

# Alaska Groundfish Harvest Specifications

## Final Regulatory Flexibility Analysis

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Abstract: This Final Regulatory Flexibility Analysis (FRFA) evaluates the impacts of alternative harvest strategies for the fisheries in the EEZ off of Alaska on small entities. This FRFA meets the requirements of the Regulatory Flexibility Act for an analysis of the impacts of the action on small entities.

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## Executive summary

This Final Regulatory Flexibility Analysis (FRFA) evaluates the impacts on small entities of alternative harvest strategies for the groundfish fisheries in the EEZ off of Alaska on small entities. This FRFA meets the statutory requirements of the Regulatory Flexibility Act (RFA) of 1980, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C. 601-612).

The action under consideration is adoption of a harvest strategy to govern the harvest of groundfish in the Bering Sea and Aleutian Islands (BSAI) and Gulf of Alaska (GOA) Management Areas. The preferred alternative is the status quo harvest strategy in which total allowable catches (TACs) fall within the range of acceptable biological catches (ABCs) recommended by the Council's Groundfish Plan Teams and TACs recommended by the North Pacific Fishery Management Council (Council). This action is taken in accordance with the Fishery Management Plans (FMPs) for the BSAI and GOA, recommended by the Council pursuant to the Magnuson-Stevens Act.

The proposed BSAI specifications were published in the Federal Register on December 15, 2006 (71 FR 75460). The proposed GOA specifications were published in the *Federal Register* on December 15, 2006 (71 FR 75437). An Initial Regulatory Flexibility Analysis (IRFA) was prepared for both sets of proposed specifications, and described in the classifications sections of the preambles to the rules. The public comment period ended on January 16, 2006, for both sets of specifications. No comments were received on the IRFA.

The directly regulated small entities include approximately 747 small catcher vessels, less than 17 small catcher-processors, and six Community Development Quota (CDQ) Groups.

Estimates of first wholesale gross revenues for the BSAI non-CDQ sector, the BSAI CDQ sector, and the GOA sector, were used as indices of the potential impacts of the alternative harvest strategies on small entities. Revenues were projected to decline from 2006 levels in 2007 and 2008 under the preferred alternative due to declines in ABCs for key species, but by relatively small amounts in the GOA.

The Coast Guard and Maritime Transportation Act of 2006 may reduce the amount of sablefish available for harvest as bycatch by trawlers, and as target catch or bycatch by fixed gear sablefish vessels. The amounts involved are expected to be relatively small, and may be under one percent of the annual first wholesale value of CDQ production.

The preferred alternative (Alternative 2) was compared to four other alternatives. These included Alternative 1, which would set TACs so as to generate fishing rates equal to the maximum permissible ABC (if the full TAC were harvested), unless the sum of TACs would exceed the regional optimum yield, in which case harvests would be limited to the optimum yield. Alternative 3 would set TACs to produce fishing rates equal to the most recent five year average of fishing rates. Alternative 4 would set TACs to equal the lower bound of the regional optimum yield range. Alternative 5 would set TACs equal to zero.

Alternatives 3, 4, and 5 produced smaller first wholesale revenues for each of the three groupings, than Alternative 2. Alternative 1 was the same as Alternative 2 in the BSAI (for both non-CDQ and CDQ groups). Alternative 1 appeared to generate higher values of the gross revenue index for fishing operations in the GOA than the preferred alternative. However, a large part of these

additional revenues appear to be due to larger TACs for flatfish that are unlikely to be caught because of halibut PSC constraints. Moreover, higher Alternative 1 TACs are associated with maximum permissible ABCs, while Alternative 2 TACs are associated with the ABCs that would be recommended to the Council by the Plan Teams and Scientific and Statistical Committee (SSC), and incorporates a fuller consideration of potential biological issues.

This action does not modify recordkeeping or reporting requirements.

# 1 Introduction

This Final Regulatory Flexibility Analysis (FRFA) evaluates the impacts of alternative harvest strategies for the fisheries in the EEZ off of Alaska on small entities.

This FRFA meets the statutory requirements of the Regulatory Flexibility Act (RFA) of 1980, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C. 601-612).

## 2 The purpose of an FRFA

The Regulatory Flexibility Act (RFA), first enacted in 1980, was designed to place the burden on the government to review all regulations to ensure that, while accomplishing their intended purposes, they do not unduly inhibit the ability of small entities to compete. The RFA recognizes that the size of a business, unit of government, or nonprofit organization frequently has a bearing on its ability to comply with a Federal regulation. Major goals of the RFA are: (1) to increase agency awareness and understanding of the impact of their regulations on small business, (2) to require that agencies communicate and explain their findings to the public, and (3) to encourage agencies to use flexibility and to provide regulatory relief to small entities. The RFA emphasizes predicting impacts on small entities as a group distinct from other entities and on the consideration of alternatives that may minimize the impacts while still achieving the stated objective of the action.

On March 29, 1996, President Clinton signed the Small Business Regulatory Enforcement Fairness Act. Among other things, the new law amended the RFA to allow judicial review of an agency's compliance with the RFA. The 1996 amendments also updated the requirements for a final regulatory flexibility analysis, including a description of the steps an agency must take to minimize the significant economic impact on small entities. Finally, the 1996 amendments expanded the authority of the Chief Counsel for Advocacy of the Small Business Administration (SBA) to file amicus briefs in court proceedings involving an agency's violation of the RFA.

In determining the scope, or 'universe', of the entities to be considered in a FRFA, NMFS generally includes only those entities that can reasonably be expected to be directly regulated by the proposed action. If the effects of the rule fall primarily on a distinct segment, or portion thereof, of the industry (e.g., user group, gear type, geographic area), that segment would be considered the universe for the purpose of this analysis. NMFS interprets the intent of the RFA to address negative economic impacts, not beneficial impacts, and thus such a focus exists in analyses that are designed to address RFA compliance.

Data on cost structure, affiliation, and operational procedures and strategies in the fishing sectors subject to the proposed regulatory action are insufficient, at present, to permit preparation of a "factual basis" upon which to certify that the preferred alternative does not have the potential to result in "significant adverse impacts on a substantial number of small entities" (as those terms are defined under RFA).

Because, based on all available information, it is not possible to 'certify' this outcome, should the proposed action be adopted, a formal FRFA has been prepared and is included in this package for Secretarial review.

### 3 What is required in a FRFA

Under 5 U.S.C., Section 604(a) of the RFA, each FRFA is required to contain:

- (1) a succinct statement of the need for, and objectives of, the rule;
- (2) a summary of the significant issues raised by the public comments in response to the initial regulatory flexibility analysis, a summary of the assessment of the agency of such issues, and a statement of any changes made in the proposed rule as a result of such comments;
- (3) a description of and an estimate of the number of small entities to which the rule will apply or an explanation of why no such estimate is available;
- (4) a description of the projected reporting, recordkeeping and other compliance requirements of the rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record; and
- (5) a description of the steps the agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.

### 4 What is a small entity?

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

Small businesses. Section 601(3) of the RFA defines a ‘small business’ as having the same meaning as ‘small business concern,’ which is defined under Section 3 of the Small Business Act. ‘Small business’ or ‘small business concern’ includes any firm that is independently owned and operated and which is not dominant in its field of operation. The SBA has further defined a “small business concern” as one “organized for profit, with a place of business located in the United States, and which operates primarily within the United States or which makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials or labor.... A (small) business concern may be in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the firm is a joint venture there can be no more than 49 percent participation by foreign business entities in the joint venture.”

The SBA has established size criteria for all major industry sectors in the United States, including fish harvesting and fish processing businesses. A business involved in fish harvesting is a small business if it is independently owned and operated and not dominant in its field of operation (including its affiliates) and if it has combined annual receipts not in excess of \$4.0 million, for all its affiliated operations worldwide. A seafood processor is a small business if it is independently owned and operated, not dominant in its field of operation, and employs 500 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. A business involved in both the harvesting and processing of seafood products is a



small business if it meets the \$4.0 million criterion for fish harvesting operations. Finally, a wholesale business servicing the fishing industry is a small business if it employs 100 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide.

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

Affiliation may be based on stock ownership when (1) A person is an affiliate of a concern if the person owns or controls, or has the power to control 50 percent or more of its voting stock, or a block of stock which affords control because it is large compared to other outstanding blocks of stock, or (2) If two or more persons each owns, controls or has the power to control less than 50 percent of the voting stock of a concern, with minority holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern.

Affiliation may be based on common management or joint venture arrangements. Affiliation arises where one or more officers, directors, or general partners controls the board of directors and/or the management of another concern. Parties to a joint venture also may be affiliates. A contractor and subcontractor are treated as joint venturers if the ostensible subcontractor will perform primary and vital requirements of a contract or if the prime contractor is unusually reliant upon the ostensible subcontractor. All requirements of the contract are considered in reviewing such relationship, including contract management, technical responsibilities, and the percentage of subcontracted work.

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

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

## 5 What is this action?

The proposed action is the choice of a harvest strategy for the federally managed groundfish fisheries in the Gulf of Alaska (GOA) and the Bering Sea and Aleutian Islands (BSAI) management areas. The alternative harvest strategies determine annual harvest specifications in compliance with Federal regulations, the Fishery Management Plans (FMPs) for the BSAI and GOA groundfish fisheries, and the Magnuson-Stevens Act. The U.S. Secretary of Commerce (Secretary) approves the harvest specifications based on the recommendations of the Council.

The harvest strategies are applied to the best available scientific information to determine the harvest specifications, which are the annual limits on the amount of each species of fish, or of each group of species, that may be taken. Harvest specifications include the total allowable catch (TAC), their seasonal apportionments and allocations, and prohibited species catch (PSC). Groundfish harvests are controlled by the enforcement of TAC and PSC limits, apportionments of those limits among seasons and areas, and allocations of the limits among fishing sectors.

TACs set upper limits on total (retained and discarded) harvest limits for a fishing year. TACs are set for each “target species” and “other species” category defined in the FMPs or harvest specifications. TAC seasonal apportionments and allocations are specified by regulations at 50 CFR part 679. While TAC amounts are reported in this FRFA to illustrate the implications of the Council’s preferred harvest strategy, given the best scientific information currently available, the TAC amounts are not the action analyzed. The action being analyzed is the alternative harvest strategies, or in other words, the principle for determining the TACs.

Prohibited species include halibut, herring, salmon, steelhead, king crab, and Tanner crab. A target fishery that has caught the seasonal (or annual) PSC limit apportioned to an area, is closed in that area for the remainder of the season (or year). PSC limits are specified in the FMP or regulations. The Council apportions PSC limits among seasons and allocates PSC limits among target fisheries, following criteria in the Federal regulations.

The Council’s Groundfish Plan Teams use stock assessments to calculate biomass, overfishing levels (OFL), and acceptable biological catches (ABC), for each target species or species group for specified management areas of the exclusive economic zone off Alaska. OFLs and ABCs are published with the harvest specifications, and provide the foundation for the Council and NMFS to develop the TACs. OFL and ABC amounts reflect fishery science, applied in light of the requirements of the FMPs, and are not part of this action.

Five alternative harvest strategies were considered by the Council. The preferred alternative, the status quo alternative (Alt. 2), is to set TACs that fall within the range of ABCs recommended by the Council’s Groundfish Plan Teams and TACs recommended by the Council. This is the method for determining TACs that has been used in the past. The Council is assumed to follow the TAC setting patterns it has used in recent years. The remaining four harvest strategy alternatives are described in Chapter 12 of this FRFA.

The TACs associated with the preferred harvest strategy are those adopted by the Council in December 2006. OFLs and ABCs for the species were based on recommendations prepared by the Council’s BSAI and GOA groundfish plan teams in November 2006, and reviewed and modified by the Council’s Scientific and Statistical Committee (SSC) in December. The Council based its TAC recommendations on those of its Advisory Panel (AP), which were consistent with the SSC’s OFL and ABC recommendations.

**Table 5-1 BSAI Alternative 2 (Preferred) OFL, ABC, and TAC recommendations for 2007-2008**

Species	Area	2006				2007			2008		
		OFL	ABC	TAC*	Catch**	OFL	ABC	TAC	OFL	ABC	TAC
Pollock	EBS	2,090,000	1,930,000	1,485,000	1,485,956	1,640,000	1,394,000	1,394,000	1,431,000	1,318,000	1,318,000
	Aleutian Islands	39,100	29,400	19,000	1,746	54,500	44,500	19,000	50,300	41,000	19,000
	Bogoslof District	50,600	5,500	10	1	48,000	5,220	10	48,000	5,220	10
Pacific cod	BSAI	230,000	194,000	189,768	187,444	207,000	176,000	170,720	154,000	131,000	127,070
Sablefish	BS	3,680	3,060	2,820	1,061	3,520	2,980	2,980	3,290	2,970	2,970
	AI	3,740	3,100	3,000	1,084	3,320	2,810	2,810	3,100	2,800	2,800
Yellowfin sole	BSAI	144,000	121,000	95,701	98,505	240,000	225,000	136,000	261,000	245,000	150,000
Greenland turbot	Total	14,200	2,740	2,740	1,956	15,600	2,440	2,440	16,000	2,490	2,490
	BS	n/a	1,890	1,890	1,436	n.a.	1,680	1,680	n.a.	1,720	1,720
	AI	n/a	850	850	520	n.a.	760	760	n.a.	770	770
Arrowtooth flounder	BSAI	166,000	136,000	13,000	12,931	193,000	158,000	20,000	208,000	171,000	30,000
Rock sole	BSAI	150,000	126,000	41,500	36,444	200,000	198,000	55,000	271,000	268,000	75,000
Flathead sole	BSAI	71,800	59,800	19,500	17,902	95,300	79,200	30,000	92,800	77,200	45,000
Alaska plaice	BSAI	237,000	188,000	8,000	17,295	241,000	190,000	25,000	252,000	199,000	60,000
Other flatfish	BSAI	24,200	18,100	3,500	3,490	28,500	21,400	10,000	28,500	21,400	21,400
Pacific ocean perch	BSAI	17,600	14,800	12,600	12,852	26,100	21,900	19,900	25,600	21,600	21,600
	BS	n/a	2,960	1,400	1,037	n.a.	4,160	2,160	n.a.	4,080	4,080
	AI total	n/a	11,840	11,200	11,815	n.a.	17,740	17,740	n.a.	17,520	17,520
	WAI	n/a	5,372	5,085	5,505	n.a.	7,720	7,720	n.a.	7,620	7,620
	CAI	n/a	3,212	3,035	3,241	n.a.	5,050	5,050	n.a.	5,000	5,000
	EAI	n/a	3,256	3,080	3,069	n.a.	4,970	4,970	n.a.	4,900	4,900
Northern rockfish	BSAI	10,100	8,530	4,500	3,825	9,750	8,190	8,190	9,700	8,150	8,150
Shortraker rockfish	BSAI	774	580	580	213	564	424	424	564	424	424
Rougheye rockfish	BSAI	299	224	224	205	269	202	202	269	202	202
Other rockfish	BSAI	1,870	1,400	1,050	578	1,330	999	999	1,330	999	999
	BS	n/a	810	460	156	n.a.	414	414	n.a.	414	414
	AI	n/a	590	590	422	n.a.	585	585	n.a.	585	585
Atka mackerel	Total	130,000	110,000	63,000	61,814	86,900	74,000	63,000	64,200	54,900	54,900
	WAI	n/a	41,360	15,500	14,625	n.a.	20,600	9,600	n.a.	15,300	15,300
	CAI	n/a	46,860	40,000	39,812	n.a.	29,600	29,600	n.a.	22,000	22,000
	EAI/BS	n/a	21,780	7,500	7,377	n.a.	23,800	23,800	n.a.	17,600	17,600
Squid	BSAI	2,620	1,970	1,275	1,416	2,620	1,970	1,970	2,620	1,970	1,970
Other species	BSAI	89,404	58,882	29,000	26,579	91,700	68,800	37,355	91,700	68,800	58,015
Total	BSAI	3,476,987	3,013,086	1,995,768	1,973,297	3,188,973	2,676,035	2,000,000	3,014,973	2,642,125	2,000,000

\* 2006 TACs based on 2006-2007 Specifications on AKR website as updated Sep 19, 2006. 2007 and 2008 OFLs, ABCs, and TACs are those adopted by the Council in December 2006.

\*\*Catch estimates are AKR CAS estimates as of November 18, and include CDQ.

**Table 5-2 GOA Alternative 2 (Preferred) OFL, ABC, and TAC recommendations for 2007-2008**

SPECIES	AREA	2006				2007			2008		
		OFL	ABC	TAC	Catch **	OFL	ABC	TAC	OFL	ABC	TAC
Pollock	W (61)		28,918	28,918	24,987		25,012	25,012		30,308	30,308
	C (62)		30,492	30,492	27,156		20,890	20,890		25,313	25,313
	C (63)		18,448	18,448	17,036		14,850	14,850		17,995	17,995
	WYAK		1,792	1,792	1,572		1,398	1,398		1,694	1,694
	<b>Subtotal</b>	110,100	79,650	79,650	70,751	87,220	62,150	62,150	105,490	75,310	75,310
	EYAK/SEO	8,209	6,157	6,157	0	8,209	6,157	6,157	8,209	6,157	6,157
	<b>Total</b>	118,309	85,807	85,807	70,751	95,429	68,307	68,307	113,699	81,467	81,467
Pacific cod	W		26,855	20,141	14,663		26,855	20,141		27,846	20,885
	C		37,873	28,405	21,547		37,873	28,405		39,270	29,453
	E		4,131	3,718	21		4,131	3,718		4,284	3,856
	<b>Total</b>	95,500	68,859	52,264	36,231	97,600	68,859	52,264	86,000	71,400	54,194
Sablefish	W		2,670	2,670	2,087		2,470	2,470		2,458	2,458
	C		6,370	6,370	5,522		6,190	6,190		6,159	6,159
	WYAK		2,280	2,280	1,654		2,280	2,280		2,269	2,269
	SEO		3,520	3,520	3,110		3,370	3,370		3,353	3,353
	<b>Total</b>	17,880	14,840	14,840	12,373	16,906	14,310	14,310	15,803	14,239	14,239
Deep water flatfish <sup>1</sup>	W		420	420	8		420	420		430	430
	C		4,139	4,139	364		4,163	4,163		4,296	4,296
	WYAK		2,661	2,661	12		2,677	2,677		2,763	2,763
	EYAK/SEO		1,445	1,445	11		1,447	1,447		1,494	1,494
	<b>Total</b>	11,008	8,665	8,665	395	10,431	8,707	8,707	11,412	8,983	8,983
Rex sole	W		1,159	1,159	352		1,147	1,147		1,122	1,122
	C		5,506	5,506	2,937		5,446	5,446		5,327	5,327
	WYAK		1,049	1,049	0		1,037	1,037		1,014	1,014
	EYAK/SEO		1,486	1,486	0		1,470	1,470		1,437	1,437
	<b>Total</b>	12,000	9,200	9,200	3,289	11,900	9,100	9,100	11,600	8,900	8,900
Shallow water flatfish <sup>2</sup>	W		24,720	4,500	239		24,720	4,500		24,720	4,500
	C		24,258	13,000	7,392		24,258	13,000		24,258	13,000
	WYAK		628	628	0		628	628		628	628
	EYAK/SEO		1,844	1,844	1		1,844	1,844		1,844	1,844
	<b>Total</b>	62,418	51,450	19,972	7,631	62,418	51,450	19,972	62,418	51,450	19,972

SPECIES		2006				2007			2008			
		OFL	ABC	TAC	Catch **	OFL	ABC	TAC	OFL	ABC	TAC	
Flathead sole	W		10,548	2,000	463		10,908	2,000		11,464	2,000	
	C		25,195	5,000	2,651		26,054	5,000		27,382	5,000	
	WYAK		2,022	2,022	1		2,091	2,091		2,198	2,198	
	EYAK/SEO		55	55	0		57	57		60	60	
	<b>Total</b>		47,003	37,820	9,077	3,115	48,658	39,110	9,148	51,146	41,104	9,258
Arrowtooth flounder	W		20,154	8,000	2,040		20,852	8,000		21,164	8,000	
	C		134,906	25,000	25,444		139,582	30,000		141,673	30,000	
	WYAK		15,954	2,500	25		16,507	2,500		16,754	2,500	
	EYAK/SEO		6,830	2,500	87		7,067	2,500		7,172	2,500	
	<b>Total</b>		207,678	177,844	38,000	27,596	214,828	184,008	43,000	218,020	186,763	43,000
Other slope rockfish <sup>3</sup>	W		577	577	241		577	577		577	577	
	C		386	386	510		386	386		386	386	
	WYAK		317	317	96		319	319		319	319	
	EYAK/SEO		2,872	200	18		2,872	200		2,872	200	
	<b>Total</b>		5,394	4,152	1,480	865	5,394	4,154	1,482	5,394	4,154	1,482
Northern rockfish <sup>3</sup>	W		1,483	1,483	972		1,439	1,439		1,383	1,383	
	C		3,608	3,608	4,034		3,499	3,499		3,365	3,365	
	E		0	0	0		0	0		0	0	
	<b>Total</b>		7,673	5,091	5,091	5,006	5,890	4,938	4,938	5,660	4,748	4,748
	Pacific Ocean perch	W		4,931	4,155	4,051		4,976	4,244		5,030	4,291
C			8,806	7,418	7,418		8,922	7,612		9,019	7,694	7,694
WYAK			1,101	1,101	1,258		1,140	1,140		1,153	1,153	
SEO			1,587	1,587	0		3,260	1,640		3,296	1,659	1,659
E(subtotal)			3,190	2,688	2,688	1,258	3,260	2,780		3,296	2,812	2,812
<b>Total</b>			16,927	14,261	14,261	13,597	17,158	14,636	14,636	17,345	14,797	14,797
Shortraker rockfish	W		153	153	90		153	153		153	153	
	C		353	353	291		353	353		353	353	
	E		337	337	250		337	337		337	337	
	<b>Total</b>		1,124	843	843	631	1,124	843	843	1,124	843	843
	Rougheye rockfish	W		136	136	58		136	136		137	137
C			608	608	130		611	611		614	614	
E			239	239	145		241	241		242	242	
<b>Total</b>			1,180	983	983	333	1,148	988	988	1,197	993	993

SPECIES		2006				2007			2008		
		OFL	ABC	TAC	Catch **	OFL	ABC	TAC	OFL	ABC	TAC
Pelagic shelf rockfish	W		1,438	1,438	557		1,466	1,466		1,752	1,752
	C		3,262	3,262	1,772		3,325	3,325		3,973	3,973
	WYAK		301	301	173		307	307		366	366
	EYAK/SEO		435	435	1		444	444		531	531
	<b>Total</b>		6,662	5,436	5,436	2,503	6,458	5,542	5,542	8,186	6,622
Demersal rockfish	<b>SEO</b>	650	410	410		650	410	410	650	410	410
Thornyhead rockfish	W		513	513	195		513	513		513	513
	C		989	989	385		989	989		989	989
	E		707	707			707	707		707	707
	<b>Total</b>		2,945	2,209	2,209	876	2,945	2,209	2,209	2,945	2,209
Atka mackerel	<b>Total</b>	6,200	4,700	1,500	143	6,200	4,700	1,500	6,200	4,700	1,500
Big skate	W		695	695	69		695	695		695	695
	C		2,250	2,250	1,155		2,250	2,250		2,250	2,250
	E		599	599	246		599	599		599	599
	<b>Total</b>		4,726	3,544	3,544	1,470	4,726	3,544	3,544	4,726	3,544
Longnose skate	W		65	65	41		65	65		65	65
	C		1,969	1,969	689		1,969	1,969		1,969	1,969
	E		861	861	140		861	861		861	861
	<b>Total</b>		3,860	2,895	2,895	870	3,860	2,895	2,895	3,860	2,895
Other skates	GW	2,156	1,617	1,617	964	2,156	1,617	1,617	2,156	1,617	1,617
Other species	GW	NA	NA	13,942	3,607	NA	NA	4,500	NA	NA	4,500
<b>TOTAL</b>		631,293	501,366	292,776	192,995	615,879	490,327	269,912	629,541	511,838	286,173

\*\*Catch is 2006 catch projected in April 2006, and used to calculate the 2007 OFLs and ABCs.

1/ Deep water flatfish includes Dover sole, Greenland turbot and deepsea sole.

2/ "Shallow water flatfish" includes rock sole, yellowfin sole, butter sole, starry flounder, English sole, Alaska plaice, and sand sole.

3/ The EGOA ABC of 2 mt for northern rockfish has been included in the WYAK ABC for other slope rockfish.

\* Indicates rollover from previous year (no age-structured projection data available).

4/ The ABC for sablefish has been reduced by 5% in the SEO and added to the WYK to allow for 5% of the EGOA TAC to be made available for trawl incidental catch.

**NOTE:**

ABCs and TACs are rounded to nearest mt. 2007 and 2008 OFLs, ABCs, and TACs are those recommended by the Council in December 2006.

GW means Gulfwide.

Catch data source: NMFS Catch Accounting System with catch through November 18, 2006.

## 6 Reason for considering the proposed action

The purpose of the harvest strategy, and the TACs adopted pursuant to it, is to provide for orderly and controlled commercial fishing for groundfish (including CDQ fishing), promote sustainable incomes to the fishing, fish processing, and support industries; support sustainable fishing communities, and provide sustainable flows of fish products to consumers. The harvest strategy balances groundfish harvest in the fishing year with ecosystem needs (such as target and non-target fish stocks, marine mammals, seabirds, and habitat).

A harvest strategy is needed for the management of the groundfish fisheries and the conservation of marine resources, as required by the Magnuson-Stevens Act and as described in the management policy, goals, and objectives in the FMPs. The harvest strategy must comply with the Magnuson-Stevens Act and other relevant laws, the groundfish FMPs, and applicable Federal regulations. The scope of this action is, therefore, constrained by the requirements of the Magnuson-Stevens Act, FMPs, and Federal regulations.

The harvest strategy must meet the Magnuson-Stevens Act's ten national standards for fisheries conservation and management. Perhaps the most influential of these is National Standard 1, which states "conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield (OY) from each fishery for the United States fishing industry" (16 U.S.C. 1851).

The harvest strategy must comply with provisions of the groundfish FMPs. The FMPs contain management objectives to guide fishery management decision-making. These objectives were embodied in the FMPs by Amendments 81 and 74, respectively (69 FR 31091, June 2, 2004, approved August 26, 2004). The environmental impacts of managing fisheries to meet these objectives were evaluated in the Alaska Groundfish Fisheries Programmatic Supplemental EIS (PSEIS) (NMFS 2004). The FMPs impose procedures for setting the harvest specifications. Of particular importance are the definitions of areas and stocks (Section 3.1), procedures for determination of harvest levels (Section 3.2), rules governing time and area restrictions (Section 3.5), and rules governing catch restrictions (Section 3.6).

The Federal regulations at 50 CFR part 679 provide specific constraints for the harvest specifications by establishing management measures that create the framework for the TAC apportionments and allocations. Specifically, the Federal regulations establish the general limitations, bycatch management, closures, seasons, gear limitations, and inseason adjustments.

## 7 Objectives of, and legal basis for, the proposed action

The objective of this action is to adopt a groundfish harvest strategy, consistent with law, that addresses the environmental and social-economic concerns described under the reasons for taking this action.

Under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act; 16 USC 1801, et seq.), the United States has exclusive fishery management authority over all marine fishery resources found within the exclusive economic zone (EEZ), which extends between 3 and 200 nautical miles from the baseline used to measure the territorial sea.

The management of these marine resources is vested in the Secretary and in the Regional Councils. In the Alaska Region, the Council has the responsibility for preparing FMPs for the marine fisheries that require conservation and management, and for submitting their 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 groundfish fisheries in the EEZ off Alaska are managed under the FMP for Groundfish of the GOA and the FMP for Groundfish of the BSAI. Actions taken to amend FMPs or implement other regulations governing these fisheries must meet the requirements of Federal laws and regulations.

## 8 Public Comments

The proposed BSAI specifications were published in the Federal Register on December 15, 2006 (71 FR 75460). The proposed GOA specifications were published in the *Federal Register* on December 15, 2006 (71 FR 75437).

An Initial Regulatory Flexibility Analysis (IRFA) was prepared for both sets of proposed specifications, and described in the classifications sections of the preambles to the rules. The public comment period ended on January 16, 2006, for both sets of specifications. No comments were received on the IRFA.

## 9 Number and description of small entities affected by the action

The entities directly regulated by this action are those that harvest groundfish in the EEZ of the BSAI and/or GOA and in parallel fisheries within State of Alaska waters.

These directly regulated entities include the groundfish catcher vessels and groundfish catcher/processor vessels active in these areas. In the BSAI, direct allocations of groundfish are made to certain organizations, including the CDQ groups, the American Fisheries Act (AFA) catcher-processor and inshore processor sectors, and the Aleut Corporation. These entities are therefore also considered to be directly regulated.

Business firms, non-profit entities, and governments are the appropriate entities for consideration in a regulatory flexibility analysis. Following the practice used in other analyses in the Alaska Region, fishing vessels have been used as a proxy for business firms. This is a practical response to the relative lack of information currently available on the ownership of multiple vessels by individual firms. This approach leads to overestimates of the numbers of firms, since several vessels may be owned by a single firm, and to an overestimate of the relative proportion of small firms, since more of the smaller vessels might have been treated as large if multiple ownership was addressed, while no large entities would be moved to the small category.

Fishing vessels, both catcher vessels and catcher/processors, are considered small, for RFA purposes, if their annual gross receipts, from all their economic activities combined, as well as those of any and all their affiliates anywhere in the world, (including fishing in Federally managed non-groundfish fisheries, and in Alaska managed fisheries), are less than or equal to \$4.0 million in a year. Further, fishing vessels were considered to be large if they were affiliated



with an AFA fishing cooperative in 2005. The members of these cooperatives had revenues that exceeded the \$4.0 million threshold. Vessels affiliated with cooperatives have retained their separate identities for the purposes of counting numbers of entities; that is, 10 vessels affiliated with an AFA cooperative are treated as 10 large entities, not as one large entity.

Tables 8-1 to 8-4 below summarize information on catcher vessel and catcher processor gross revenues for vessels grossing more and vessels grossing less than \$4 million. Tables show the counts of vessels falling into each category, by area and gear type, and the average gross revenues for these different classifications of vessels. These tables do not take account of AFA affiliations.

**Table 8-1. Number of groundfish vessels that caught or caught and processed more than \$4.0 million ex-vessel value or product value of groundfish and other species by area, vessel type and gear, 1999-2005.**

		Gulf of Alaska			Bering Sea and Aleutians			All Alaska		
		Catcher Vessels	Catcher/ Process	All Vessels	Catcher Vessels	Catcher/ Process	All Vessels	Catcher Vessels	Catcher/ Process	All Vessels
1999	All gear	0	24	24	1	50	51	1	50	51
	Hook & line	0	8	8	0	16	16	0	16	16
	Pot	0	1	1	0	2	2	0	2	2
	Trawl	0	15	15	1	35	36	1	35	36
2000	All gear	0	25	25	3	52	55	3	52	55
	Hook & line	0	10	10	0	22	22	0	22	22
	Pot	0	0	0	0	2	2	0	2	2
	Trawl	0	15	15	3	32	35	3	32	35
2001	All gear	0	18	18	6	46	52	6	46	52
	Hook & line	0	4	4	0	13	13	0	13	13
	Trawl	0	14	14	6	33	39	6	33	39
2002	All gear	0	17	17	8	43	51	8	43	51
	Hook & line	0	4	4	0	8	8	0	8	8
	Trawl	0	13	13	8	35	43	8	35	43
2003	All gear	0	29	29	5	58	63	5	58	63
	Hook & line	0	11	11	0	21	21	0	21	21
	Trawl	0	18	18	5	37	42	5	37	42
2004	All gear	0	24	24	5	58	63	5	58	63
	Hook & line	0	11	11	0	21	21	0	21	21
	Pot	0	0	0	0	1	1	0	1	1
	Trawl	0	13	13	5	37	42	5	37	42
2005	All gear	1	24	25	9	66	75	9	66	75
	Hook & line	0	11	11	0	28	28	0	28	28
	Pot	0	0	0	0	2	2	0	2	2
	Trawl	1	13	14	9	37	46	9	37	46

Note: Includes only vessels that fished part of federal TACs.

Source: CFEC fish tickets, weekly processor reports, NMFS permits, Commercial Operators Annual Report (COAR), ADFG intent-to-operate listings. National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

**Table 8-2. Number of groundfish vessels that caught or caught and processed less than \$4.0 million ex-vessel value or product value of groundfish and other species by area, vessel type and gear, 1999-2005.**

		Gulf of Alaska			Bering Sea and Aleutians			All Alaska		
		Catcher Vessels	Catcher/ Process	All Vessels	Catcher Vessels	Catcher/ Process	All Vessels	Catcher Vessels	Catcher/ Process	All Vessels
1999	All gear	1,000	32	1,032	282	38	320	1,113	40	1,153
	Hook & line	716	20	736	69	25	94	738	27	765
	Pot	234	10	244	95	12	107	286	12	298
	Trawl	163	3	166	125	5	130	209	5	214
2000	All gear	1,007	19	1,026	298	35	333	1,172	38	1,210
	Hook & line	733	11	744	81	21	102	762	22	784
	Pot	258	5	263	115	9	124	328	11	339
	Trawl	125	3	128	112	6	118	202	7	209
2001	All gear	861	21	882	284	44	328	1,022	45	1,067
	Hook & line	658	15	673	92	32	124	690	32	722
	Pot	160	4	164	78	7	85	218	9	227
	Trawl	119	4	123	118	6	124	195	7	202
2002	All gear	795	25	820	258	43	301	929	44	973
	Hook & line	628	18	646	80	34	114	644	34	678
	Pot	130	4	134	63	5	68	173	6	179
	Trawl	109	3	112	119	4	123	187	4	191
2003	All gear	795	18	813	267	25	292	938	28	966
	Hook & line	651	14	665	74	19	93	673	21	694
	Pot	134	1	135	84	3	87	194	3	197
	Trawl	90	3	93	116	3	119	158	4	162
2004	All gear	785	12	797	248	24	272	920	25	945
	Hook & line	621	8	629	63	19	82	644	20	664
	Pot	151	1	152	82	3	85	203	3	206
	Trawl	78	3	81	111	3	114	147	3	150
2005	All gear	724	11	735	223	15	238	845	17	862
	Hook & line	566	7	573	64	12	76	584	13	597
	Pot	147	1	148	69	1	70	196	1	197
	Trawl	77	3	80	99	2	101	140	3	143

Note: Includes only vessels that fished part of federal TACs.

Source: CFEC fish tickets, weekly processor reports, NMFS permits, Commercial Operators Annual Report (COAR), ADFG intent-to-operate listings. National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

**Table 8-3. Average revenue of groundfish vessels that caught or caught and processed more than \$4.0 million ex-vessel value or product value of groundfish and other species, by area, vessel type, and gear, 1999-2005. (\$ millions)**

		Gulf of Alaska		Bering Sea & Aleutians			All Alaska		
		Catcher/ Process	All Vessels	Catcher Vessels	Catcher/ Process	All Vessels	Catcher Vessels	Catcher/ Process	All Vessels
1999	All gear	5.98	5.98	-	10.98	10.98	-	10.98	10.98
	Hook & line	5.28	5.28	-	5.04	5.04	-	5.04	5.04
	Trawl	6.36	6.36	-	13.51	13.51	-	13.51	13.51
2000	All gear	6.92	6.92	-	11.29	11.29	-	11.29	11.29
	Hook & line	5.18	5.18	-	5.35	5.35	-	5.35	5.35
	Trawl	8.08	8.08	-	15.17	15.17	-	15.17	15.17
2001	All gear	8.43	8.43	5.03	15.53	14.32	5.03	15.53	14.32
	Hook & line	5.63	5.63	-	5.17	5.17	-	5.17	5.17
	Trawl	9.23	9.23	5.03	19.61	17.37	5.03	19.61	17.37
2002	All gear	8.08	8.08	5.17	15.06	13.51	5.17	15.06	13.51
	Hook & line	4.99	4.99	-	4.78	4.78	-	4.78	4.78
	Trawl	9.03	9.03	5.17	17.40	15.13	5.17	17.40	15.13
2003	All gear	7.13	7.13	4.65	12.96	12.30	4.65	12.96	12.30
	Hook & line	4.86	4.86	-	4.83	4.83	-	4.83	4.83
	Trawl	8.52	8.52	4.65	17.58	16.04	4.65	17.58	16.04
2004	All gear	7.91	7.91	5.71	14.36	13.67	5.71	14.36	13.67
	Hook & line	4.86	4.86	-	4.80	4.80	-	4.80	4.80
	Trawl	10.48	10.48	5.71	19.79	18.11	5.71	19.79	18.11
2005	All gear	9.87	9.87	5.94	15.23	14.10	5.94	15.23	14.10
	Hook & line	5.71	5.71	-	5.33	5.33	-	5.33	5.33
	Trawl	13.39	13.39	5.94	22.71	19.43	5.94	22.71	19.43

Notes: Includes only vessels that fished part of federal TACs. Categories with fewer than four vessels are not reported. Averages are obtained by adding the total revenues, across all areas and gear types, of all the vessels in the category, and dividing that sum by the number of vessels in the category.

Source: CFEC fish tickets, weekly processor reports, NMFS permits, commercial operators annual report (COAR), ADFG intent-to-operate listings. National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

**Table 8-4. Average revenue of groundfish vessels that caught or caught and processed less than \$4.0 million ex-vessel value or product value of groundfish and other species, by area, vessel type and gear, 1999-2005. (\$ millions)**

		Gulf of Alaska			Bering Sea & Aleutians			All Alaska		
		Catcher Vessels	Catcher/ Process	All Vessels	Catcher Vessels	Catcher/ Process	All Vessels	Catcher Vessels	Catcher/ Process	All Vessels
1999	All gear	.19	1.89	.23	.55	1.93	.72	.20	1.84	.26
	Hook & line	.08	2.19	.14	.18	2.27	.74	.08	2.10	.15
	Pot	.17	1.23	.21	.15	1.38	.29	.16	1.38	.21
	Trawl	.74	-	.74	1.07	2.00	1.10	.76	2.00	.79
2000	All gear	.15	1.62	.17	.62	1.76	.74	.23	1.68	.28
	Hook & line	.10	1.89	.12	.22	2.00	.58	.10	1.92	.15
	Pot	.16	1.03	.18	.15	.49	.18	.16	.62	.18
	Trawl	.56	-	.56	1.37	2.58	1.43	.92	2.58	.96
2001	All gear	.13	2.21	.18	.56	2.03	.76	.22	2.03	.30
	Hook & line	.09	2.40	.14	.15	2.27	.70	.08	2.27	.18
	Pot	.12	1.82	.16	.13	.78	.18	.12	1.13	.16
	Trawl	.47	1.94	.52	1.16	1.84	1.19	.82	1.90	.86
2002	All gear	.14	2.20	.19	.64	2.33	.88	.24	2.28	.33
	Hook & line	.09	2.60	.16	.18	2.52	.88	.09	2.52	.21
	Pot	.15	.38	.16	.18	.62	.21	.14	.52	.15
	Trawl	.44	-	.44	1.18	2.90	1.24	.83	2.90	.88
2003	All gear	.16	2.36	.20	.65	2.76	.79	.26	2.53	.31
	Hook & line	.11	2.36	.16	.23	2.76	.74	.11	2.53	.18
	Pot	.16	-	.16	.23	-	.23	.17	-	.17
	Trawl	.59	-	.59	1.20	-	1.20	.97	-	.97
2004	All gear	.17	2.62	.19	.73	2.72	.87	.28	2.63	.33
	Hook & line	.11	2.62	.14	.19	2.72	.78	.11	2.63	.18
	Pot	.17	-	.17	.21	-	.21	.17	-	.17
	Trawl	.73	-	.73	1.39	-	1.39	1.17	-	1.17
2005	All gear	.19	2.33	.22	.84	2.68	.93	.32	2.54	.35
	Hook & line	.12	2.33	.15	.22	2.68	.61	.12	2.54	.18
	Pot	.19	-	.19	.27	-	.27	.20	-	.20
	Trawl	.83	-	.83	1.60	-	1.60	1.30	-	1.30

Notes: Includes only vessels that fished part of federal TACs. Categories with fewer than four vessels are not reported. Averages are obtained by adding the total revenues, across all areas and gear types, of all the vessels in the category, and dividing that sum by the number of vessels in the category.

Source: CFEC fish tickets, weekly processor reports, NMFS permits, commercial operators annual report (COAR), ADFG intent-to-operate listings. National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 8-2 shows that, in 2005, there were 845 individual catcher vessels, and 17 individual catcher-processors, with revenues less than or equal to \$4 million. These estimates do not take account of AFA affiliations among BSAI pollock vessels. In 2005, 98 catcher vessels were affiliated with AFA catcher vessel cooperatives. Adjusting the count of catcher vessels to treat these as large, reduces the number of small catcher vessels to 747. Table 8-2 indicates that 17 catcher processors grossed less than \$4 million. Some of these 17 vessels operated in BSAI AFA fisheries in 2004. Vessels that did so would be considered large entities because of their participation in AFA CP pollock cooperative. Thus the count of small entities is approximately 747 catcher vessels, and less than 17 catcher-processors.

Through the Community Development Quota (CDQ) program, the North Pacific Fishery Management Council and NMFS allocate a portion of the BSAI groundfish TACs, and prohibited species halibut and crab PSC limits, to 65 eligible Western Alaska communities. These communities work through six non-profit CDQ Groups, and are required to use the proceeds from the CDQ allocations to start or support activities that will result in ongoing, regionally based, commercial fishery or related businesses. Because they are nonprofit entities, the CDQ groups are considered small for RFA purposes.

The count of 2005 AFA cooperatives was obtained from the NMFS Alaska Region Restricted Access Management Division web site: [http://www.fakr.noaa.gov/ram/05afa\\_ic.htm](http://www.fakr.noaa.gov/ram/05afa_ic.htm). (accessed January 6, 2007). The count includes seven inshore cooperatives, the mothership cooperative, and the catcher processor cooperative. All AFA cooperatives are large entities, on the basis of the combined gross revenues of their affiliated members.

The Aleut Corporation is an Alaska Native Corporation that receives an allocation of pollock in the Aleutian Islands (AI). The Aleut Corporation is a holding company and evaluated according to the SBA criteria at 13 CFR 121.201, using a \$6 million gross annual receipts threshold for "Offices of Other Holding Companies." Aleut Corporation revenues are believed to exceed this threshold, and the Aleut Corporation is considered to be a large entity. This follows the analysis in the RFA certification for BSAI FMP Amendment 82. (NMFS, 2004d, page 413).

## 10 Adverse economic impacts on directly regulated small entities

Gross revenues have been estimated for production under the preferred alternative for non-CDQ operations in the BSAI, for CDQ operations in the BSAI, and for operations in the GOA. Gross revenues have been estimated at the first wholesale level. These first wholesale gross revenues are used to here to provide an index of the impacts of the action on small entities between 2006, and 2007 and 2008. Similar gross revenue estimates have also been prepared for each alternative, and they are used here as an index of the relative impact of the different alternatives on small entities. More details on the specifications and the gross revenue calculations may be found in Chapters 2 and 12, and Appendix F, of the Groundfish Specifications EIS (NMFS, 2007).

Gross revenue, under each alternative, has been estimated separately for the fisheries harvesting (a) the BSAI TAC and unspecified reserves, (b) the BSAI CDQ reserve, and (c) the GOA TACs. Revenue is projected for each alternative, separately, for 2007 and 2008, and estimated for the TACs adopted by the Council in the years 2004, 2005, and 2006. The gross revenue impacts of the alternatives are defined with respect to the change between the alternative and the year 2006 estimates.

The CDQ gross revenue estimates are estimates of first wholesale gross revenues associated with the products produced from the CDQ harvest allocations. The actual revenues accruing to the CDQ groups will be less than this. A comparison of CDQ royalties received from fishing operations for the opportunity to harvest CDQ allocations shows that royalties during the period from 2003 to 2005 ranged between 32 percent and 37 percent of estimates of product value. Royalty percentages were highest for pollock, lower for Pacific cod, and least for these other species (Whitney, pers. comm.).<sup>1</sup>

To create a consistent index, the 2004 through 2006 revenue estimates were generated through the same estimation process used to produce the projections for the 2007 and 2008 alternatives - in other words, the 2004 through 2006 gross revenues estimates were produced, treating the ABCs and TACs for those years in the same manner as the ABCs and TACs for the alternatives. All gross revenues were estimated using average 2005 prices.

The method used to prepare these first wholesale gross revenue estimates is described in detail in Appendix F of the Groundfish Specifications EIS (NMFS, 2007). The model makes a large number of simplifying assumptions.<sup>2</sup> These results must be treated as a rough approximation, with a large margin of error. As noted above, the 2004 through 2006 revenue estimates are not historical revenue estimates, but estimates developed from the model, based on the TAC levels in those years, using the same assumptions that were used for the 2007 and 2008 estimates. The model results shown here are used as an index of the relative impacts of the alternatives on revenues. The use of model estimates back to 2004 provides consistency through the estimates, supporting their use in this role as an index of movements in revenues.

Overall results are summarized for Alternative 2 separately for the BSAI, the BSAI CDQ program, and the GOA, in Tables 9-1 through 9-3. Alternatives 1 through 5 are compared in Figure 12-1. Table 9-4 provides a comparison of overall model results with first wholesale gross revenue estimates for 2005 summarized from the 2006 Economic SAFE.<sup>3</sup>

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<sup>1</sup> Steve Whitney. Sustainable Fisheries Division, Alaska Region, National Marine Fisheries Service, Juneau, Alaska. October 17, 2006.

<sup>2</sup> An important assumption is that the prices received for fish products do not vary as the level of output varies. Economists refer to this as perfectly elastic demand. To the extent that prices vary inversely with output levels, and that demand is less elastic, changes in gross revenues associated with the alternatives would be reduced. A discussion of consumer impacts, later in this section, addresses available information on demand elasticity for these species.

<sup>3</sup> A comparison of model and 2005 historical revenue estimates may be found at the end of this section. In general, the species-specific gross revenue estimates from the model appear to be close to those from the SAFE. The model estimates for flatfish are much smaller, however, than SAFE estimates. The model will never exactly reproduce SAFE estimates for a year, because it uses five year average catch and retention rates, where the SAFE will use those appropriate for a specific year.

**Table 9-1 Estimated and projected BSAI combined gross revenue from 2004-2008 in millions of 2005 U.S. dollars**

BSAI Combined	Estimated Earned Revenue			Projected Revenue	
	2004	2005	2006	2007 Alt. 2	2008 Alt. 2
Pollock	1,148.5	1,151.9	1,156.9	1,086.9	1,095.9
Sablefish	10.0	8.2	9.4	9.4	10.4
Pacific cod	275.4	263.2	240.4	218.1	166.0
Arrowtooth	2.7	2.7	2.9	4.5	6.8
Flathead sole	11.9	12.2	12.2	18.8	28.3
Rock sole	21.5	21.7	21.7	28.8	39.3
Turbot	4.6	4.6	3.6	3.2	3.3
Yellowfin	44.7	47.1	49.7	70.6	79.8
Flats (other)	3.4	3.0	3.0	9.1	21.3
Rockfish	11.4	11.5	11.2	17.5	18.6
Atka	29.6	29.6	29.6	29.6	25.8
Other	2.0	2.1	2.1	2.8	4.2
Column total	1,565.7	1,557.9	1,542.9	1,499.4	1,499.8

**Table 9-2 Estimated and projected BSAI CDQ combined gross revenue for 2004-2008 in millions of 2005 U.S. dollars**

BSAI CDQ Combined	Estimated Earned Revenue			Projected Revenue	
	2004	2005	2006	2007 Alt. 2	2008 Alt. 2
Pollock	126.8	127.2	127.8	120.0	113.6
Sablefish	1.4	1.2	1.4	1.3	1.3
Pacific cod	20.7	19.8	18.1	16.4	12.2
Arrowtooth	0.1	0.1	0.1	0.2	0.3
Flathead sole	0.4	0.4	0.4	0.6	0.8
Rock sole	0.4	0.5	0.5	0.6	0.8
Turbot	0.1	0.1	0.1	0.1	0.1
Yellowfin	2.9	3.1	3.2	4.6	5.1
Flats (other)	0.1	0.1	0.1	0.2	0.4
Rockfish	0.7	0.7	0.7	1.1	1.2
Atka	2.4	2.4	2.4	2.4	2.1
Other	0.2	0.2	0.2	0.2	0.3
Column total	156.2	155.6	154.7	147.6	138.2



**Table 9-3 Estimated and projected GOA combined gross revenue for 2004-2008 in millions of 2005 U.S. dollars**

GOA	Estimated Earned Revenue			Projected Revenue	
	2004	2005	2006	2007 Alt. 2	2008 Alt. 2
<b>Combined</b>					
Pollock	23.8	30.6	28.6	22.8	27.2
Sablefish	74.7	72.0	67.0	64.6	64.3
Pacific cod	51.3	47.4	55.8	55.8	57.9
Arrowtooth	7.0	7.0	7.0	8.0	8.0
Flathead sole	2.9	2.8	2.5	2.5	2.5
Rex sole	7.5	7.5	5.4	5.4	5.3
Flat (deep)	0.2	0.2	0.3	0.3	0.3
Flat (shallow)	4.4	4.4	4.3	4.3	4.3
Rockfish	24.1	24.9	27.4	27.6	28.6
Atka	0.1	0.1	0.3	0.3	0.3
Skates	0.5	0.6	0.6	0.6	0.6
Other	0.3	0.3	0.3	0.1	0.1
<b>Column total</b>	<b>196.9</b>	<b>197.9</b>	<b>199.4</b>	<b>192.2</b>	<b>199.2</b>

Notes: The skate fishery was in transition during this period. A target fishery emerged in 2003, and skates were moved from the “other fisheries” to the “target” category by FMP amendment in 2004.

Tables 9-1 to 9-3 show that under the preferred alternative, the indices of overall first wholesale revenues accruing to the three sectors evaluated are expected to decline, although the decline is small in the GOA, and is essentially eliminated in the GOA in 2008. The larger revenue declines in the BSAI are driven by decreases in TACs, particularly for pollock and Pacific cod, which are only partially offset by revenues from flatfish TAC increases. The pollock and Pacific cod TAC declines are themselves driven by declining ABCs. The ABCs reflect scientific analysis of stock status, evaluated by stock assessment authors, the Council’s groundfish plan teams, and its SSC, in light of the provisions of the Council’s FMPs. These declines in overall revenues may be expected to be associated with adverse impacts on the directly regulated small entities active in the fisheries. Chapter 12 of this FRFA compares the impacts under Alternative 2 with the impacts associated with other alternatives evaluated by the Council. The BSAI revenue declines are proportionally smaller for the CDQ sector because of its relatively heavy reliance on pollock for revenue.

As a means of comparing model output with tabulated values, Table 9-4 contrasts 2005 aggregated model output (BSAI, BSAI CDQ, and GOA combined) and 2005 revenue estimates, by species group, from Table 25 of the 2006 Economic SAFE document. In total, the model estimates about three percent less total gross revenue than reported in the 2006 Economic SAFE. A species by species comparison shows that the model estimates approximately two percent more pollock revenue than recorded in the Economic SAFE for 2006. The model also estimates greater revenue for Pacific cod and rockfish than recorded in the Economic SAFE. In contrast, the model estimates less revenue than recorded in the Economic SAFE for sablefish, flatfish, and Atka mackerel.

These differences may arise from estimates of revenue being based on a five year average of catch and retention rates versus an actual accounting of value for 2005. Thus, it is difficult to make exact comparisons, as the methods used to derive these two sets of numbers are inherently different and serve different purposes. The SAFE document is an overall accounting of catch and

value from reported data, while the model uses catch and retention data by sector to attempt to predict sector specific revenue associated with future TAC specifications.

**Table 9-4 Comparison of 2005 model and Economic SAFE total first wholesale revenue estimates for the North Pacific groundfish fisheries (\$ millions)**

Species Group	Model	Economic SAFE	Difference	Percent Difference
Pollock	1,310	1,284	26	2%
Sablefish	81	102	-20	-25%
Pacific cod	330	321	9	3%
Flatfish	121	148	-27	-23%
Rockfish	37	34	3	8%
Atka Mackerel	32	37	-4	-14%
<b>Total</b>	<b>1,911</b>	<b>1,963</b>	<b>-51</b>	<b>-3%</b>

Sources: NMFS-AKR Gross Revenue Model and 2006 Economic SAFE, table 25, page 53.

A description of the approach used to prepare the gross revenue estimates may be found in Appendix F of the EIS (NMFS, 2007).

#### Allocations to the CDQ Program

A provision in the Coast Guard and Maritime Transportation Act of 2006 affects certain allocations of species currently made to the CDQ program. This section explains how the Act has this effect, and discusses the potential size of the impact on the CDQ groups.

On July 11, 2006, the President signed the Coast Guard and Maritime Transportation Act of 2006 (Coast Guard Act). Section 416(a) of this Act revises section 305(i)(1) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) by replacing all of the existing language in this section with new language. Part of this new language, Section 305(i)(1)(B)(i), addresses allocations to the western Alaska Community Development Quota (CDQ) Program. It requires that “the annual percentage of the total allowable catch, guideline harvest level, or other annual catch limit allocated to the program in each directed fishery of the Bering Sea and Aleutian Islands shall be the percentage approved by the Secretary, or established by Federal law, as of March 1, 2006, for the program.

Prior to these amendments, section 305(i)(1)(A) of the MSA stated that “a percentage of the total allowable catch of any Bering Sea fishery is allocated to the program.” Since 1998, NMFS has allocated to the CDQ Program a percentage of each groundfish TAC category, except squid, to the CDQ Program. Ten percent of the BSAI pollock TACs are allocated to the CDQ Program as directed fishing allowances, as required by the American Fisheries Act (AFA). Twenty percent of the fixed gear allocation of the sablefish TAC is allocated to the CDQ Program under BSAI Amendment 15, which was implemented in 1995. Seven and one-half percent of the remaining groundfish TAC categories are allocated to the CDQ Program under BSAI Amendment 39, which was implemented in 1998. The allocation of squid to the CDQ Program was discontinued in 2001 under Amendment 66 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (66 *FR* 13672; March 7, 2001).

As amended by the Coast Guard Act, the MSA now requires that “the annual percentage of the total allowable catch, guideline harvest level, or other annual catch limit allocated to the program *in each directed fishery of the Bering Sea and Aleutian Islands* shall be the percentage approved by the Secretary, or established by Federal law, as of March 1, 2006. NMFS interprets this change in the MSA to require allocations to the CDQ Program only for those total allowable catch (TAC) categories that had a directed fishery in 2006, when the MSA amendments were enacted.

The groundfish TAC categories that did not have a directed fishery in the BSAI in 2006 are: Pollock in the Bogoslof district, sablefish from the trawl allocation of the BS and AI sablefish TACs, Bering Sea Pacific ocean perch, northern rockfish, shortraker rockfish, rougheye rockfish, other rockfish, and other species.

CDQ allocations for 2007 have already been established through the 2006/2007 final harvest specifications (71 FR 10894; March 3, 2006). The species or species groups and percentage allocations allocated to the CDQ Program in 2006 also were allocated to the CDQ Program in 2007 under this final specifications. In October 2006, the Council recommended its preferred harvest strategy, and TACs consistent with that strategy. The 2007/2008 groundfish specifications will be prepared to incorporate these recommendations. These harvest specifications will make any changes in CDQ allocations necessary for the 2007 fisheries and will implement specifications for the 2008 groundfish fisheries.

Catch in the CDQ fisheries of species in TAC categories that are not allocated to the CDQ Program would be managed under the regulations and fishery status that applies to the TAC category in all BSAI groundfish fisheries. Retention would either be limited to maximum retainable amounts or all catch of the species would be required to be discarded. Notices of closures to directed fishing and retention requirements for these species would apply equally to the CDQ and non-CDQ sectors. These species would be managed with “soft caps,” and catch of these species in the CDQ fisheries would not constrain the catch of other CDQ species unless catch by all sectors approached overfishing.

Bogoslof pollock are not currently allocated to the CDQ fisheries. The impact of no longer allocating northern rockfish, shortraker rockfish, rougheye rockfish, other rockfish, and other species to the CDQ Program is expected to be minimal. Although 7.5 percent of the TAC of these species has been allocated to the CDQ Program since 1998, these allocations have been managed at the “CDQ reserve level” since 2003. Management at the CDQ reserve level means that the allocations of these species to the CDQ Program are not further allocated among the CDQ groups. No directed fishing for these species is allowed by any vessel fishing on behalf of a CDQ group. Retention up to the maximum retainable amounts is allowed until the CDQ allocation for each species is reached, then further retention is prohibited. These management measures are very similar to how the catch of these species will be managed when no allocations of these TACs will be made to the CDQ Program.

The main difference in the management measures that have applied to these species since 2003 and those management measures that will apply once these species are no longer allocated to the CDQ Program is the point at which retention of the species changes from some retention allowed to no retention allowed. Under the current management approach, retention is prohibited once the CDQ allocation amount is reached. In the future, the retention status of these species in the CDQ fisheries will be based on the total catch of the species by all vessels fishing in the BSAI groundfish fisheries relative to the TAC for each species. This change in management could provide the CDQ groups with a longer period of time during the year in which some catch of

these species may be retained. However, NMFS does not expect this change in management approach to significantly affect the amount of these species that will be retained in the CDQ or non-CDQ fisheries or the date at which a TAC is reached and further retention is prohibited.

The one impact the Coast Guard Act may have on the CDQ groups that may be more than minimal is the impact on the allocation of trawl sablefish. The CDQ Program currently receives allocations of sablefish from four TAC categories: (1) the fixed gear allocation of sablefish in the Bering Sea, (2) the fixed gear allocation of sablefish in the Aleutian Islands, (3) the trawl allocation of sablefish in the Bering Sea, and (4) the trawl allocation of sablefish in the Aleutian Islands. The fixed gear sablefish CDQ allocations may only be harvested by vessels using hook-and-line or pot gear. However, allocations of sablefish to the CDQ Program from the trawl allocation of sablefish may be harvested with any gear.

All of the catch of sablefish in the CDQ fisheries by vessels using trawl gear is subtracted from the sablefish CDQ allocations that originate from the trawl allocation of the sablefish TAC. All harvest of sablefish CDQ using fixed gear is subtracted from the fixed gear sablefish CDQ allocations until these allocations are reached. Further catch of sablefish CDQ with fixed gear is then subtracted from the sablefish CDQ allocations that come from the trawl allocation of the sablefish TAC. Therefore, the allocations of sablefish to the CDQ Program from the trawl allocation of the sablefish TAC provide the CDQ groups with a quota that supports both their trawl catch of sablefish and supplements the quota available to be fished with hook-and-line or pot gear. Removing the allocation of 7.5% of the trawl allocation of sablefish in the Bering Sea and Aleutians Islands removes these two sablefish quota categories from the CDQ Program.

On one hand, removing the allocation of sablefish from the trawl allocation of the TAC removes two quotas that are managed with hard caps in the CDQ fisheries and have the potential to constrain all of the other groundfish CDQ fisheries, if these sablefish quotas are reached before the CDQ groups fully harvest their other allocations. On the other hand, however, removing these allocations of sablefish (1) removes the opportunity for the CDQ groups to harvest this sablefish beyond the maximum retainable amounts in their trawl fisheries, and (2) removes the ability of the CDQ groups to supplement their fixed gear sablefish CDQ allocations with these two additional sablefish allocations.

The CDQ groups have not completely harvested their trawl allocations of sablefish in recent years. In 2004, trawl fishermen harvested 19 percent of their allocation in the BS and none of their allocation in the AI; in 2005 they harvested one percent of their allocation in the EBS, and 34 percent in the AI; so far in 2006 (October 7) they have harvested 16 percent in the BS, and 1% in the AI. The key sources of sablefish bycatch in the trawl fisheries were directed fisheries for Atka mackerel and arrowtooth flounder. In 2004, fixed gear fishermen harvested none of the trawl allocation in either the EBS or the AI; in 2005, they harvested about 11 percent of the trawl allocation in the EBS, and none in the AI, and in 2006 (as of October 7) they had harvested about two percent in the EBS, and about three percent in the AI. (All proportions were calculated from harvest and quota information on the Alaska Region website, URL: <http://www.fakr.noaa.gov/sustainablefisheries/default.htm> ).

Under the Coast Guard Act, trawl fishermen would be limited to retention of the sablefish bycatch permitted under NMFS Retainable Percentages, as published in Table 11 to 50 CFR 679. The retainable bycatch rate of sablefish in the arrowtooth fishery in the BSAI is zero percent, and the rate in the Atka mackerel fishery is one percent. Rates are calculated as a percentage of the

target species<sup>4</sup>. Harvests in excess of the rates must be discarded by the operations. Fixed gear CDQ fishermen would be restricted to the harvest of the fixed gear quotas, and would not be able to harvest fish against a “trawl” allocation.

An estimate of the potential loss to CDQ groups associated with the provisions of the Coast Guard bill may be obtained by multiplying the metric tonnage of fish taken each year under the “trawl quota,” by the dollar value per metric ton of retained weight for 2004 (used in the gross revenues model). The dollar value per retained metric ton for catcher processors was \$4,619 per retained metric ton (NMFS, 2006, page F-3). Using this approach, the 20 metric tons retained in 2004 would have had a value of about \$92,000, the 27.4 tons retained in 2005 would have had a value of \$127,000, and the 21.1 tons retained in 2006 (as of October 7) would have had a value of \$97,000. These estimates may be high, because trawl fishermen would be able to retain some harvest in some fisheries under MRA rules, and because price primarily reflects the value of higher valued products made from fixed gear landings. A comparison of the highest of these revenue losses with estimates of the overall first wholesale value of the of the CDQ allocation in 2008 (the lowest revenue year of the two years for which revenue projections are made; \$138.2 million from Table 9-2) shows that the revenue impact would be under one percent of the estimated CDQ processed product value. NMFS does not currently have the ability to identify the royalties associated with the sablefish trawl allocations, and compare these to the overall revenues accruing to the CDQ groups.

## 11 Recordkeeping and reporting requirements

This action does not modify recordkeeping or reporting requirements.

## 12 Description of significant alternatives

An IRFA should include “A description of any significant alternatives to the proposed rule which accomplish the stated objectives (*of the proposed action*), consistent with applicable statutes, and which would minimize any significant economic impact of the proposed rule on small entities.” The five alternatives under consideration in this action are:

**Alternative 1:** Set TACs to produce harvest levels equal to the maximum permissible ABCs, unless the sum of the TACs is constrained by the Optimum Yield (OY) established in the FMPs.

**Alternative 2: (Status Quo; Preferred)** Set TACs that fall within the range of ABCs recommended by the Council’s Groundfish Plan Teams and TACs recommended by the Council.

**Alternative 3:** For stocks with a high level of scientific information, set TACs to produce harvest levels equal to the most recent five-year average actual fishing mortality rates. For stocks with insufficient scientific information, set TACs equal to the most recent five-year average actual catch.

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<sup>4</sup> Specifically, the rates are calculated as a percentage of the weight of retained catch onboard the vessel of species open for directed fishing.

**Alternative 4:** Set low and spatially explicit TACs for rockfish species. Reduce all other TACs by a proportion that does not vary across species, so that the sum of all TACs, including rockfish TACs, is equal to the lower bound of the OY for a given area (1,400,000 mt in the BSAI and 116,000 mt in the GOA). This alternative sets TACs to sum to the lower OY range.

**Alternative 5: (No Action)** Set TACs at zero. This is the no action alternative, but does not reflect the status quo.

The gross revenues model described earlier was used to make estimates of the first wholesale gross revenues associated with each of these alternatives. Figure 12-1 summarizes the gross revenue information by comparing 2007-2008 estimates of gross revenues with those for 2006. The model used to generate these gross revenues estimates is a simple one, and the gross revenues estimates are rough. As noted earlier, the gross revenue information is meant for use as an index of relative revenue impacts.

Predicting the portion of increased Alternative 1 TAC that may be caught is problematic. At present, annual halibut PSC is often a binding constraint on flatfish fisheries. In other words, an increase in flatfish TACs associated with Alternative 1 would not necessarily increase flatfish catch and gross revenues, unless industry is able to substantially reduce the rate at which it currently catches halibut. Thus, it is not likely that Alternative 1 flatfish revenue would increase significantly compared to Alternative 2 levels when PSC is taken into consideration. The flatfish PSC condition suggests that a conservative analysis might consider Alternative 2 revenue estimates for flatfish (i.e., those most similar to the present specifications) as proxies for what is more likely than the Alternative 1 revenue estimates. Alternative 1 flatfish revenues estimates should be interpreted as upper bound estimates, in the absence of binding PSC constraints.

**Figure 1** Model projections of the change in gross revenue from 2006 levels by alternative, sector, and region, for 2007 and 2008, in millions of dollars

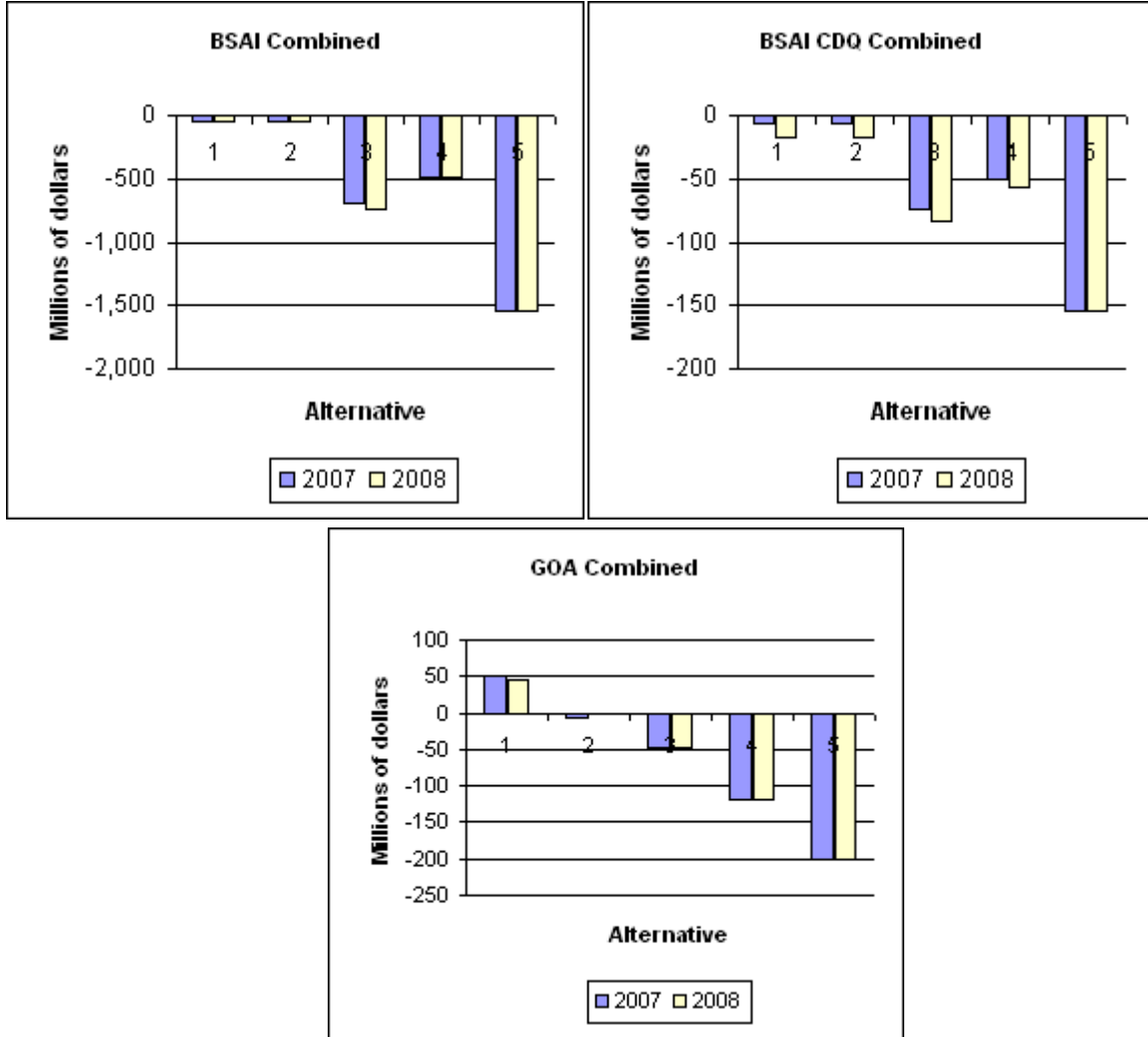


Figure 12-1 shows that Alternatives 3, 4, and 5, all produce lower gross revenues than Alternative 2. Using gross revenues as an index therefore, it appears that these alternatives would have greater adverse impacts on small entities than the preferred alternative.

In the BSAI, Alternative 1 TACs are equal to Alternative 2 TACs. This happens because, in the BSAI, Alternative 2 TACs are already set to equal the upper end of the optimum yield range. The Alternative 2 TACs therefore show how the Council would choose to set TACs under the conditions of Alternative 1 (ie. If the sum of maximum permissible ABCs exceeded the optimum yield).

Alternative 1 appeared to generate higher values of the gross revenue index fish fishing operations in the GOA than the preferred alternative. A large part of the larger Alternative 1 GOA revenue appears to be due to the assumption that the full Alternative 1 TAC would be harvested. Much of the larger revenue is due to increases in flatfish TACs. Fishermen are currently unable to fully harvest many existing flatfish TACs because of halibut PSC incidental catch constraints. Therefore a large part of the revenues associated with the Alternative 1 index are unlikely to occur. Moreover, Alternative 2 TACs are constrained by the ABCs the Plan Teams and SSC recommend to the Council on the basis of a full consideration of biological issues. These ABCs are often less than the Alternative 1 maximum permissible ABCs, reflecting biological and precautionary considerations beyond those incorporated into the formulas for determining maximum permissible ABC. Therefore, higher TACs, such as those for some species in the GOA under Alternative 1, may not be consistent with prudent biological management of the resource.

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