFA Program. As a result, harvesting and processing restrictions, known as sideboards, on AFA vessels in non-pollock groundfish, crab, and scallop fisheries in the BSAI and GOA were created (Section 211 of the AFA). In addition, specified restrictions for prohibited species, as well as harvesting and processing limits for BSAI crab species for AFA vessels were created.

NMFS manages the restrictions created in the AFA as sideboard limits. The agency makes an initial determination at the beginning of the fishing year regarding the fisheries in which AFA vessels are likely to participate, based on historical participation (sideboard ratios), TACs, prohibited species catch (PSC) limits, and other apportionments and regulations. For some species, NMFS actively manages sideboard limits; for the other sideboard species, NMFS closes the sideboard species to directed fishing by AFA vessels, typically at the beginning of the fishing year. Other reasons directed fishing may not be opened could include: species is fully allocated to other catch share programs (e.g., Amendment 80 rock sole and flathead sole), directed fishing for a species is closed for all sectors (e.g., other rockfish and skates), lack of markets for a species (other flatfish), or directed fishing is not supported by PSC limits (e.g., for the BSAI trawl limited access sector).

NMFS places species with sideboard limits that are closed to directed fishing by AFA vessels at the beginning of the year, or are closed to directed fishing for reasons other than the sideboard limit, on “bycatch-only” status. Vessels may retain these species if caught incidentally up to the MRA. If incidental catch amounts approach the TAC, then NMFS could prohibit retention of these sideboard species by sideboarded vessels.

The sideboard limit ratios were calculated as percentages of the TAC based on the aggregate retained catch by AFA vessels of the sideboard species from 1995 to 1997. The ratio remains the same year to year, but is applied to the current year’s initial TAC (ITAC) for the species to determine the yearly sideboard limit.

Sideboard limits are separated by vessel type (catcher vessel, catcher/processor), NMFS management area (BSAI, GOA), and may be further delineated by gear type and/or season. The exception to this rule is the calculation of the Atka mackerel sideboard limit in the Central and Western Aleutian Islands for AFA catcher/processors, which is set as a fixed percentage of the TAC under section 211(b)(2)(c) of the AFA and the regulations at 50 CFR § 679.64(a)(1)(ii).

Because some catcher vessels that qualified under the AFA were much more focused on fisheries other than pollock, the Council added some exemptions to the sideboard harvesting limits—thereby exempting certain catcher vessels from certain sideboard limits. The catch history of the exempt vessels is not included in the sideboard calculations and their catch does not count towards the sideboard limits.

Some of the AFA sideboards were modified by the Amendment 80 Program (72 FR 52668; September 14, 2007). As NMFS noted in the proposed rule for the Amendment 80 Program, the allocation of exclusive harvest privileges to the Amendment 80 sector substantially reduced the amount of ITAC available for harvest by other trawl vessels, including AFA vessels (72 FR 30052, 30070-71; May 30, 2007). The portion of the ITAC assigned to the Amendment 80 sector is not available to other participants, thereby limiting the ITAC available to the BSAI limited access sector. The allocation of ITAC to the Amendment 80 sector constrained the AFA sideboard limits for Amendment 80 species, except for yellowfin sole, which is not sideboarded for AFA vessels when the ITAC is equal to or greater than 125,000 metric tons (mt). As an example, for catcher/processors, the sideboard ratio for Central Aleutian Islands Atka mackerel is 11.5 percent, however, the percentage of the ITAC that goes to the BSAI trawl limited access sector is only 10 percent, so the sideboard is constrained to the allocation to the BSAI trawl limited access sector. Because some of the AFA sideboards for Amendment 80 species are fully allocated to Amendment 80, NMFS does not open directed fishing for those sideboard species.

2.6.1.2 Catcher vessels BSAI groundfish harvesting sideboard limits

At the beginning of each year, NMFS sets separate AFA catcher vessel sideboard limits for non-pollock target species of groundfish and for currently listed prohibited species. For selected species, the sideboards are applied on a seasonal basis as well. Sideboards are established using a formula based on the retained catch of all non-exempt AFA catcher vessels for each sideboard species from 1996 through 1997 (only 1997 for BSAI Pacific cod), divided by the available TAC using the same years. In the BSAI, this amounts to sideboard limits on 16 different groundfish species or species groups. Of these, AFA catcher vessels have historically only targeted Pacific cod and yellowfin sole, while the remaining sideboard species have generally been closed to directed fishing by AFA catcher vessels at the beginning of the year.

The AFA catcher vessel cooperatives (including the inshore cooperatives, as well as the Mothership Fleet Cooperative and the High Seas Catchers' Cooperative) divide the harvest limits among themselves, and each cooperative apportions its allocations among member vessels. Because the sideboard harvest limits apply to all AFA catcher vessels across the three AFA sectors, the Catcher Vessel Inter-cooperative agreement was created to divide the limits among cooperatives, set penalties for exceeding the limits, and to monitor sideboard species transfers between cooperatives. Thus, the cooperative structure provides the mechanism by which AFA catcher vessels can manage the harvest of non-pollock species as well as their harvests of pollock (Northern Economics, 2017).

The sideboard limits for both groundfish and prohibited species apply only to AFA catcher vessels that are not exempt from the specific sideboard limits. Amendments 61/61/13/8 established two classes of exempted AFA catcher vessels. The first class are those catcher vessels exempt from sideboard limits in the BSAI Pacific cod fishery. The second class are those catcher vessels exempt from sideboard limits in the GOA groundfish fisheries.

As noted above, many of the BSAI groundfish harvesting sideboards for non-exempt AFA catcher vessels are not opened for directed fishing because the sideboard limits are not large enough to support directed fishing. Even at high TACs, these sideboard ratios are not large enough to support directed fishing. While TACs may be subject to variation in the BSAI, the Council must set TACs of target species categories to be equal to or less than the 2.0 million metric ton optimum yield cap (see § 679.20(a)(1)(i)(A)). It is highly unlikely that the TACs of any of the AFA sideboard species would increase significantly enough to result in a high enough sideboard limit to allow directed fishing.

Additionally, some sideboard species are not opened because the species is fully allocated to the Amendment 80 Program (e.g., flathead sole, rock sole) and/or because there are no PSC sideboard limits

apportioned to support directed fishing (e.g., Greenland turbot, arrowtooth flounder, Kamchatka flounder). NMFS annually publishes in the groundfish harvest specifications a list of these sideboards closed to directed fishing (e.g., Table 26; 82 FR 11826; February 27, 2017).

Table 2-5 lists AFA catcher vessel sideboard species limits that would be replaced with a prohibition on directed fishing along with their associated sideboard ratios, 2011-2017 average sideboard limit, and 2017 sideboard limit.

Table 2-5 AFA catcher vessel BSAI sideboard species that would be replaced with a prohibition on directed fishing, along with their sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits

Target species and gear	Area/Season	Sideboard ratio ¹	2017 TAC ⁴ (mt)	2017 sideboard limit (mt)	Average sideboard limit (2011-2017) (mt)
Pacific cod - jig	BSAI	0	n/a	0	0
Pacific cod- hook-and-line CV ≥ 60 ft	BSAI Jan 1 - Jun 10	0.0006	217	0	0
	BSAI Jun 10 - Dec 31	0.0006	209	0	0
Pacific cod pot gear	BSAI Jan 1 - Jun 10	0.0006	9,123	5	6
	BSAI Sept 1 - Dec 31	0.0006	8,765	5	5
Pacific cod hook-and-line or pot ≤ 60 ft	BSAI	0.0006	4,259	3	3
Sablefish - trawl	BS	0.0906	541	49	65
	AI	0.0645	369	24	25
Atka mackerel	Eastern AI/BS Jan 1-June 10	0.0032	15,405	49	42
	Eastern AI/BS June 10-Nov 1	0.0032	14,505	49	42
	Central AI Jan 1-June 10	0.0001	8,037	1	1
	Central AI June 10-Nov 1	0.0001	8,037	1	1
	Western AI Jan 1-June 10	0	5,582	0	0
	Western AI June 10-Nov 1	0	5,582	0	0
Rock sole	BSAI	0.0341	42,060	1,434	2,274
Greenland turbot	BS	0.0645	3,719	240	176
	AI	0.0205	106	2	13
Arrowtooth flounder	BSAI	0.069	11,900	821	1,264
Kamchatka flounder	BSAI	0.069	4,250	293	578
Alaska plaice	BSAI	0.0441	11,050	487	699
Other flatfish ²	BSAI	0.0441	2,125	94	112
Flathead sole	BSAI	0.0505	1,294	654	1,177
Pacific ocean perch	BS	0.1	9,350	935	676
	EAI	0.0077	7,055	54	53
	CAI	0.0025	6,251	16	14
	WAI	0	8,037	0	0
Northern rockfish	BSAI	0.0084	4,250	36	30
Shorthead rockfish	BSAI	0.0037	125	0	1
Rougeye rockfish	BS/Eastern AI	0.0037	100	0	1
	Central AI/Western AI	0.0037	125	0	1
Other rockfish ³	BS	0.0048	325	2	2
	AI	0.0095	550	5	5
Skates	BSAI	0.0541	22,100	1,196	1,166
Sculpins	BSAI	0.0541	3,825	207	245
Sharks	BSAI	0.0541	125	7	7
Squids	BSAI	0.3827	1,141	437	237
Octopuses	BSAI	0.0541	400	22	23

Source: NMFS

¹Determined using a ratio of 1995 to 1997 AFA CV catch to 1995 to 1997 TAC

²Other flatfish includes all flatfish species, except for halibut, Alaska plaice, flathead sole, Greenland turbot, rock sole, yellow fin sole, Kamchatka flounder, and arrow tooth flounder

³Other rockfish includes all Sebastes and Sebastolobus species except for Pacific ocean perch, northern rockfish, shorthead rockfish, and rougeye rockfish.

⁴AI Pacific ocean perch, and BSAI Atka mackerel, flathead sole, Pacific cod, and rock sole are multiplied by the remainder of the TAC of that species after the subtraction of the CDQ reserve under § 679.20(b)(1)(ii)(C).

Sideboard fisheries that would remain open for directed fishing are provided in Table 2-6. Also, the table includes the sideboard ratio, average sideboard limit from 2011-2017, and the sideboard limit for 2017 for

the Pacific cod trawl catcher vessels and yellowfin sole sideboard fisheries. These sideboard limits would not be affected by the proposed action.

Table 2-6 AFA sideboard limits open for directed fisheries along with their AFA catcher vessel BSAI sideboard ratios, 2011-2017 average sideboard limits (mt), and 2017 sideboard limit (mt)

Target species and gear	Area/Season	Sideboard ratio ¹	2017 TAC ³ (mt)	2017 sideboard limit (mt)	Average sideboard limit (2011-2017) (mt)
Pacific cod trawl gear CV	BSAI Jan 20 - Apr 1	0.8609	34,962	30,099	31,309
	BSAI Apr 1 - Jun 10	0.8609	5,197	4,474	4,654
	BSAI Jun 10 - Nov 1	0.8609	7,087	6,101	6,346
Yellowfin sole ²	All	0.0647	154,000	no sideboard limit	no sideboard limit

Source: NMFS

¹Determined using a ratio of 1995 to 1997 AFA CV catch to 1995 to 1997 TAC

²The sideboard limit for BSAI yellow fin sole is suspended when the initial TAC is equal to or greater than 125,000 mt in order to allow AFA sectors the potential to expand their harvest in the yellow fin sole fishery in periods of diminished availability of pollock (§ 679.64(a)(1)(v) and § 679.64(b)(6)).

³All Pacific ocean perch, and BSAI Atka mackerel, flathead sole, Pacific cod, and rock sole are multiplied by the remainder of the TAC of that species after the subtraction of the CDQ reserve under § 679.20(b)(1)(ii)(C).

2.6.1.3 Catcher vessels GOA groundfish harvesting sideboard limits

In the GOA, non-exempt AFA catcher vessel sideboard limits are established and managed in the same manner as those in the BSAI groundfish fisheries. The sideboard limits rely on a formula based on the retained catch of all non-exempt AFA catcher vessels for each sideboard species from 1995 through 1997, divided by the available TAC using the same set of years. Like the Pacific cod fishery in the BSAI, certain AFA catcher vessels that had relatively low BS pollock fishing history and could demonstrate a significant economic dependence on GOA fisheries are exempt from GOA sideboards.

In GOA, many of the sideboards limits for non-exempt AFA catcher vessels are insufficient to support a directed fishery and thus are not open for directed fishing. NMFS annually publishes in the groundfish harvest specifications a list of these sideboard fisheries closed to directed fishing (Table 30; 82 FR 12032; February 27, 2017). Table 2-7 shows the sideboard ratios, 2017 TACs, 2017 sideboard limit, and the 2011-2017 sideboard limit average for the GOA groundfish species for which directed fishing would be prohibited under the action alternative.

Table 2-7 AFA catcher vessel GOA sideboard species limits that would be replaced with a prohibition on directed fishing, along with their sideboard ratios, 2017 TACs, 2017 sideboard limits , and 2011-2017 average sideboard limits

Target species and gear	Area/Season	Sideboard ratio ¹	2017 TACs (mt)	2017 sideboard limit (mt)	Average sideboard limit (2011-2017) (mt)
Pacific cod	Eastern inshore	0.0079	5,313	42	23
	Eastern offshore	0.0078	590	5	3
Shallow-water flatfish	Eastern	0.0126	4,287	54	48
Deep-water flatfish	Western	0	256	-	-
Rexsole	Western	0.0007	1,459	1	1
	Eastern	0.0029	1,922	6	5
Arrowtooth flounder	Western	0.0021	14,500	30	28
	Eastern	0.0002	13,800	3	3
Flathead sole	Western	0.0036	8,650	31	28
	Eastern	0.0009	3,806	3	4
Pacific ocean perch	Western	0.0023	2,679	6	6
Northern rockfish	Western	0.0003	432	0	1
Dusky rockfish	Western	0.0001	158	0	0
	Central	0	3,786	-	-
	Eastern	0.0067	334	2	6
Demersal shelf rockfish	SEO district	0.002	227	0	1
Sablefish	Western	0	270	-	-
	Central	0.0642	903	58	62
	Eastern	0.0433	211	9	10
Shortraker rockfish	Western	0	38	-	-
	Central	0.0218	301	7	8
	Eastern	0.011	947	10	8
Rougheye rockfish	Western	0	105	-	-
	Central	0.0237	706	17	19
	Eastern	0.0124	516	6	5
Thornyhead rockfish	Western	0.028	291	8	7
	Central	0.028	988	28	24
	Eastern	0.028	682	19	20
Other rockfish	Central	0.1699	1,534	261	166
	Eastern	0	774	-	-
Atka mackerel	GOA	0.0309	3,000	93	66
Big skate	Western	0.0063	908	6	4
	Central	0.0063	1,850	12	11
	Eastern	0.0063	1,056	7	8
Longnose skate	Western	0.0063	61	0	0
	Central	0.0063	2,513	16	13
	Eastern	0.0063	632	4	5
Other skates	GOA	0.0063	1,919	12	13
Sharks	GOA	0.0063	4,514	28	35
Squids	GOA	0.0063	1,137	7	7
Octopuses	GOA	0.0063	4,878	31	15
Sculpins	GOA	0.0063	5,591	35	35

Source: NMFS

¹Determined using a ratio of 1995 to 1997 AFA CV catch to 1995 to 1997 TAC

Table 2-8 shows AFA catcher vessel sideboard limits for those GOA fisheries that are sufficient for NMFS to allow directed fishing. The table includes sideboard ratios, 2017 TACs, the 2017 sideboard limits, and average sideboard limit from 2011-2017. These sideboard limits would not be affected by the proposed action.

Table 2-8 AFA sideboard limits open for directed fisheries along with their AFA catcher vessel GOA sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits

Target Species	Apportionments by season/gear	Area/component	Sideboard ratio ¹	2017 TACs (mt)	2017 sideboard limit (mt)	Average sideboard limit 2011-2017 (mt)
Pollock	A Season Jan 20 - Mar 10	Shumagin (610)	0.6047	2,232	1,350	2,537
		Chirikof (620)	0.1167	34,549	4,032	2,946
		Kodiak (630)	0.2028	11,014	2,234	1,730
	B Season Mar 10 - May 31	Shumagin (610)	0.6047	2,232	1,350	2,537
		Chirikof (620)	0.1167	39,420	4,600	3,505
		Kodiak (630)	0.2028	6,143	1,246	759
	C Season Aug 25 - Oct 1	Shumagin (610)	0.6047	19,569	11,834	8,398
		Chirikof (620)	0.1167	12,341	1,440	1,256
		Kodiak (630)	0.2028	15,886	3,222	2,701
	D Season Oct 1 - Nov 1	Shumagin (610)	0.6047	19,569	11,834	7,492
Chirikof (620)		0.1167	12,341	1,440	1,678	
Kodiak (630)		0.2028	15,886	3,222	2,565	
Annual	WYK (640)	0.3495	7,492	2,618	1,760	
	SEO (650)	0.3495	9,920	3,467	3,333	
Pacific cod	A Season Jan 1 - Jun 10	W	0.1331	15,242	2,029	1,926
		C	0.0692	19,881	1,376	1,637
	B Season Sept 1 - Dec 31	W	0.1331	10,161	1,352	1,283
		C	0.0692	13,254	917	1,091
Shallow-water flatfish	Annual	W	0.0156	13,250	207	187
		C	0.0587	19,306	1,133	1,046
Deep-water flatfish	Annual	C	0.0647	3,454	223	202
		E	0.0128	5,582	71	68
Rex sole	Annual	C	0.0384	4,930	171	222
Arrowtooth flounder	Annual	C	0.028	75,000	2,100	1,920
Flathead sole	Annual	C	0.0213	15,400	328	296
Pacific ocean perch	Annual	C	0.0748	16,671	1,247	1,015
		E	0.0466	4,568	213	167
Northern Rockfish	Annual	C	0.0277	3,354	93	93

Source: NMFS

¹Determined using a ratio of 1995 to 1997 AFA CV catch to 1995 to 1997 TAC

2.6.1.4 Catcher/processors BSAI groundfish harvest sideboard limits

Many of the BSAI groundfish harvesting sideboards for AFA catcher/processor vessels are also not opened for directed fishing where the sideboard limits are not large enough to support directed fishing. Additionally, some sideboards for AFA catcher/processor vessels are not available for directed fishing because the species is fully allocated to the Amendment 80 Program (e.g., flathead sole, rock sole, Western AI Atka mackerel) or because there are no PSC limits apportioned to support directed fishing. NMFS annually publishes a list of these sideboard fisheries closed to directed fishing for AFA catcher/processor vessels (Table 25; 82 FR 11826; February 27, 2017).

Table 2-9 lists those AFA catcher/processor sideboard species that are proposed for replacement with a prohibition on directed fishing along with their associated sideboard ratios, 2017 sideboard limit, and 2011-2017 sideboard average sideboard. All the species included in the table are closed to directed fishing through the annual harvest specifications.

Table 2-9 AFA catcher/processor sideboard species that would be replaced with a prohibition on directed fishing, their AFA catcher/processor vessels BSAI sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits

Target species and gear	Area/Season	Sideboard ratio ¹	2017 TAC available to trawl C/Ps (mt) ²	2017 sideboard limit (mt)	Average sideboard limit (2011-2017) (mt)
Sablefish trawl	BS	0.016	541	9	11
	AI	0	369	0	0
Rock sole	BSAI	0.037	42,060	1,556	2,468
Greenland turbot	BS	0.007	3,719	26	19
	AI	0.005	106	1	3
Arrowtooth flounder	BSAI	0.002	11,900	24	37
Kamchatka flounder	BSAI	0.002	4,250	9	17
Alaska Plaice	BSAI	0.001	11,050	11	16
Other flatfish	BSAI	0.058	2,125	123	148
Flathead sole	BSAI	0.036	12,949	466	839
Atka mackerel	Western AI A season ³	0.2	5,582	1,116	504
	Western AI B season ³	0.2	5,582	1,116	504
Pacific ocean perch	BS	0.002	9,350	19	14
	Eastern AI	0.02	7,055	141	138
	Central AI	0.001	6,251	6	5
	Western AI	0.004	8,037	32	32
Northern Rockfish	BSAI	0.007	4,250	30	25
Shorthead Rockfish	BSAI	0.018	125	2	6
Rougheye Rockfish	Eastern BS/Eastern AI	0.018	100	2	3
	Central AI/Western AI	0.018	125	2	4
Other rockfish	BS	0.029	325	9	11
	AI	0.027	550	15	14
Skates	BSAI	0.008	22,100	177	173
Sculpins	BSAI	0.008	3,825	31	36
Sharks	BSAI	0.008	125	1	1
Squids	BSAI	0.022	1,141	25	28
Octopuses	BSAI	0.008	400	3	3

Source: NMFS

¹Determined using a ratio of retained catch to total catch from 1995 to 1997

²AI Pacific ocean perch, and BSAI Atka mackerel, flathead sole, Pacific cod, and rock sole are multiplied by the remainder of the TAC of that species after the subtraction of the CDQ reserve under § 679.20(b)(1)(ii)(C).

³The seasonal apportionment of Atka mackerel in the open access fishery is 50 percent in the A season and 50 percent in the B season.

Listed AFA catcher/processors are limited to harvesting no more than zero in EAI district and BS, 20 percent of the annual ITAC specified for the WAI district, and 11.5 percent of the annual ITAC specified for the CAI district.

Table 2-10 shows BSAI sideboard limits for those AFA catcher/processor fisheries that continue to be sufficient for NMFS to open for directed fishing to include sideboard ratios, 2017 TACs, the 2017 sideboard limits, and average sideboard limit from 2011-2017. The yellowfin sole sideboard limit would not be affected by the proposed action. As for the Central AI Atka mackerel sideboard limit, the proposed action (Option 1) would no longer publish the sideboard in the annual groundfish harvest specifications. NMFS would not prohibit directed fishing for this species by AFA catcher/processor vessels because this fishery is open for directed fishing through the BSAI trawl limited access fishery.

Table 2-10 AFA sideboard limits that have remained open for directed fisheries along with their AFA catcher vessel GOA sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits

Target species and gear	Area/Season	Sideboard ratio ¹	2017 TAC available to trawl C/Ps (mt) ²	2017 sideboard limit (mt)	Average sideboard limit (2011-2017) (mt)
Atka mackerel	Central AI A season ³	0.115	15,405	1,772	783
	Central AI B season ³	0.115	15,405	1,772	783
Yellowfin sole ⁴	All	0.23	154,000	no sideboard limit	no sideboard limit

Source: NMFS

¹Determined using a ratio of retained catch to total catch from 1995 to 1997

²All Pacific ocean perch, and BSAI Atka mackerel, flathead sole, Pacific cod, and rock sole are multiplied by the remainder of the TAC of that species after the subtraction of the CDQ reserve under § 679.20(b)(1)(ii)(C).

³The seasonal apportionment of Atka mackerel in the open access fishery is 50 percent in the A season and 50 percent in the B season.

Listed AFA catcher/processors are limited to harvesting no more than zero in EAI district and BS, 20 percent of the annual ITAC specified for the WAI district, and 11.5 percent of the annual ITAC specified for the CAI district.

⁴The sideboard limit for BSAI yellow fin sole is suspended when the initial TAC is equal to or greater than 125,000 mt in order to allow AFA sectors the potential to expand their harvest in the yellow fin sole fishery in periods of diminished availability of pollock (§ 679.64(a)(1)(v) and § 679.64(b)(6)).

2.6.2 Description of CR Program Sideboard Limits

Portions of the following discussion on the CR Program are excerpted from the AFA and CR Program Sideboard Limit Discussion Paper (NPFMC 2017) and the Ten-Year Program Review for the Crab Rationalization Management Program in the Bering Sea/Aleutian Islands (NPFMC 2017). Nine BSAI crab fisheries are managed under the CR Program, which was implemented on April 1, 2005 (70 FR 10174; March 2, 2005). Under the CR Program, holders of license limitation program (LLP) licenses endorsed for a crab fishery were issued quota share (QS), which are long term shares, based on their qualifying harvest histories in that crab fishery. As part of the CR Program, NMFS issued four types of QS: catcher vessel owner (CVO) QS, assigned to LLP license holders who delivered their catch onshore or to stationary floating crab processors; catcher/processor vessel owner QS, assigned to LLP license holders who harvested and processed their catch at sea; captains and crew on board catcher/processor vessels, issued as catcher/processor crew QS; and captains and crew on board catcher vessels, issued as catcher vessel crew QS. Each year, the holder of QS may receive an exclusive harvest privilege for a portion of the annual TAC, called individual fishing quota (IFQ).

During the development of the CR Program, the Council was concerned that the increase in flexibility for crab fishermen to choose when and where to fish for their IFQ under the CR Program would provide crab fishermen with increased opportunity to participate in other fisheries. Therefore, to protect participants in other fisheries, the Council developed restrictions on participation in other fisheries (sideboards) to restrict a vessel's harvests to its historical landings in all GOA groundfish fisheries. The Council established sideboard limits for vessels with BS snow crab fishing history to restrict these vessels' catch to their collective historical landings in each GOA groundfish fishery (except the fixed-gear sablefish fishery) from 1996 to 2000 relative to the total retained catch of those species by all groundfish vessels during the same period. The preamble to the proposed rule for Amendments 18 and 19 to the Crab FMP notes that historically, the BS snow crab fishery and GOA groundfish fisheries operated concurrently from January through March, meaning that a crab vessel owner had to decide whether to fish for BS snow crab or GOA groundfish but could not participate fully in both fisheries (69 FR 63229; October 29, 2004). Consequently, the Council was most concerned with BS snow crab vessels expanding into GOA groundfish fisheries and so developed sideboard limits for these fisheries.

The GOA groundfish sideboard restrictions apply to any non-AFA crab vessel with a fishing history that generated any amount of BS snow crab QS, and to any LLP licenses earned in whole or in part by the crab fishing history of such vessels. These sideboard limits are listed in 50 CFR § 680.22. Because AFA catcher vessels were already subject to sideboard restrictions in the GOA under the implementing

regulations for the AFA, no additional restrictions for AFA catcher vessels with BS snow crab history were included with the CR Program. The sideboard restrictions are also apportioned by season and/or area for each GOA groundfish TAC that is apportioned by season or area.

Under the CR Program, vessels with less than 100,000 pounds (45.4 mt) of total BS snow crab landings and more than 500 metric tons (mt) (1,102,311 lb) of total Pacific cod landings in the GOA during the CR Program qualifying years were exempted from the Pacific cod sideboards. In addition, vessels with less than 50 mt (110,231 lb) of total groundfish landings in the GOA during the qualifying period were prohibited from harvesting Pacific cod from the GOA. Sideboard limits were applied to vessels but also restricted landings made using a groundfish LLP license derived from the history of a restricted vessel, even if that LLP license is used on another vessel.

These exemptions were later broadened under Amendment 34 to the Crab FMP (76 FR 35772; June 20, 2011). Under Amendment 34, vessels with less than 750,000 pounds (340.2 mt) of total BS snow crab and greater than 680 mt of Pacific cod are exempt from the GOA Pacific cod sideboards. Amendment 34 also added an exemption from the GOA pollock sideboards for crab vessels that were used to land less than 0.22 percent of all BS snow crab from 1996 to 2000 (550 mt) and made 20 landings of GOA pollock from 1996 to 2000.

2.6.2.1 Catcher vessels

The CR Program sideboard limits are published each year in the GOA harvest specifications for groundfish (82 FR 12032; February 27, 2017). Since the implementation of these sideboard limits in 2006, the only sideboard limits large enough to support directed fishing are the Western and Central GOA Pacific cod pot catcher vessel sideboard limits, and in some years the Western GOA Pacific cod pot catcher/processor sideboard limit. All other sideboard limits shown in Table 2-11 have been closed for directed fishing. It is highly unlikely that the TACs of any of the sideboard species would increase significantly enough to result in a large enough sideboard limit to allow directed fishing. Table 2-11 shows those GOA sideboard limits that would be replaced with a prohibition on directed fishing along with their sideboard ratios, the 2017 TAC, the 2017 sideboard limit, and the average sideboard limit from 2011-2017.

Table 2-12 shows sideboard limits for those Western and Central GOA Pacific cod pot catcher vessels that would remain open for directed fishing. The table includes sideboard ratios, 2017 TACs, the 2017 sideboard limits, and average sideboard limit from 2011-2017. These sideboard limits would not be affected by the proposed action.

Table 2-11 Non-AFA CR Program sideboard species that are proposed for replacement with a prohibition on directed fishing, their sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits

Target species and gear	Area/Season	Area/component/gear	Sideboard ratio ¹	2017 TACs (mt)	2017 sideboard limit (mt)	Average sideboard limit (2011-2017) (mt)
Pollock	A Season Jan 20 - Mar 10	Shumagin (610)	0.0098	2,232	22	41
		Chirikof (620)	0.0031	34,549	107	78
		Kodiak (630)	0.0002	11,014	2	2
	B Season Mar 10 - May 31	Shumagin (610)	0.0098	2,232	22	41
		Chirikof (620)	0.0031	39,420	122	93
		Kodiak (630)	0.0002	6,143	1	1
	C Season Aug 25 - Oct 1	Shumagin (610)	0.0098	19,569	192	136
		Chirikof (620)	0.0031	12,341	38	33
		Kodiak (630)	0.0002	15,886	3	3
	D Season Oct 1 - Nov 1	Shumagin (610)	0.0098	19,569	192	136
		Chirikof (620)	0.0031	12,341	38	33
		Kodiak (630)	0.0002	15,886	3	3
	Annual	WYK (640)	0	7,492	-	-
SEO (650)		0	9,920	-	-	
Pacific cod ²	A Season - Jan 1 - Jun 10	WG Jig	0	15,242	-	-
		WG Hook-and-line CV	0.0004	15,242	6	6
		WG Trawl CV	0.0007	15,242	11	10
		CG Jig	0	19,881	-	-
		CG Hook-and-line CV	0.0001	19,881	2	2
		CG Trawl CV	0.0012	19,881	24	29
	B Season	WG Jig	0	10,161	-	-
	Jig Gear - Jun 10 - Dec 31	WG Hook-and-line CV	0.0004	10,161	4	4
		WG Trawl CV	0.0007	10,161	7	7
	All other gears - Sept 1 - Dec 31	CG Jig	0	10,161	-	-
		CG Hook-and-line CV	0.0001	13,254	1	2
		CG Trawl CV	0.0012	13,254	16	19
	Annual	EG inshore	0.011	5,313	58	35
		EG offshore	0	5,313	-	-
	Sablefish	Annual, trawl gear	W	0	270	-
C			0	903	-	-
E			0	211	-	-
Shallow-water flatfish	Annual	W	0.0059	13,250	78	71
		C	0.0001	19,306	2	2
		E	0	4,287	-	-
Deep-water flatfish	Annual	W	0.0035	256	1	1
		C	0	3,454	-	-
		E	0	5,582	-	-

Table 2-11 (continued) Non-AFA CR Program sideboard species that are proposed for replacement with a prohibition on directed fishing, their sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits

Target species and gear	Area/Season	Area/component/gear	Sideboard ratio ¹	2017 TACs (mt)	2017 sideboard limit (mt)	Average sideboard limit (2011-2017) (mt)
Rex sole	Annual	W	0	1,459	-	-
		C	0	4,930	-	-
		E	0	1,922	-	-
Arrowtooth flounder	Annual	W	0.0004	14,500	6	6
		C	0.0001	75,000	8	7
		E	0	13,800	-	-
Flathead sole	Annual	W	0.0002	8,650	2	2
		C	0.0004	15,400	6	5
		E	0	3,806	-	-
Pacific ocean perch	Annual	W	0	2,679	-	-
		C	0	16,671	-	-
		E	0	4,568	-	-
Northern rockfish	Annual	W	0.0005	432	0	1
		C	0	3,354	-	-
Shortraker rockfish	Annual	W	0.0013	38	0	0
		C	0.0012	301	0	0
		E	0.0009	947	1	1
Dusky rockfish	Annual	W	0.0017	158	0	0
		C	0	3,786	-	-
		E	0	334	-	-
Rougheye rockfish	Annual	W	0.0067	105	1	1
		C	0.0047	706	3	4
		E	0.0008	516	0	0
Demersal shelf rockfish	Annual	SEO	0	227	-	-
Thornyhead rockfish	Annual	W	0.0047	291	1	1
		C	0.0066	988	7	6
		E	0.0045	682	3	3
Other rockfish	Annual	W/C	0.0033	1,534	5	3
		E	0	774	-	-
Atka mackerel	Annual	Gulfwide	0	3,000	-	-
Big skate	Annual	W	0.0392	908	36	26
		C	0.0159	1,850	29	28
		E	0	1,056	-	-
Longnose skate	Annual	W	0.0392	61	2	3
		C	0.0159	2,513	40	34
		E	0	632	-	-
Other skates	Annual	Gulfwide	0.0176	1,919	34	36
Sculpins	Annual	Gulfwide	0.0176	5,591	98	99
Sharks	Annual	Gulfwide	0.0176	4,514	79	98
Squids	Annual	Gulfwide	0.0176	1,137	20	20
Octopuses	Annual	Gulfwide	0.0176	4,878	86	42

Source: NMFS

¹Ratio of 1996-2000 non-AFA crab vessel catch to 1996-2000 total harvest.

²Prior to 2012, Pacific cod was apportioned only by as inshore and offshore, so sideboard limits were not included in this table for 2011.

Table 2-12 Non-AFA sideboard limits that have remained open for directed fisheries along with the sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits

Target species and gear	Area/Season	Area/component/gear	Sideboard ratio ¹	2017 TACs (mt)	2017 sideboard limit (mt)	Average sideboard limit (2011-2017) (mt)
Pacific cod ²	A Season - Jan 1 -Jun 10	WG Pot CV	0.0997	15,242	1520	1,456
		WG Pot C/P	0.0078	15,242	119	114
		CG Pot CV	0.0474	19,881	942	1,117
		CGPot C/P	0.0136	19,881	270	320
	B Season - Sep 1 - Dec 31	WG Pot CV	0.0997	10,161	1013	970
		WG Pot C/P	0.0078	10,161	79	76
		CG Pot CV	0.0474	13,254	628	745
		CGPot C/P	0.0136	13,254	180	214

Source: NMFS

¹Ratio of 1996-2000 non-AFA crab vessel catch to 1996-2000 total harvest.

²Prior to 2012, Pacific cod was apportioned only by as inshore and offshore, so sideboard limits were not included in this table for 2011.

2.7 Analysis of Impacts: Alternative 1, No Action

Alternative 1 is the no action alternative. This alternative would leave in place the sideboard limits for all the species listed in Table 2-1, Table 2-2, Table 2-3, and Table 2-4. As noted throughout Section 2.6, these sideboard species have insufficient sideboard limits to support directed fishing, are fully allocated to the Amendment 80 sector, or have insufficient halibut PSC sideboard to support directed fishing. Therefore, NMFS would likely continue to close these sideboard fisheries via the annual harvest specifications.

Alternative 1 would result in NMFS continuing to utilize time and monetary resources to calculate and establish sideboard limits for these species in the annual harvest specifications. NMFS would also continue to generate and publish in the Federal Register tables of sideboard limits that would likely continue to be closed to directed fishing prior to the start of the fishing.

AFA Program and CR Program vessels that are restricted by the sideboard limits listed in Table 2-1, Table 2-2, Table 2-3, and Table 2-4 would continue to target species not restricted by sideboards and those sideboard species listed in Table 2-6, Table 2-8, Table 2-10, Table 2-12 that are sufficient enough to allow directed fishing. Under this alternative, AFA or crab sideboarded vessels would likely continue to retain incidental catch of species that are closed to directed fishing due to insufficient sideboard limits in amounts similar to those shown in Table 2-13, Table 2-14, Table 2-15, and Table 2-16 shown in Section 2.8. Any catch of those sideboard species that are closed to directed fishing during harvest specifications while targeting other species is incidental catch, and vessels must comply with the MRA regulations at § 679.20(e). The MRA is calculated as a percentage of the retained amount of a species closed to directed fishing, relative to the retained amount of basis species or basis species groups open for directed fishing. Amounts that are caught greater than the MRA percentage must be discarded.

2.8 Analysis of Impacts: Alternative 2

This alternative would remove sideboard limits for the all the species listed in Table 2-1, Table 2-2, Table 2-3, and Table 2-4 and prohibit directed fishing for those species by AFA and crab sideboarded vessels. NMFS annually closes most of these sideboard limits to directed fishing via the harvest specifications because (1) the sideboard limits are too small to support directed fishing, (2) some BSAI species are fully allocated to the Amendment 80 program, or (3) there are insufficient halibut PSC sideboard limits to support directed fishing. However, instead of annually closing directed fishing for these sideboard species, NMFS would close these sideboard species by regulation. This prohibition also would apply to

any future break-out or combination of such species; e.g., splitting out a specific species from the "Other Rockfish" species group.

A potential adverse impact of this proposed regulatory change is if the TACs for these closed sideboard species were to increase dramatically or Amendment 80 allocations changed in the future, vessel owners or operators who may wish to conduct directed fishing for a particular sideboard species for which directed fishing is closed, would not be able to do so without a regulatory action. This potential adverse impact would not affect any current sideboard restricted participants relative to opportunities available to them currently, because directed fishing for these sideboard species have been closed since the implementation of the AFA Program (1998) and CR Program (2005). If circumstances were to change in the future, the Council and NMFS could choose to reestablish the calculation and publication of specific sideboard limits through a regulatory change.

Another potential adverse impact is the cost of preparing the regulatory analysis and regulations for authorizing directed fishing, if sufficient TACs exist. Although it is unlikely that the TACs for these sideboard fisheries will ever be sufficiently high enough to open them for directed fishing, nevertheless, the costs of preparing the regulatory analysis and regulations could exceed the benefits of this proposed action. Most of the sideboard ratios included in Table 2-5, Table 2-7, Table 2-9, and Table 2-11 are insufficient to ever support a directed fishery despite a significantly higher TAC. Given that the sideboard limits for this proposed action have been closed to directed fishing since their implementation and the probability of opening these small sideboard fisheries in the future is extremely low, the likelihood of preparing a future analysis and regulations to authorizing directed fishing for these sideboard fisheries is negligible.

The primary benefits of this alternative relative to Alternative 1 are that it would streamline the preparation of the BSAI and GOA annual harvest specifications, simplify NMFS's annual programming changes to the groundfish catch accounting system, and reduce the annual costs of publishing the annual harvest specifications in the Federal Register. Conversely, Alternative 2 would not incur any negative impacts to AFA and crab sideboard limited vessels for the foreseeable future. This alternative still supports the original intent of creating such limits to protect non-AFA and non-CR Program fisheries from the adverse impacts of the rationalization of the AFA and CR Programs.

The BSAI and GOA annual harvest specifications process includes the preparation of a Stock Assessment and Fishery Evaluation (SAFE) for the species managed under each groundfish FMP. These reports are reviewed by the Council and its advisory bodies, and serve as the basis for establishing the OFLs, ABCs, and TACs for each two-year harvest specifications cycle. The Council's recommendations for the harvest specifications are incorporated into proposed and final rulemaking. Both the BSAI and GOA final harvest specifications contain a variety of tables that detail the OFLs, ABCs, and TACs for groundfish species, as well as the limits associated with a variety of prohibited species. Besides the preliminary tables that establish the annual OFL, ABCs, and TACs, each final rule document contains numerous tables. This includes tables associated with the AFA and CR sideboards, each of which can be a multi-page table containing dozens of combinations of species, management area, and seasonal apportionments of sideboard limits. Annually, NMFS staff spends considerable time calculating new sideboard limits based upon the Council's recommended annual TACs, incorporating those limits into the sideboard tables, and cross-checking such tables for accuracy. Finally, NMFS then describes which AFA and CR sideboard limits are either open or closed to directed fishing. Prohibiting directed fishing for most species in regulation would remove the need to annually calculate most sideboard limits, and simplify the creation and publication of AFA and CR sideboard tables.

Besides increasing the administrative efficiency of managing most AFA and CR sideboard limits through regulation, rather than in the BSAI and GOA annual harvest specifications, there are associated annual

cost savings to NMFS of publishing shorter proposed and final rules in the Federal Register. For example, there were approximately 11 pages of AFA and CR sideboard limits published in the final BSAI and GOA 2017 harvest specifications. Publication rates in the Federal Register are about \$159 per column, or \$477 per page³. This equates to \$5,247 for 11 pages of sideboard limit tables. NMFS estimates that condensing the AFA and CR sideboard limit tables in the harvest specifications to perhaps four pages could yield an annual agency cost of \$1,908, a savings of \$3,339. That estimate only includes the publication of sideboard tables in the final harvest specifications; additional savings would be realized each year, since the sideboard tables in the proposed harvest specifications could be condensed as well.

Finally, with respect to the potential benefits of closing directed fishing for most sideboard species in regulation, NMFS would not have to use as much staff time on the catch accounting aspects of AFA and CR sideboard limits. Each of the various combinations of BSAI and GOA species, area, gear, and seasonal limits of groundfish and prohibited species that are established in the final harvest specifications have a corresponding account in NMFS's catch accounting system. Adoption of Alternative 2 would mean that NMFS could eliminate the annual programming required to establish new accounts for sideboard limits, as well as the staff time required to enter each new sideboard limit in the catch accounting system.

NMFS would continue to monitor catch for the species listed in Table 2-1, Table 2-2, Table 2-3, and Table 2-4. Inseason management credits both directed harvest and incidental harvest against the TAC for each groundfish species to ensure that each species' TAC is not over harvested. NMFS allows vessels to retain incidental catch of species (if the TAC has not been reached) taken in other directed fisheries that are open, up to the MRA. If a species is closed to directed fishing, and the TAC for that species is reached, NMFS prohibits retention of that species and all catch of that species must be discarded.

This action would not modify the ability of sideboard restricted vessels from retaining incidental catch of species closed to directed fishing while targeting other species. AFA or crab sideboarded vessels would likely continue to retain incidental catch amounts similar to those shown in Table 2-13, Table 2-14, Table 2-15, and Table 2-16. Any catch of these regulatory closed species must comply with the MRA regulations at § 679.20(e). Amounts that are caught in excess of the MRA percentage in Tables 10 and 11 to 50 CFR part 679 must be discarded.

Table 2-13 provides annual retained catch for those sideboard species affected by this action along with the sideboard limits for AFA catcher vessels in the BSAI from 2015-2017. In nearly all cases, incidental catch amounts were well below the sideboard limits. In a few cases, AFA trawl catcher vessels have some sideboard limit overages for species closed to directed fishing because of incidental catch in other target fisheries. In 2017, 44 AFA catcher vessels retained 442 mt of squid, which was slightly greater than the sideboard limit of 437 mt. In 2015, 63 AFA catcher vessels retained 35 mt of northern rockfish, which was greater than the sideboard limit of 23 mt.

Table 2-14 provides annual retained catch by the AFA catcher vessels for those GOA sideboard species that are proposed for replacement with a prohibition on directed fishing. As noted in the table, incidental catch amounts while targeting other species are retained for most of the sideboard fisheries. In nearly every sideboard limit, the incidental catch amount is less than sideboard limit. Those sideboard amounts that were exceeded include dusky rockfish in all three years, big skates in 2017, and squids in 2015 and 2016.

³ See <https://www.archives.gov/files/federal-register/write/conference/publishing-billing.pdf>. Accessed November 6, 2017.

Table 2-13 AFA catcher vessel BSAI count, retained catch, and sideboard limit from 2015-2017 for each aggregated sideboard limit that is proposed for replacement with a prohibition on directed fishing

Sideboard Species	2017			2016			2015		
	Vessel count	Retained (mt)	Sideboard limit (mt)	Vessel count	Retained (mt)	Sideboard limit (mt)	Vessel count	Retained (mt)	Sideboard limit (mt)
Pacific cod - jig	0	0	0	0	0	0	0	0	0
Pacific cod- hook-and-line CV ≥ 60 ft	0	0	0	0	0	0	0	0	0
Pacific cod pot gear	0	0	10	0	0	12	0	0	11
Pacific cod hook-and-line or pot ≤ 60 ft	0	0	3	0	0	3	0	0	3
Sablefish - trawl	79	36	73	61	5	65	19	0	76
Atka mackerel	77	6	100	83	31	84	83	35	80
Rock sole	85	710	1,434	86	976	1,739	87	390	2,109
Greenland turbot	37	1	242	40	2	150	64	6	137
Arrowtooth flounder	88	54	821	89	89	821	86	124	1,290
Kamchatka flounder	16	1	293	16	2	293	18	7	391
Alaska plaice	47	207	487	42	271	544	24	107	693
Other flatfish	83	84	94	80	67	94	86	82	136
Flathead sole	87	366	654	91	271	680	88	548	682
Pacific ocean perch	76	647	1,005	80	641	750	84	726	753
Northern rockfish	54	5	36	71	10	32	63	35	23
Shortraker rockfish	26	0	0	18	1	1	29	0	1
Rougheye rockfish	28	0	0	17	0	1	23	0	2
Other rockfish	56	2	7	56	3	7	57	4	7
Skates	74	154	1,196	68	67	1,196	68	116	1,182
Sculpins	78	12	207	82	14	207	81	30	216
Sharks	16	2	7	19	2	7	17	1	7
Squids	44	442	437	54	234	488	72	1,200	130
Octopuses	28	2	22	29	6	22	47	2	22

Source: NMFS and AFA_CV_Ves_Species(10-12-17)-1.xls

Table 2-14 AFA catcher vessel GOA count, retained catch, and sideboard limit from 2015-2017 for each aggregated sideboard limit that is proposed for replacement with a prohibition on directed fishing

Sideboard Species	2017			2016			2015		
	Vessel count	Retained (mt)	Sideboard limit (mt)	Vessel count	Retained (mt)	Sideboard limit (mt)	Vessel count	Retained (mt)	Sideboard limit (mt)
Pacific cod	0	0	47	0	0	52	0	0	17
Shallow water flatfish	0	0	54	0	0	54	0	0	36
Deep water flatfish	0	0	0	0	0	0	0	0	0
Rex sole	1	*	7	2	*	6	0	0	7
Arrowtooth flounder	3	0	33	3	4	33	1	*	33
Flathead sole	4	0	34	3	3	34	1	*	34
Pacific ocean perch	1	*	6	2	*	6	1	*	5
Northern rockfish	0	0	0	3	0	0	1	*	0
Dusky rockfish	5	60	2	7	73	2	3	25	10
Demersal shelf rockfish	0	0	0	0	0	0	0	0	0
Sablefish	4	18	67	5	35	60	3	43	70
Shortraker rockfish	0	0	17	6	1	17	3	1	18
Rougeye rockfish	4	5	23	6	5	23	5	8	20
Thornyhead rockfish	3	3	55	2	*	55	2	*	52
Other rockfish	1	*	261	3	10	261	4	2	175
Atka mackerel	3	2	93	5	4	62	5	14	62
Big skate	4	31	25	2	*	23	1	*	21
Longnose skate	2	*	20	5	7	20	5	18	20
other skates	3	0	12	5	0	12	1	*	14
Sharks	4	0	28	5	1	28	5	1	38
Squids	4	0	7	6	8	7	5	40	7
Octopuses	1	*	31	1	*	31	3	2	9
Sculpins	4	0	35	2	*	35	0	0	35

Source: NMFS and AFA_CV_GOA_Species(10-23-17).xls

*Denotes confidential data

Table 2-15 provides annual retained catch by the AFA catcher/processor vessels for those BSAI sideboard fisheries that are closed to directed fishing and proposed for replacement with a prohibition on directed fishing. Although the retained catch for these sideboard species listed in the table are incidental to other target fisheries, the amounts of retained catch in many cases are greater than the sideboard limit. NMFS accommodates these overages through the incidental catch allowances rather than prohibiting the retention of these sideboard species by putting their target fisheries on prohibited species status.

As noted in the proposed rule for Amendments 61/61/13/8, in some instances where catcher/processors have a history of harvesting a species as bycatch in the pollock fishery and have not traditionally retained that species, the sideboard ratio would likely result in sideboard limits far below the intrinsic bycatch rate in the BSAI pollock fishery. Squid and Pacific ocean perch are in this category. An expected consequence of basing sideboard amounts on retained catch rather than total catch is that actual harvests of some species as bycatch in the directed pollock fishery would exceed the published sideboard amount. As a result, NMFS proposed a management approach in the proposed rule that would allow for continued incidental catch of species under sideboard provisions that acknowledge historical bycatch needs, while ensuring that listed AFA catcher/processors would not participate in directed fisheries for other BSAI groundfish species at levels that would exceed their level of participation in such fisheries from 1995 through 1997. NMFS believes that this approach is consistent with the language and intent of the AFA.

Table 2-15 AFA catcher/processor vessel count, retained catch, and sideboard limit from 2015-2017 for each aggregated sideboard limit in the BSAI that is proposed for replacement with a prohibition on directed fishing

Sideboard Species	2017			2016			2015		
	Vessel count	Retained (mt)	Sideboard limit (mt)	Vessel count	Retained (mt)	Sideboard limit (mt)	Vessel count	Retained (mt)	Sideboard limit (mt)
Sablefish trawl	14	23	9	14	10	8	4	0	9
Rock sole	13	2,668	1,556	12	1,508	1,887	13	1,578	2,288
Greenland turbot	11	5	27	12	10	17	12	24	16
Arrowtooth flounder	12	38	24	12	97	24	12	309	37
Kamchatka flounder	12	8	9	12	38	9	11	64	11
Alaska Plaice	12	948	11	11	528	12	11	560	16
Other flatfish	13	39	123	14	57	123	14	16	178
Flathead sole	13	488	466	14	844	675	14	1,436	780
Atka mackerel	1	*	5,776	1	*	3,520	1	*	3,622
Pacific ocean perch	14	2,265	198	14	2,006	193	14	801	195
Northern Rockfish	13	63	30	12	118	27	13	62	19
Shortraker Rockfish	13	24	2	10	5	4	7	4	5
Rougheye Rockfish	12	6	4	10	1	6	5	0	7
Other rockfish	15	8	24	14	27	24	11	13	24
Skates	10	99	177	12	170	177	9	222	175
Sculpins	10	24	31	12	53	31	10	50	32
Sharks	7	3	1	8	3	1	3	1	1
Squids	9	299	25	10	126	28	12	71	7
Octopuses	6	2	3	8	7	3	10	1	3

Source: NMFS and AFA_CP_VES_Species(10-24-17).xls

*Denotes confidential data

Table 2-16 provides annual retained catch by the non-AFA CR Program catcher vessels of the GOA sideboard species that are proposed for replacement with a prohibition on directed fishing. Due to the difficulty in removing Pacific cod catch activity for Pacific cod sideboard exempt vessels from Table 2-16, the catch of these vessels is aggregated with the catch from sideboard restricted vessels, which explains why the retained catch for Pacific cod in Table 2-16 is greater than the sideboard limit. For other GOA sideboard species that are closed to directed fishing, the sideboard restricted vessels are retaining incidental catch of some of the species, but are not targeting these sideboard species. In some cases, the amounts of retained catch are greater than the sideboard limit. NMFS accommodates these overages through the incidental catch allowance rather than prohibiting the retention of these sideboard species by putting their target fisheries on prohibited species status.

Table 2-16 Non-AFA crab vessel count, retained catch, and sideboard limit from 2015-2017 for each aggregated sideboard species in the GOA that is proposed for replacement with a prohibition on directed fishing

Sideboard Species	2017			2016			2015		
	Vessel count	Retained (mt)	Sideboard limit (mt)	Vessel count	Retained (mt)	Sideboard limit (mt)	Vessel count	Retained (mt)	Sideboard limit (mt)
Pollock	7	8	742	9	5	951	7	3	623
Pacific cod	10	1,516	129	11	1,514	145	14	1,622	111
Sablefish	1	*	0	1	*	0	1	*	0
Shallow-water flatfish	1	*	80	1	*	80	2	*	80
Deep-water flatfish	0	0	1	0	0	1	1	*	1
Rexsole	1	*	0	0	0	0	1	*	0
Arrowtooth flounder	1	*	14	1	*	14	2	*	14
Flathead sole	1	*	8	2	*	8	1	*	8
Pacific ocean perch	1	*	0	1	*	0	1	*	0
Northern rockfish	1	*	0	1	*	0	2	*	1
Shortraker rockfish	7	8	1	10	6	1	8	8	1
Dusky rockfish	1	*	0	2	*	0	2	*	1
Rougheye rockfish	9	5	4	8	3	4	9	6	4
Demersal shelf rockfish	0	0	0	0	0	0	1	*	0
Thornyhead rockfish	8	13	11	9	18	11	11	23	10
Other rockfish	10	4	5	11	2	5	12	3	3
Atka mackerel	1	*	0	1	*	0	2	*	0
Big skate	1	*	65	0	0	65	1	*	49
Longnose skate	5	2	42	2	*	42	1	*	39
Other skates	1	*	34	1	*	34	2	*	39
Sculpins	5	1	98	3	0	98	3	0	98
Sharks	1	*	79	1	*	79	1	*	105
Squids	1	*	20	1	*	20	1	*	20
Octopuses	9	60	86	12	29	86	13	25	27

Source: NMFS

*Denotes confidential data

2.8.1 Option 1

Option 1 would remove the sideboard limit on AFA catcher/processors for Central AI Atka mackerel. The Central AI Atka mackerel sideboard for AFA catcher/processors is no longer constraining. The sideboard ratio for Central AI Atka mackerel is 11.5 percent; however, the percentage of the ITAC that goes to the BSAI trawl limited access sector is only 10 percent, so the sideboard is constrained to the allocation to the BSAI trawl limited access sector, which has been in place since implementation of Amendment 80 in 2008. Under Option 1, the fishery would continue to be managed under the allocation to the BSAI trawl limited access sector and NMFS would allow directed fishing for that Central AI Atka mackerel limit. However, if Option 1 were selected, NMFS would no longer publish a sideboard limit for this species category, thereby streamlining the annual harvest specifications, while not negatively impacting AFA catcher/processors that directed fish for Central AI Atka mackerel.

Table 2-17 shows that one AFA catcher/processor retained Central AI Atka mackerel in each of the last three years. In each case, the retained amount was less than the BSAI trawl limited access allocation. The table also demonstrates that the trawl limited access allocation for Central AI Atka mackerel is less than the sideboard limit, thereby constraining the AFA catcher/processors to the trawl limited access allocation.

Table 2-17 AFA catcher/processor vessel count, retained catch, aggregated sideboard limit, and aggregated trawl limited access allocation for Central AI Atka mackerel from 2015-2017

Sideboard Species	2017				2016				2015			
	Vessel count	Retained (mt)	Sideboard limit (mt)	Trawl limited access (mt)	Vessel count	Retained (mt)	Sideboard limit (mt)	Trawl limited access (mt)	Vessel count	Retained (mt)	Sideboard limit (mt)	Trawl limited access (mt)
Central AI Atka mackerel	1	*	3,544	1,600	1	*	1,644	1,421	1	*	1,746	1,511

Source: NMFS and AFA_CP_VES_Species(10-24-17).xls

*Denotes confidential data

2.9 Number and Description of Directly Regulated Small Entities

This section provides estimates of the number of harvesting vessels that are considered small entities. These estimates may overstate the number of small entities (and conversely, understate the number of large entities). The Regulatory Flexibility Act (RFA) requires consideration of affiliations between entities to assess if an entity is small. The estimates do not account all affiliations between entities. There is not a strict one-to-one correlation between vessels and entities; many persons and firms are known to have ownership interests in more than one vessel, and many of these vessels with different ownership, are otherwise affiliated with each other. For example, vessels in the AFA catcher vessel sectors are categorized as “large entities” for the purpose of the RFA under the principles of affiliation, due to their being part of the AFA pollock cooperatives. However, vessels that have other types of affiliation, (i.e., ownership of multiple vessel or affiliation with processors), not tracked in available data, may be misclassified as a small entity.

The entities directly regulated by this action are those entities that are restricted by AFA and CR Program harvesting sideboard limits in the BSAI and GOA. The thresholds applied to determine if an entity or group of entities are “small” under the RFA depend on the industry classification for the entity or entities. Businesses classified as primarily engaged in commercial fishing are considered small entities if they have combined annual gross receipts not in excess of \$11.0 million for all affiliated operations worldwide (81 FR 4469; January 26, 2016). There are 93 active AFA catcher vessels that are restricted by sideboard limits in BSAI and GOA, 17 active catcher/processors that are restricted by sideboard limits in the BSAI, and 95 CR Program active catcher vessels that are restricted by sideboard limits in GOA. These vessels were members of an AFA cooperative for Bering Sea pollock or a Bering Sea Crab Cooperative. The remaining 18 vessels were not part of a cooperative and are considered small entities.

2.10 Summation of the Alternatives with Respect to Net Benefit to the Nation

Overall, this action is likely to have limited effect on net benefits to the Nation. This alternative would remove sideboard limits for the all the species listed in Table 2-1, Table 2-2, Table 2-3, and Table 2-4 and prohibit directed fishing for those AFA and crab vessels restricted by those sideboards. In large part, the action would streamline the annual harvest specifications, simplify annual programming changes to NMFS’s groundfish catch accounting system, and reduce the annual costs of publishing the annual harvest specifications in the Federal Register, while incurring no negative impacts to AFA and crab sideboard limited vessels for the foreseeable future.

3 Magnuson-Stevens Act and FMP Considerations

3.1 Magnuson-Stevens Act National Standards

Below are the 10 National Standards as contained in the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), and a brief discussion of how each alternative is consistent with the National Standards, where applicable. In recommending a preferred alternative, the Council must consider how to balance the national standards.

National Standard 1 — Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

Nothing in the proposed alternatives would undermine the current management system that prevents overfishing.

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

The analysis draws on the best scientific information that is available, concerning sideboard fisheries by AFA and CR Program vessels for BSAI and GOA groundfish fisheries. The most up-to-date information that is available has been provided by the managers of these fisheries.

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.

Nothing in the proposed alternative would change the manner in which individual stocks are managed as a unit throughout their range, and interrelated stocks are managed as a unit or in close coordination. The proposed alternative does not modify the determination of individual stocks or interrelated stocks nor how groundfish stocks are assessed in the BSAI or GOA.

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 United States 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.

The proposed alternatives would treat all participants the same, regardless of their residence. The proposed change would be implemented without discrimination among participants. The action would not contribute to an entity acquiring an excessive share of privileges.

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.

The proposed action would have the overall effect of streamline the annual harvest specifications, and reduce the annual costs of publishing the annual harvest specifications, while incurring no negative impacts to AFA and crab sideboard limited vessels since these sideboard fisheries are closed annually through the harvest specification process.

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

None of the alternatives would be expected to affect changes in the availability of BSAI or GOA groundfish resources each year. The harvest would be managed to and limited by the TACs for each groundfish species, regardless of the proposed action considered.

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

This action does not duplicate any other measure and does not increase enforcement costs in the fisheries. Since this action would streamline the annual harvest specifications, it would reduce annual costs of publishing the annual harvest specifications.

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 by utilizing economic and social data that meet the requirements of National Standard 2, 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 would not have adverse effects on communities or affect community sustainability.

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 action would have no effect on bycatch beyond what has already been considered in previous analyses.

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

The alternatives considered under this action do not affect safety of human life at sea.

3.2 Council's Ecosystem Vision Statement

In February 2014, the Council adopted, as Council policy, the following:

Ecosystem Approach for the North Pacific Fishery Management Council

Value Statement

The Gulf of Alaska, Bering Sea, and Aleutian Islands are some of the most biologically productive and unique marine ecosystems in the world, supporting globally significant populations of marine mammals, seabirds, fish, and shellfish. This region produces over half the nation's seafood and supports robust fishing communities, recreational fisheries, and a subsistence way of life. The Arctic ecosystem is a dynamic environment that is experiencing an unprecedented rate of loss of sea ice and other effects of climate change, resulting in elevated levels of risk and uncertainty. The North Pacific Fishery Management Council has an important stewardship responsibility for these resources, their productivity, and their sustainability for future generations.

Vision Statement

The Council envisions sustainable fisheries that provide benefits for harvesters, processors, recreational and subsistence users, and fishing communities, which (1) are maintained by healthy, productive, biodiverse, resilient marine ecosystems that support a range of services; (2) support robust populations of marine species at all trophic levels, including marine mammals and seabirds; and (3) are managed using a precautionary, transparent, and inclusive process that allows for analyses of tradeoffs, accounts for changing conditions, and mitigates threats.

Implementation Strategy

The Council intends that fishery management explicitly take into account environmental variability and uncertainty, changes and trends in climate and oceanographic conditions, fluctuations in productivity for managed species and associated ecosystem components, such as habitats and non-managed species, and relationships between marine species. Implementation will be responsive to changes in the ecosystem and our understanding of those dynamics, incorporate the best available science (including local and traditional knowledge), and engage scientists, managers, and the public.

The vision statement shall be given effect through all of the Council's work, including long-term planning initiatives, fishery management actions, and science planning to support ecosystem-based fishery management.

In considering this action, the Council is being consistent with its ecosystem approach policy. This proposed action would revise the federal regulations to prohibit directed fishing for those species (and future breakouts of a complex) with sideboard limits that are not large enough for support directed fishing by non-exempt AFA vessels in the BSAI and GOA and crab vessels in the CR Program in the GOA or for those species that are fully allocated to other programs (e.g., flathead sole, rock sole, Western Aleutian Islands Atka mackerel). NMFS would then no longer publish AFA and CR Program sideboard amounts for those species in the annual harvest specifications. In addition, the proposed action would remove the sideboard limit on AFA catcher/processors for Central AI Atka mackerel because the sideboard limit under the AFA (11.5%) is constrained by the allocation to the limited access sector that was established by the Amendment 80 Program (10%). This action directly supports the Council's intention to protect historical participants, mitigate the risk of a "race for fish," and help maintain consistently low rates of halibut PSC in the fishery.

4 Preparers and Persons Consulted

Preparers

Jon McCracken, NPFMC
Michael Fey, AKFIN
Obren Davis, NMFS
Keeley Kent, NMFS

Persons (*and Agencies*) Consulted

Mary Furuness, NMFS

5 References

Northern Economics, Inc. *American Fisheries Act Program Review*. Prepared for North Pacific Fishery Management Council. January 2017.

NPFMC. 2017. American Fisheries Act and Crab Rationalization Sideboard Limit. Discussion Paper. June 2017. North Pacific Fishery Management Council, 605 West 4th Ave., Anchorage, Alaska, 99501.

NPFMC. 2017. Ten-Year Program Review for the Crab Rationalization Management Program in the Bering Sea/ Aleutian Islands. January 2017. North Pacific Fishery Management Council, 605 West 4th Ave., Anchorage, Alaska, 99501.