

INITIAL REVIEW

DRAFT

ENVIRONMENTAL ASSESSMENT/REGULATORY IMPACT REVIEW/
INITIAL REGULATORY FLEXIBILITY ANALYSIS

for a Proposed Amendment to the
Fishery Management Plan for Groundfish
of the GOA Management Area

FIXED GEAR RECENCY IN THE THE WESTERN AND CENTRAL GOA

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DEFINITIONS AND ASSUMPTIONS FOR THE GOA FIXED GEAR REGENCY FMP AMENDMENT ANALYSIS

The following list provides definitions for a list of selected words or phrases used in the analysis:

- An **LLP license** is held by a person, and not by a vessel. NOAA Fisheries requires license owners to assign a vessel to the license before it can be used in a fishery subject to the LLP. Licenses may be transferred to a different vessel or owner once per calendar year (Jan 1- Dec 31). The LLP license must be physically on board the vessel when it is engaged in activities authorized by the license.
- **Area Endorsements** – Each license carries one or more area endorsements authorizing entry into fisheries in those management areas (Bering Sea, Aleutian Islands, Western GOA, Central GOA, Southeast). For purposes of the LLP, the Central GOA area endorsement also allows vessels to fish in West Yakutat.
- **Gear Designation**- Each license carries a non-trawl and/or trawl gear designation which authorizes the license to fish using the designated gear type.
- **Landing** – For purposes of this analysis, a catcher vessel landing includes any LLP groundfish species landed during one calendar day. State waters and IFQ catch is not counted toward qualifying catch. Catcher vessel harvests are based upon ADFG Fish tickets. A catcher processor landing includes any groundfish landed during a one week interval, because catcher processor landings are based upon Blend and Catch Accounting data and are only specific to a week ending date.
- **MLOA designation** – Each license carries a maximum length overall (LOA) designation, limiting the length of the vessel that may use the license.
- **Non-severability** – The endorsements and designations on a license are non-severable and only transfer with the license.
- **Non-Trawl** – A license was assigned a non-trawl designation if fixed gear was used to harvest groundfish from a qualifying fishery during the period beginning January 1, 1988 through June 17, 1995 (§679(k)(3)(iv)(D)).
- **Operation-type designation** – Each license carries a designation for either catcher processor or catcher vessel operation. A catcher processor may choose to operate as a catcher vessel, delivering its catch shoreside or to a floating processor.
- **Trawl/non-trawl** – A license was assigned both a trawl and non-trawl gear designation if both gear types were used to harvest groundfish by the qualifying vessel during the period beginning January 1, 1988 through June 17, 1995 (§679(k)(3)(iv)(B)).
- **Trawl** – A license was assigned a trawl gear designation if trawl gear was used to harvest groundfish from by the qualifying vessel during the period beginning January 1, 1988 through June 17, 1995 (§679(k)(3)(iv)(C)).

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EXECUTIVE SUMMARY

This EA/RIR/IRFA examines the environmental, economic, and socioeconomic aspects of the proposed amendment to revise the groundfish License Limitation Program (LLP). The proposed action has two parts. First, the action would remove Western and Central GOA area endorsements from fixed gear LLP licenses that do not have recent catch history in the parallel or Federal waters groundfish fisheries. Second, the action would add Pacific cod endorsements to fixed gear licenses. Licenses would be required carry a Pacific cod endorsement, in addition to the appropriate area endorsement, to participate in the directed Pacific cod fisheries in the Western and Central GOA. The Council could choose to implement both parts of this action, or could add Pacific cod endorsements to fixed gear licenses without removing licenses from the fisheries. The action would result in an amendment to the GOA Fisheries Management Plan (FMP).

Competition among fixed gear participants in the Western and Central GOA groundfish fisheries has intensified in recent years, and long-term participants are concerned about the potential for latent fixed gear licenses to re-enter the fisheries. The proposed amendment would address this concern by extinguishing fixed gear licenses that do not have recent participation in the GOA groundfish fisheries. This action may enhance stability in the fisheries, reduce competition among fixed gear participants, and protect historic catch shares of participants. If latent licenses are not extinguished, future entry of latent effort into the Western and Central GOA groundfish fisheries could further intensify competition among fixed gear participants and erode catch shares of long-term participants.

To address these concerns, the Council adopted the following problem Statement in October 2007:

GOA Fixed Gear Recency Purpose and Need Statement

Western GOA and Central GOA groundfish fisheries are subject to intense competition, particularly in the A season, when fish are aggregated and of highest value. Competition among fixed gear participants in the Western GOA and Central GOA fisheries has increased for a variety of reasons, including increased market value of Pacific cod products and a declining ABC/TAC. The possible future entry of latent effort would have detrimental effects on LLP holders that have exhibited participation in, and dependence on, the fixed gear groundfish fisheries. Many fixed gear vessel owners have made significant investments, have long catch histories, and are dependent on WGOA and CGOA groundfish resources. These long-term participants need protection from those who have little or no recent history and who have the ability to increase their participation in the fisheries. The intent of the proposed amendment is to prevent latent fixed gear groundfish fishing capacity that has not been utilized in recent years, from future entry or re-entry into the fisheries. This requires prompt action to promote stability in the fixed gear sectors of the GOA groundfish fisheries, and is expected to be implemented concurrently with the division of GOA Pacific cod among sectors which is currently under consideration.

Alternatives, Components, and Options

There are two alternatives currently under consideration. **Alternative 1** (no action) would not make any changes to the current License Limitation Program. **Alternative 2** would remove area (Western GOA and/or Central GOA) endorsements from fixed gear LLPs unless the license meets a minimum catch or landings threshold in that management area. If a fixed gear license has only one area endorsement and does not meet the catch or landings threshold in that area, the entire license would be extinguished. If a license has multiple area endorsements and does not meet the landings threshold for a specific area, the license would be reissued with only the qualifying area endorsements. If a license has both trawl and

fixed gear designations and does not meet the landings threshold for an area, the license would lose eligibility to participate as a fixed gear vessel in that area, but would remain eligible to fish using trawl gear in that area, assuming the license qualified to retain that area endorsement under the recent trawl recency action. **Alternative 2** would also add Pacific cod endorsements to fixed gear licenses, which would limit entry into the directed Pacific cod fisheries in Federal waters in the GOA. Table E-1 reports the number of fixed gear licenses that are currently eligible to participate in the Federal groundfish fisheries in the Western and Central GOA.

Table E-1 GOA fixed gear LLP licenses by endorsement area, operation type, MLOA, and gear designation.

	Number of endorsements		Licenses that also have an endorsement (or designation) for:					
	All licenses	Licenses with MLOA <60 feet	Central GOA	Western GOA	Aleutian Islands	Bering Sea	Southeast Outside	Trawl
Central GOA CV	884	703	--	176	62	159	179	114
Central GOA CP	49	5	--	27	41	45	5	8
Western GOA CV	266	156	176	--	64	158	43	78
Western GOA CP	31	1	27	--	30	31	3	4

Source: NMFS RAM groundfish license file, October 2008.

Component 1 identifies the management areas subject to the proposed action, the Western GOA and Central GOA. Note that under the LLP program, the Central GOA area endorsement also authorizes vessels to fish in the West Yakutat management area. **Component 2** identifies the sectors subject to the proposed action. There are also options to exempt jig vessels from any LLP requirement, or to exempt jig vessels from being required to carry fixed gear Pacific cod endorsements to fish during the directed Pacific cod fisheries in Federal waters, if such endorsements are created. Finally, there is an option to exempt vessels that are both <60 ft and under a capacity limit to be determined by the Council. Sector definitions currently parallel those in the sector allocation motion. The Council could use the proposed sector divisions to establish different landings or catch (mt) thresholds for vessels based on the maximum length overall (MLOA) on the license.

- Hook-and-line CP
Option: Hook-and-line CP ≥ 125
Hook-and-line CP <125
- Hook-and-line CV
Option: Hook-and-line ≥ 60
Hook-and-line <60
- Pot CP
- Pot CV
Option: Pot CV ≥ 60
Pot CV <60
- Jig

Component 3 identifies the qualifying years for purposes of calculating catch history. There are 4 options for defining recent participation in the fisheries: 2000 to 2005, 2000 to 2006, 2002 to 2005, and 2002 to 2006. There is a suboption to also credit licenses with catch history during 2007 through June 4, 2008 in addition to one of the above qualifying periods.

- Option 1: 2000-2005
- Option 2: 2000-2006
- Option 3: 2002-2005
- Option 4: 2002-2006

Component 3, continued:

Option 5: Add the qualifying period January 1, 2007 through June 4, 2008 (this option would be selected in addition to one of the qualifying periods listed above in Options 1-4). If an LLP license qualifies only when this supplemental range of years is included, any area endorsements retained by licenses or Pacific cod endorsements granted to licenses under this option would be designated non-transferable. Endorsements retained by licenses or granted to licenses under this option will be extinguished upon transfer of the LLP license to another vessel or owner.

Component 4 identifies options for setting catch and landings thresholds. More than one of these options could be selected. Options 1 and 3 define the criteria licenses must meet to retain their area endorsements. Licenses are credited with all retained catch of groundfish from the Federal and parallel fisheries, excluding incidental catch of groundfish from the IFQ halibut and sablefish fisheries. Under these options, licenses that meet a landings threshold of 1, 3, or 5 landings or a catch threshold of 5, 10, 25, or 100 mt of groundfish in the Western or Central GOA would qualify to retain the respective area endorsement. Options 2 and 4 define the criteria licenses must meet to qualify for a Pacific cod endorsement. Under these options, licenses are only credited with retained catch from the directed Pacific cod fisheries in Federal and parallel waters. Licenses that meet a landings threshold of 1, 3, or 5 landings or a catch threshold of 5, 10, 25, 100 mt in the respective management area would receive a Pacific cod endorsement. The Council could select either Option 1 or 3 to determine which licenses qualify to retain area endorsements, and could also select either Option 2 or 4 to determine which licenses qualify for Pacific cod endorsements. **Component 4** options include:

Option 1 – All groundfish 1, 3, 5 landings

Option 2 – All directed Pacific Cod 1, 3, 5 landings (resulting in a Pcod endorsement)

Option 3 – All groundfish 5, 10, 25, 100 mt

Option 4 – All directed Pacific Cod 5, 10, 25, 100 mt (resulting in a Pcod endorsement)

Component 5 addresses issues related to vessels that have multiple LLPs, or ‘stacked’ licenses.

Option 1: Where there are multiple LLPs registered to a single vessel, also known as ‘stacking’ of LLPs, groundfish harvest history will be fully credited to all stacked licenses, each carrying its own qualifying endorsements and designations.

Option 2: Catch history could be divided among stacked licenses. License owner(s) may choose which license will be credited with landings so that one of the stacked licenses may qualify. In the absence of an agreement among license owner(s), catch history could be split evenly among stacked licenses.

Number of licenses meeting recency thresholds

Tables E-2, E-3, and E-4 report the number of fixed gear licenses that meet the various landings and catch thresholds based on 2 definitions of qualifying catch: (1) all retained catch of groundfish in the parallel and Federal fisheries, and (2) retained catch of directed Pacific cod in the parallel and Federal fisheries. Both catch definitions exclude IFQ and State waters landings. The upper portion of each table shows the number of licenses that would qualify to retain Western and Central GOA endorsements based on all qualified groundfish landings in the respective management area. The lower portion of each table shows the number of licenses that meet the catch and landings thresholds based on catch in the directed Pacific cod fisheries. This portion of each table indicates the number of licenses with each area endorsement that would potentially qualify for Pacific cod endorsements. The Council could choose to implement both parts of this action, or could add Pacific cod endorsements to fixed gear licenses without removing latent licenses from the fisheries.

Catcher vessel licenses

Table E-2 reports the number of fixed gear catcher vessel licenses that meet each landings and catch threshold. The number of licenses that would qualify to retain Western and Central GOA area endorsements depends on the catch definition, landings or catch threshold, and qualification period selected. There are currently 266 Western GOA fixed gear licenses, and 51 to 101 of these licenses meet the various landings and catch (mt) thresholds based on all groundfish landings during the qualifying periods in Options 1 through 4 and would retain Western GOA area endorsements. Under the second part of the action, 51 to 94 of these licenses would qualify for a Pacific cod endorsement. There are 884 Central GOA fixed gear licenses, and under Options 1 through 4, 98 to 296 licenses would retain Central GOA area endorsements, and 97 to 269 licenses would qualify for a Pacific cod endorsement. If landings during 2007 through June 4, 2008 are included (Option 5), approximately 10% to 15% more licenses meet the various catch and landings thresholds. Note that licenses qualifying under Option 5 will be non-transferable. Endorsements retained under this option will be extinguished upon transfer to another vessel or owner.

Table E-2 Number of fixed gear catcher vessel licenses that meet the landings and catch thresholds. The columns on the right-hand side of the table include landings from 2007-June 4, 2008.

Western GOA – 266 CV licenses

Fishery	Threshold	2007- June 4, 2008 plus the period:							
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	101	98	89	83	114	114	104	102
	3 landings	85	82	78	74	99	96	94	91
	5 landings	77	73	71	67	93	89	88	85
	5 mt	85	84	77	74	101	101	95	94
	10 mt	79	78	73	69	95	95	91	89
	25 mt	74	72	66	63	89	87	83	81
	100 mt	55	53	54	51	62	61	62	59
Directed Pacific cod	1 landing	94	92	83	79	107	107	97	96
	3 landings	83	81	76	73	95	93	90	88
	5 landings	74	71	68	64	87	85	82	80
	5 mt	85	84	77	74	101	101	95	94
	10 mt	79	78	73	69	94	94	90	88
	25 mt	74	72	66	63	88	86	82	80
	100 mt	55	53	54	51	62	61	62	59

Central GOA – 884 CV licenses

Fishery	Threshold	2007- June 4, 2008 plus the period:							
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	296	278	215	193	327	320	256	249
	3 landings	251	239	185	168	279	275	223	218
	5 landings	232	218	169	150	258	255	206	201
	5 mt	250	235	187	166	281	274	224	216
	10 mt	236	222	178	160	264	258	214	207
	25 mt	202	190	162	142	233	227	196	189
	100 mt	151	141	111	98	171	165	142	132
Directed Pacific cod	1 landing	269	252	198	176	297	292	234	229
	3 landings	240	226	179	160	266	262	215	210
	5 landings	219	206	164	144	246	242	200	195
	5 mt	237	223	180	161	267	261	216	209
	10 mt	223	211	171	154	250	245	205	199
	25 mt	190	180	154	137	220	217	188	183
	100 mt	151	141	110	97	169	161	139	128

Source: ADFG Fish Tickets and RAM LLP groundfish license file dated October 2008.

The number of licenses that meet each landings and catch threshold based on catch made while using a specific gear type is reported in Table E-3. It is important to note that the gear type columns are not mutually exclusive. Licenses may have qualified landings using more than one fixed gear type, and as a result, the number of licenses in the columns in Table E-3 may sum to more than the number of qualifying licenses in Table E-2. In the absence of specific fixed gear type endorsements (i.e., pot, hook-and-line, or jig endorsements), these licenses could continue to fish using any fixed gear type.

A number of catcher vessel licenses have fixed gear landings using more than one gear type. These licenses could potentially qualify for more than one gear-specific Pacific cod endorsement. Under Amendment 67, individual licenses were eligible to qualify for up to two gear-specific BSAI Pacific cod endorsements (pot and hook-and-line). Under the current landings and catch thresholds, the number of gear-specific Pacific cod endorsements that would be added to fixed gear catcher vessel licenses includes:

Central GOA

- 62 to 169 hook-and-line endorsements (up to 196 under Option 5)
- 35 to 111 pot endorsements (up to 120 under Option 5)
- 0 to 19 jig endorsements (up to 22 under Option 5)

Western GOA

- 0 to 8 hook-and-line endorsements (up to 13 under Option 5)
- 51 to 83 pot endorsements (up to 93 under Option 5)
- 0 to 9 jig endorsements (up to 9 under Option 5)

The Council could choose different catch or landings thresholds for different gear types and MLOAs to account for differences in catch history among licenses in each sector. There are additional tables in Chapter 3 of this document that report the number of licenses in each gear type and MLOA that meet the various criteria, and the number of additional licenses in each gear group and MLOA that qualify when landings during 2007 through June 4, 2008 are credited to licenses.

Table E-3 Number of fixed gear catcher vessel licenses qualifying under the various catch thresholds based on catch using a specific gear type. The lower table includes landings from 2007-June 4, 2008.

Western GOA licenses - 266 CV licenses

		Hook-and-line				Jig				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	13	11	10	8	13	12	13	12	85	83	74	70
	3 landings	4	3	4	3	7	7	7	7	79	76	71	67
	5 landings	2	2	1	1	5	5	5	5	73	70	67	63
	5 mt	6	5	5	4	6	6	6	6	78	77	69	66
	10 mt	3	*	3	*	3	3	3	3	75	75	68	65
	25 mt	0	0	0	0	*	*	*	*	71	69	63	60
	100 mt	0	0	0	0	0	0	0	0	55	53	54	51
Directed cod	1 landing	8	6	8	6	9	9	8	8	83	82	72	69
	3 landings	4	3	3	2	7	7	7	7	77	75	69	66
	5 landings	1	1	1	1	5	5	5	5	71	68	64	60
	5 mt	6	5	5	4	6	6	6	6	78	77	69	66
	10 mt	3	*	3	*	3	3	3	3	75	75	68	65
	25 mt	0	0	0	0	*	*	*	*	71	69	63	60
	100 mt	0	0	0	0	0	0	0	0	55	53	54	51

Western GOA licenses - 266 CV licenses

2007-June 4, 2008 plus the period below:

		Hook-and-line				Jig				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	18	18	15	15	13	12	13	12	97	96	87	85
	3 landings	8	7	8	7	7	7	7	7	90	88	84	82
	5 landings	6	6	5	5	5	5	5	5	85	82	80	77
	5 mt	12	12	11	11	6	6	6	6	88	88	81	80
	10 mt	10	10	10	10	3	3	3	3	86	86	81	79
	25 mt	6	6	6	6	*	*	*	*	81	79	75	73
	100 mt	0	0	0	0	0	0	0	0	62	61	62	59
Directed cod	1 landing	13	13	13	13	9	9	8	8	93	93	83	82
	3 landings	8	7	7	6	7	7	7	7	86	85	80	79
	5 landings	5	5	5	5	5	5	5	5	80	78	74	72
	5 mt	12	12	11	11	6	6	6	6	88	88	81	80
	10 mt	10	10	10	10	3	3	3	3	85	85	80	78
	25 mt	6	6	6	6	*	*	*	*	80	78	74	72
	100 mt	0	0	0	0	0	0	0	0	62	61	62	59

Source: ADFG Fish Tickets and RAM LLP groundfish license file dated October 2008. *Withheld for confidentiality.

Note: Gear type columns are not mutually exclusive, and the number of licenses in the columns in Table E-3 may sum to more than the number of qualifying licenses in Table E-2.

Central GOA licenses – 884 CV licenses

		Hook-and-line				Jig				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	192	179	139	124	45	42	30	26	113	106	79	69
	3 landings	158	148	115	104	19	14	11	7	102	98	70	62
	5 landings	144	134	103	92	12	9	8	5	93	89	66	57
	5 mt	160	147	119	104	7	5	6	4	103	99	72	64
	10 mt	146	135	111	100	4	3	4	3	99	95	69	61
	25 mt	121	112	101	90	*	0	*	0	84	81	62	53
	100 mt	85	80	70	64	0	0	0	0	66	61	42	35
Directed cod	1 landing	169	158	123	110	19	17	15	12	111	104	78	67
	3 landings	149	138	111	100	9	6	6	4	100	96	70	62
	5 landings	133	124	98	87	7	5	5	3	91	87	66	56
	5 mt	149	137	112	99	7	5	6	4	99	95	72	64
	10 mt	135	126	104	94	4	3	4	3	96	92	69	61
	25 mt	112	105	94	85	0	0	0	0	83	80	62	53
	100 mt	84	79	68	62	0	0	0	0	66	61	42	35

Central GOA licenses – 884 CV licenses

2007-June 4, 2008 plus the period below:

		Hook-and-line				Jig				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	220	213	172	165	51	50	36	35	125	123	95	92
	3 landings	182	178	143	139	23	21	16	14	109	108	83	81
	5 landings	164	161	127	124	16	15	12	11	101	100	79	77
	5 mt	187	179	148	140	10	8	9	7	110	109	82	80
	10 mt	171	165	139	133	4	3	4	3	106	105	80	78
	25 mt	143	140	123	120	*	0	*	0	92	91	74	71
	100 mt	96	95	84	83	0	0	0	0	75	69	59	50
Directed cod	1 landing	196	191	154	149	22	21	18	16	120	118	90	87
	3 landings	172	169	138	135	10	8	7	6	106	105	82	80
	5 landings	155	152	123	120	9	7	7	5	98	97	78	76
	5 mt	176	169	141	134	8	6	7	5	106	105	82	80
	10 mt	159	154	130	125	4	3	4	3	103	102	80	78
	25 mt	134	132	116	114	*	0	*	0	91	90	74	71
	100 mt	94	92	81	79	0	0	0	0	75	69	59	50

Source: ADFG Fish Tickets and RAM LLP groundfish license file dated October 2008. *Withheld for confidentiality.

Note: Gear type columns are not mutually exclusive, and the number of licenses in the columns in Table E-3 may sum to more than the number of qualifying licenses in Table E-2.

Table E-4 Number of fixed gear catcher processor licenses qualifying under various landings and catch thresholds. The lower table includes landings from 2007-June 4, 2008.

Western GOA – 31 CP licenses

		All Gear Types				Hook-and-line				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	23	20	21	17	20	17	18	14	5	5	3	3
	3 landings	20	18	18	14	16	14	15	11	5	5	3	3
	5 landings	19	17	16	13	15	13	13	10	3	3	3	3
	5 mt	20	18	18	14	17	15	15	11	5	5	3	3
	10 mt	20	18	18	14	17	15	15	11	5	5	3	3
	25 mt	19	18	17	14	16	15	14	11	5	5	3	3
	100 mt	*	*	*	*	15	14	14	11	*	*	*	*
Directed cod	1 landing	21	18	19	14	18	15	16	11	5	5	3	3
	3 landings	20	18	17	14	16	14	14	11	5	5	3	3
	5 landings	18	15	16	12	15	12	13	9	3	3	3	3
	5 mt	20	18	18	14	17	15	15	11	5	5	3	3
	10 mt	19	18	17	14	16	15	14	11	5	5	3	3
	25 mt	19	18	17	14	15	14	14	11	5	5	3	3
	100 mt	*	*	*	*	15	14	14	11	*	*	*	*

Western GOA – 31 CP licenses

2007-June 4, 2008 plus the period below:

		All Gear Types				Hook-and-line				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	23	20	22	19	20	17	18	15	5	5	4	4
	3 landings	22	19	20	17	18	15	17	14	5	5	3	3
	5 landings	20	19	18	17	16	15	15	14	4	4	3	3
	5 mt	21	19	20	18	18	16	16	14	5	5	4	4
	10 mt	21	19	20	18	18	16	16	14	5	5	4	4
	25 mt	20	19	19	18	17	16	15	14	5	5	4	4
	100 mt	18	17	*	*	15	14	14	13	4	4	*	*
Directed cod	1 landing	22	19	21	18	19	16	17	14	5	5	4	4
	3 landings	21	19	19	17	17	15	16	14	5	5	3	3
	5 landings	19	17	17	15	15	13	14	12	4	4	3	3
	5 mt	21	19	20	18	18	16	16	14	5	5	4	4
	10 mt	20	19	19	18	17	16	15	14	5	5	4	4
	25 mt	20	19	19	18	16	15	15	14	5	5	4	4
	100 mt	18	17	*	*	15	14	14	13	4	4	*	*

Source: Catch Accounting/Blend data and RAM LLP license file, October 2008. *Withheld for confidentiality.

Note: Gear type columns are not mutually exclusive, because some licenses have catch history using more than one gear type. The number of licenses in the gear columns may sum to more than the total number of licenses qualifying.

Central GOA – 49 CP licenses

		All Gear Types				Hook-and-line				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	24	21	22	17	21	18	19	15	4	3	3	2
	3 landings	15	11	14	8	13	9	12	8	3	2	2	0
	5 landings	14	9	13	6	12	7	11	6	3	2	2	0
	5 mt	18	14	15	*	15	11	12	8	4	3	3	*
	10 mt	15	*	*	8	13	9	12	8	3	*	*	0
	25 mt	14	*	*	6	12	7	11	6	3	*	*	0
	100 mt	*	*	*	5	7	5	7	5	*	*	*	0
Directed cod	1 landing	14	11	12	7	12	9	10	6	3	2	2	1
	3 landings	12	8	11	5	10	6	9	5	3	2	2	0
	5 landings	11	7	9	4	8	5	7	4	3	2	2	0
	5 mt	14	*	*	5	12	8	9	5	3	*	*	0
	10 mt	12	*	*	5	10	6	9	5	3	*	*	0
	25 mt	12	*	*	5	10	6	9	5	3	*	*	0
	100 mt	*	*	*	5	7	5	7	5	*	*	*	0

Central GOA – 49 CP licenses

2007-June 4, 2008 plus the period below:

		All Gear Types				Hook-and-line				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	29	27	27	23	26	23	24	20	4	4	3	3
	3 landings	21	19	20	17	18	15	17	14	4	4	3	3
	5 landings	18	15	17	13	15	11	14	10	4	4	3	3
	5 mt	24	22	21	18	21	18	18	15	4	4	3	3
	10 mt	22	20	21	18	19	16	18	15	4	4	3	3
	25 mt	21	19	20	17	18	15	17	14	4	4	3	3
	100 mt	15	13	14	12	11	9	11	9	4	4	3	3
Directed cod	1 landing	21	19	19	15	18	15	16	12	4	4	3	3
	3 landings	18	16	17	14	15	12	14	11	4	4	3	3
	5 landings	14	12	12	10	10	8	9	7	4	4	3	3
	5 mt	21	19	18	15	18	15	15	12	4	4	3	3
	10 mt	19	17	18	15	16	13	15	12	4	4	3	3
	25 mt	18	16	17	14	15	12	14	11	4	4	3	3
	100 mt	15	13	14	12	11	9	11	9	4	4	3	3

Source: Catch Accounting/Blend data and RAM LLP license file, October 2008. *Withheld for confidentiality.

Note: Gear type columns are not mutually exclusive, because some licenses have catch history using more than one gear type. The number of licenses in the gear columns may sum to more than the total number of licenses qualifying.

Table E-4 reports the number of CP licenses meeting the various catch thresholds. There are 31 Western GOA catcher processor licenses, and 12 to 23 licenses meet the various landings and catch thresholds based on all groundfish landings during the qualifying periods in Options 1 through 4, and would qualify to retain Western GOA area endorsements. The majority of Western GOA licenses that have catch history during the various qualifying periods also meet the highest catch threshold (100 mt) and landings threshold (5 landings). There are 49 Central GOA licenses, and 5 to 24 licenses meet the landings and catch thresholds in Options 1 through 4 based on all groundfish catch and would qualify to retain Central GOA area endorsements. Only 4 to 14 of Central GOA CP licenses would qualify for a Pacific cod

endorsement. If landings during 2007 through June 4, 2008 are included (Option 5), 5 additional Central GOA licenses meet the 1 landing threshold for all groundfish and 7 additional licenses have 1 landing of directed cod. No additional Western GOA licenses meet the 1 landing criteria for all groundfish, but 1 additional license has 1 landing of directed cod.

The number of catcher processor licenses that would qualify for gear-specific Pacific cod endorsements includes:

Western GOA

- 9 to 18 hook-and-line catcher processor endorsements (up to 19 under Option 5)
- Up to 5 pot catcher processor endorsements
- 2 licenses have both hook-and-line and pot landings

Central GOA

- 4 to 12 hook-and-line catcher processor endorsements (up to 18 under Option 5)
- 0 to 3 pot catcher processor endorsements (up to 4 under Option 5)
- 1 license has both hook-and-line and pot landings

Potential Range of Outcomes from this Action

Based on the existing set of options, there is a range of possible outcomes from this action:

1. Status quo: No fixed gear licenses are removed from the Western and Central GOA fisheries.
2. Remove Western and/or Central GOA area endorsements from fixed gear licenses with no recent participation in the fisheries.
3. Add Pacific cod endorsements to fixed gear licenses to limit entry to the directed Pacific cod fisheries in Federal waters of the Western or Central GOA.
4. Add gear-specific Pacific cod endorsements to fixed gear licenses to limit entry to the directed Pacific cod fisheries and to limit access to the Pacific cod sector allocations.
5. Add gear-specific Pacific cod endorsements to fixed gear licenses, and restrict licenses to the operation type on their license, i.e. licenses with a catcher processor designation could only fish off the catcher processor sector allocations.

Interactions with Pacific Cod Sector Allocations

In refining the alternatives and options for analysis, the Council may wish to consider interactions between the proposed GOA Pacific cod sector allocations and the GOA fixed gear recency action. A comparison of the components and options currently under consideration for the two actions is found Table E-5. The Council is considering options to add Pacific cod endorsements to fixed gear licenses to limit entry into the directed Pacific cod fisheries in the Western and Central GOA. Pacific cod endorsements could also restrict licenses to using the specific fixed gear type (e.g., pot or hook-and-line) and operation type (catcher processor or catcher vessel) specified on the endorsement. The pot, hook-and-line, and jig catcher vessel sectors and pot and hook-and-line catcher processor sectors could also be subject to the Pacific cod endorsement requirement. The Council may wish to make the Pacific cod endorsement sector definitions consistent with the sector allocation definitions to ensure that vessels that contributed catch history to the sector allocations have access to those allocations. The Council could choose different landings or catch (mt) thresholds for licenses based on gear type, operation type, or MLOA on the license.

Table E-5. A comparison of the components and options included in the proposed GOA sector allocations and GOA fixed gear recency actions.

COMPARISON OF GULF OF ALASKA ACTIONS		
ACTION	GOA Pacific Cod Sector Allocations	GOA Fixed Gear LLP Recency
PURPOSE OF ACTION	Allocate Western and Central Gulf Pacific cod TACs to the various sectors	(1) Remove latent fixed gear licenses with WG and/or CG endorsements from the groundfish fisheries (2) Add Pacific cod endorsements to licenses to limit entry to directed Pacific cod fisheries in WG and CG
MANAGEMENT AREAS	Western and Central Gulf of Alaska	Western and Central Gulf of Alaska (CG endorsement also includes West Yakutat)
SECTORS	(1) Hook-and-line CVs <u>Option:</u> Hook-and-line CVs <60 and ≥60 <u>Option:</u> Hook-and-line CVs <50 and ≥50 (CGOA) (2) Hook-and-line CPs <u>Option:</u> Hook-and-line CPs <125 and ≥125 (3) Pot CVs <u>Option:</u> Pot CVs <60 and ≥60 (4) Pot CPs (5) Jig (6) Trawl CVs (7) Trawl CPs <u>Option:</u> Combined <60 ft trawl and pot CV (WG only)	(1) Hook-and-line CVs <u>Option:</u> Hook-and-line CVs <60 and ≥60 (2) Hook-and-line CPs <u>Option:</u> Hook-and-line CPs <125 and ≥125 (3) Pot CVs <u>Option:</u> Pot CVs <60 and ≥60 (4) Pot CPs (5) Jig
VESSEL CAPACITY	<u>Option:</u> Vessels participating in the <60 ft sectors may not exceed a capacity limit to be determined by the Council.	<u>Option:</u> Exempt vessels that are both <60 ft and under a capacity limit to be determined by the Council.
QUALIFYING CATCH	All retained catch of Pacific cod from parallel and Federal waters State waters catch is excluded	(1) All retained catch of groundfish from parallel and Federal waters (2) Retained catch from the directed Pacific cod fisheries in parallel and Federal waters State waters and IFQ catch is excluded
QUALIFYING YEARS	(1) 1995-2005: best 7 years (2) 1995-2005: best 5 years (3) 2000-2006: best 5 years (4) 2000-2006: best 3 years (5) 2002-2007: best 5 years (6) 2002-2007: best 3 years	(1) 2000-2005 (2) 2000-2006 (3) 2002-2005 (4) 2002-2006 <u>Option:</u> Include 2007-June 4, 2008 in addition to one of the above qualifying periods
LANDINGS THRESHOLDS	None	(1) 1, 3, or 5 landings during qualifying years (2) 5, 10, 25, or 100 mt during qualifying years
JIG	1%, 3%, 5%, or 7% allocation Step up provision (1%, 2%, or 3%) if allocation is 90% harvested during a given year Step down provision if allocation is not 90% harvested during 3 consecutive years, but allocation will not drop below its initial level	(1) Exempt jig vessels from any LLP requirement (2) Exempt jig vessels from Pacific cod endorsement requirement
OTHER COMPONENTS	Options to allocate hook-and-line halibut PSC to CVs and CPs Options to cap mothership processing shares	Stacked license provisions: (1) Credit catch to stacked licenses; or (2) Divide catch history among stacked licenses

1.0 INTRODUCTION

The groundfish fisheries in the Exclusive Economic Zone (3 to 200 miles offshore) of the Gulf of Alaska (GOA) are managed under the GOA Fisheries Management Plan (FMP), developed by the North Pacific Fishery Management Council under the Magnuson-Stevens Fishery Conservation and Management Act. The GOA FMP was approved by the Secretary of Commerce and became effective in 1978.

This document is an Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) for the proposed fixed gear LLP recency action that would remove latent licenses from the Western and Central GOA groundfish fisheries. This action would result in an amendment to the GOA FMP. The proposed action would extinguish fixed gear licenses (or endorsements) that do not meet a minimum landings threshold during a specific qualifying period.

An environmental assessment is required by the National Environmental Policy Act of 1969 (NEPA) to determine whether the proposed action will result in a significant impact on the human environment. If the action is determined not to be significant based on an analysis of the relevant considerations, the EA and finding of no significant impact (FONSI) would be the final environmental documents required by NEPA. An environmental impact Statement (EIS) must be prepared for major Federal actions significantly affecting the human environment.

The purpose of the EA is to analyze the environmental impacts of the proposed Federal action to remove latent fixed gear licenses from the Western and Central GOA. The human environment is defined by the Council on Environmental Quality as the natural and physical environment and the relationships of people with that environment (40 CFR 1508.14). This means that economic or social effects are not intended by themselves to require preparation of an EA. However, when an EA is prepared and socio-economic and natural or physical environmental impacts are interrelated, the EA must discuss all of these impacts on the quality of the human environment. NEPA requires a description of the purpose and need for the proposed action as well as a description of alternatives which may address the problem. This information is included in **Chapter 1** of this document. **Chapter 2** contains a description of the affected human environment and information on the impacts of the alternatives on that environment, specifically addressing potential impacts on endangered species and marine mammals and cumulative effects.

Executive Order 12866 (E.O. 12866) requires preparation of a Regulatory Impact Review (RIR) to assess the social and economic costs and benefits of available regulatory alternatives, in order to determine whether a proposed regulatory action is economically significant as defined by the order. This analysis is included in **Chapter 3**. **Chapter 4** addresses the requirements of other applicable laws, including the Magnuson Stevens Act, Marine Mammal Protection Act, and Regulatory Flexibility Act (RFA). The RFA requires an analysis of potential adverse economic impacts to small entities that would be directly regulated by the proposed action. The references and literature cited are in **Chapter 5**, the list of preparers is in **Chapter 6**, and the list of agencies and individuals consulted is in **Chapter 7**.

1.1 Purpose and Need for the Action

1.1.1 Background

Management of the GOA groundfish fisheries has become increasingly complex as a result of Steller sea lion protection measures, increased participation by vessels displaced from other fisheries, and bycatch reduction requirements under the Magnuson-Stevens Act (MSA). These factors have made achieving the goals set by the National Standards in the MSA difficult, and have had significant adverse social and economic impacts on harvesters, processors, crew, and communities that depend on the GOA fisheries. In 1999, the Council began developing a package of measures to rationalize the GOA groundfish fisheries. At its April 2003 meeting, the Council adopted a motion defining preliminary alternatives for rationalizing the GOA groundfish fisheries. During 2003 through 2006, the Council worked to develop and refine these alternatives. However, in December 2006, the Council elected to delay further consideration of the comprehensive rationalization program. Instead, the Council decided to proceed with the more discrete issues of allocating the Pacific cod resource to the various gear sectors and limiting future entry to the GOA groundfish fisheries by extinguishing latent fixed gear License Limitation Program (LLP) licenses.

At its March/April 2007 meeting, the Council reviewed a discussion paper exploring the goals, objectives, elements, and options for the removal of latent LLP licenses from the fixed gear fisheries in the GOA. In October 2007, the Council adopted a problem statement, outlined draft components and options, and directed staff to prepare an EA/RIR/IRFA for a proposed regulatory amendment to revise the LLP program. The Council reviewed a draft EA/RIR/IRFA at its June 2008 meeting in Kodiak.

1.1.2 Purpose and Need Statement

The LLP limits access to the groundfish and crab fisheries in the Bering Sea, Aleutian Islands, and GOA.¹ In the mid to late 1990s, the Council developed the LLP to address capacity concerns and take a first step toward rationalization of the groundfish fisheries under its management. Fishing under the program began in 2000. Competition among fixed gear participants in the Western and Central GOA groundfish fisheries has intensified in recent years, and long-term participants are concerned about the potential for latent fixed gear licenses to re-enter the fisheries. The proposed amendment would address this concern by extinguishing fixed gear licenses that do not have recent participation in the GOA groundfish fisheries.

The sectors potentially affected by the proposed amendment include fixed gear catcher vessel and catcher processor groundfish LLP license holders with Western and Central GOA² area endorsements. Options under consideration would remove Western and Central GOA area endorsements if the licenses did not meet specified harvest thresholds in those management areas. If a license has only one area endorsement and does not meet the catch or landings threshold selected, the entire license would be extinguished. If the license has multiple area endorsements and does not meet the catch or landings threshold in a specific management area, the non-qualifying area endorsement would be removed from the license. However, it should be noted that this action only applies to fixed gear area endorsements and does not affect trawl area endorsements. If a license has both trawl and fixed gear designations and the license does not have sufficient fixed gear landings to retain its Western or Central GOA area endorsement under this action, the license would retain those area endorsements for use with its trawl designation only. In addition, there are options under consideration to add Pacific cod endorsements to fixed gear licenses. Fixed gear licenses would be required to carry a Pacific cod endorsement, in addition to the appropriate area endorsement, to participate in the directed Pacific cod fisheries in Federal waters in the GOA.

¹ Amendment 39 to the BSAI groundfish plan and Amendment 41 to the groundfish plan for the GOA established the LLP. The primary rules governing the LLP are contained in 50 CFR 679.4(k).

²Note that under LLP area designations, the Central GOA subarea includes West Yakutat.

The rationale for this action is concern over the impacts that future entry of latent effort may have on current LLP permit holders that participate in the groundfish fisheries. Latent effort is comprised of valid LLPs that have not been utilized in the fixed gear groundfish fisheries during recent years. Recency, as defined by the options under consideration, has been determined by the Council to be participation in the Western or Central GOA fixed gear groundfish fisheries during a 4 to 7 year period between 2000 and 2006. The proposed action would extinguish GOA fixed gear LLP licenses (or endorsements) that do not meet minimum groundfish landings thresholds during a specific qualifying period. This action may enhance stability in the fisheries, reduce competition among fixed gear participants, and protect historic catch shares of participants. If latent licenses are not extinguished, future entry of latent effort into the Western and Central GOA groundfish fisheries could further intensify competition among fixed gear participants and erode catch shares of long-term participants.

To address these concerns, the Council adopted the following problem statement in October 2007:

GOA Fixed Gear Recency Purpose and Need Statement

Western GOA and Central GOA groundfish fisheries are subject to intense competition, particularly in the A season, when fish are aggregated and of highest value. Competition among fixed gear participants in the Western GOA and Central GOA fisheries has increased for a variety of reasons, including increased market value of Pacific cod products and a declining ABC/TAC. The possible future entry of latent effort would have detrimental effects on LLP holders that have exhibited participation in, and dependence on, the fixed gear groundfish fisheries. Many fixed gear vessel owners have made significant investments, have long catch histories, and are dependent on WGOA and CGOA groundfish resources. These long-term participants need protection from those who have little or no recent history and who have the ability to increase their participation in the fisheries. The intent of the proposed amendment is to prevent latent fixed gear groundfish fishing capacity that has not been utilized in recent years, from future entry or re-entry into the fisheries. This requires prompt action to promote stability in the fixed gear sectors of the GOA groundfish fisheries, and is expected to be implemented concurrently with the division of GOA Pacific cod among sectors which is currently under consideration.

Extinguishing latent licenses may prevent future gross revenues from groundfish harvests in the respective management areas from being diluted by future increases in fishing effort by latent licenses. Those LLP holders exhibiting dependence and participation in the fixed gear groundfish fisheries, (i.e., those meeting the selected threshold criteria), would be protected from possible future increases in effort and dilution of their gross revenue share. However, this action may not result in increased production efficiencies to licenses that would generally be expected from a comprehensive rationalization program. Following implementation of the amendment, each qualified LLP holder will still have an incentive to expand their fishing effort and maximize their respective share of the gross revenues in the open access GOA groundfish fisheries. The action will not necessarily result in an 'optimum' harvesting capacity in any of the sectors or management areas. The Council is considering a range of potential catch and landings thresholds, qualification periods, and catch definitions. The number of latent LLPs to be removed under any of these options was not based on a predetermined optimum capacity for the fixed gear groundfish fleet. The action would revise the LLP by removing latent effort, and is a more modest approach to revolving participation issues than a fully rationalized fixed gear groundfish fishery.

1.2 Alternatives

This section identifies the alternatives and options under consideration for the proposed action. **Alternative 1** (no action) would not make any changes to the current License Limitation Program. **Alternative 2** would remove area (Western GOA and/or Central GOA) endorsements from fixed gear LLPs unless the license meets a minimum catch or landings threshold in that management area. **Alternative 2** would also add Pacific cod endorsements to fixed gear licenses that would limit entry into the directed Pacific cod fisheries in Federal waters in the GOA.

ALTERNATIVE 1. No Action. No changes would be made to the current License Limitation Program.

ALTERNATIVE 2. The proposed action has two parts.

- (1) Remove area (Western GOA and/or Central GOA) endorsements from fixed gear LLP licenses unless the license meets a minimum catch or landings threshold in that management area.
- (2) Add Pacific cod endorsements to fixed gear licenses. Pacific cod endorsements would limit entry into the directed Pacific cod fisheries in Federal waters in the Western and Central GOA.

Component 1— Areas included

Western GOA

Central GOA (current LLP endorsement includes West Yakutat)

- Different options may be applied to each management area.

Component 2— Identify and define sectors

- Hook-and-line CP
 - Option: Hook-and-line CP ≥ 125
 - Hook-and-line CP < 125
- Hook-and-line CV
 - Option: Hook-and-line ≥ 60
 - Hook-and-line < 60
- Pot CP
- Pot CV
 - Option: Pot CV ≥ 60
 - Pot CV < 60
- Jig
 - Option 1: Exempt vessels using jig gear from any LLP requirement
 - Option 2: Exempt vessels using jig gear from any Pacific cod endorsement requirement

Suboption (applicable to either option):

Exempt vessels using a maximum of 5 jigging machines, 5 lines, and 30 hooks per line or one line of 150 hooks.

Option (applicable to any of the sectors):

Exempt vessels that are both < 60 ft and under a capacity limit to be determined by the Council. The Council directs staff to provide recommendations of options to consider for capacity limits.

Component 3 – Qualifying years

Option 1: 2000-2005

Option 2: 2000-2006

Option 3: 2002-2005

Option 4: 2002-2006

Option 5: Add the qualifying period January 1, 2007 through June 4, 2008 (this option would be selected in addition to one of the qualifying periods listed above in Options 1-4). If an LLP license qualifies only when this supplemental range of years is included, any area endorsements retained by licenses or Pacific cod endorsements granted to licenses under this option would be designated non-transferable. Endorsements retained by licenses or granted to licenses under this option will be extinguished upon transfer of the LLP license to another vessel or owner.

Component 4 – Catch thresholds

Thresholds shall be based on legally retained catch in the aggregate during all of the qualifying years in the Federal and parallel fisheries (excluding IFQ catch).

Option 1: All groundfish 1, 3, or 5 landings

Option 2: All directed Pacific Cod 1, 3, or 5 landings (resulting in a Pacific cod endorsement)

Option 3: All groundfish 5, 10, 25, or 100 mt

Option 4: All directed Pacific Cod 5, 10, 25, or 100 mt (resulting in a Pacific cod endorsement)

Directed Pacific cod catch is defined as landings made when the directed Pacific cod fisheries are open. Licenses are credited with landings made up to 7 days after the directed season closes.

Component 5 – Stacked license provisions

Option 1: Where there are multiple LLPs registered to a single vessel, also known as ‘stacking’ of LLPs, groundfish harvest history will be fully credited to all stacked licenses, each carrying its own qualifying endorsements and designations.

Option 2: Catch history could be divided among stacked licenses. License owner(s) may choose which license will be credited with landings so that one of the stacked licenses may qualify. In the absence of an agreement among license owner(s), catch history could be split evenly among stacked licenses.

Other issues for analysis:

Additionally, the Council recommends that Staff expand the analysis of Alaskan ownership of the hook-and-line catcher processor sector to include percent ownership and gross revenues by Alaskan community, including contributions to:

- (1) local tax revenues
- (2) local processing activity
- (3) local participation

Options considered but rejected:

At its June 2008 meeting, the Council removed options from the motion that would have limited vessels from participating in both the trawl and fixed gear sectors during a given year, or would have required vessels to make a one time election to participate in either the trawl or fixed gear sectors. The Council reviewed data which showed that approximately 10 to 15 vessels use both trawl and fixed gear in the

Pacific cod fisheries (most operating in the Western GOA) on an annual basis. Restricting vessels to using only one gear type during a given year would impact the annual fishing operations of this group of vessels.

1.3 Consistency with the Problem Statement

The alternatives under consideration are consistent with the problem statement. The problem identified is that fixed gear participants who have made significant long-term investments, have extensive catch histories, and are highly dependent on the GOA groundfish fisheries need protection from the potential increase in competition that may be caused by the re-entry of latent licenses into the fisheries. If latent fixed gear licenses remain eligible for re-entry into the fisheries, future participation levels may increase, intensifying competition for the decreasing GOA groundfish TACs. Under the no action alternative, latent fixed gear licenses with Western or Central GOA endorsements will continue to have the potential to enter the GOA groundfish fisheries. Under the action alternative, there are options to extinguish fixed gear licenses that do not have recent catch history in the GOA groundfish fisheries, and to add Pacific cod endorsements to fixed gear licenses that would limit entry into the directed Pacific cod fisheries in the Western and Central GOA.

2.0 ENVIRONMENTAL ASSESSMENT

The purpose of this environmental assessment (EA) is to analyze the environmental impacts of the proposed Federal action to remove latent fixed gear LLP licenses (or endorsements) from the Central and Western GOA groundfish fisheries. An EA is intended to provide sufficient evidence of whether or not the environmental impacts of the action are significant (40 CFR 1508.9).

The purpose and need statement for this action and a description of the alternatives and options are included in Chapter 1. This chapter analyzes the alternatives for their effects on the biological, physical, and human environment. Each section discusses the environment that would be affected by the alternatives and then describes the impacts of the alternatives. The following components of the environment are discussed: the Pacific cod fishery, other groundfish fisheries, incidental and prohibited species catch, seabirds and marine mammals, benthic habitat, essential fish habitat, ecosystem effects, economic impacts and management considerations, and cumulative effects.

The criteria listed in Table 2-1 are used to evaluate the significance of impacts. If significant impacts are likely to occur, preparation of an Environmental Impact Statement (EIS) is required. Although economic and socioeconomic impacts must be evaluated, such impacts by themselves are not sufficient to require the preparation of an EIS (see 40 CFR 1508.14).

Table 2-1. Criteria Used to Evaluate the Alternatives.

Component	Criteria
Fish species	An effect is considered to be significant if it can be reasonably expected to jeopardize the sustainability of the species or species group.
Habitat	An effect is considered to be significant if it exceeds a threshold of more than minimal and not temporary disturbance to habitat.
Seabirds and marine mammals	An effect is considered to be significant if it can be reasonably expected to alter the population trend outside the range of natural variation.
Ecosystem	An effect is considered to be significant if it produces population-level impacts for marine species, or changes community- or ecosystem-level attributes beyond the range of natural variability for the ecosystem.

2.1 GOA Groundfish Fisheries

2.1.1 GOA Environment

The action area includes the Western and Central GOA. The documents listed below contain information about the fishery management areas, fisheries, marine resources, ecosystem, social, and economic elements of the GOA groundfish fisheries.

Alaska Groundfish Harvest Specifications Final Environmental Impact Statement (NMFS 2007a). This EIS provides decision makers and the public an evaluation of the environmental, social, and economic effects of alternative harvest strategies for the Federally managed groundfish fisheries in the GOA and the Bering Sea and Aleutian Islands management areas. The EIS examines alternative harvest strategies that comply with Federal regulations, the GOA FMP, and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). These strategies are applied to the best available scientific information to derive the total allowable catch estimates for the groundfish fisheries. The EIS evaluates the effects of different alternatives on target species, non-specified species, forage species, prohibited

species, marine mammals, seabirds, essential fish habitat, ecosystem relationships, and economic aspects of the GOA fisheries.

Stock Assessment and Fishery Evaluation (SAFE) Report for the Groundfish Resources of the GOA (NPFMC 2007). Annual SAFE reports review recent research and provide estimates of the biomass of each species and other biological parameters. The SAFE report includes the acceptable biological catch (ABC) specifications used by NMFS in the annual harvest specifications. The SAFE report also summarizes available information on the GOA ecosystem and the economic condition of the groundfish fisheries off Alaska. This document is available from: <http://www.afsc.noaa.gov/refm/stocks/assessments.htm>.

2.1.2 Pacific Cod

Pacific cod (*Gadus macrocephalus*) is the primary groundfish species targeted by the fixed gear sectors in the Western and Central GOA. Pacific cod is widely distributed in the GOA and occurs at depths from shoreline to 500 m (Thompson et al. 2006). Pacific cod are moderately fast growing, and females reach 50% maturity at approximately 5.8 years old. Spawning occurs during January through April in the GOA. Pacific cod are demersal and concentrate on the shelf edge and upper slope at depths of 100-250 m in the winter, and move to shallower waters (<100 m) in the summer.

The Pacific cod resource is managed under three discrete TACs in the GOA: the Western GOA TAC, the Central GOA TAC, and the Eastern GOA TAC. In addition, the GOA Pacific cod TACs are divided between the A season (60%) and B season (40%), and are apportioned to the inshore processing component (90%) and offshore component (10%). Historically, the majority of the GOA Pacific cod catch has come from the Central and Western GOA management subareas. Final 2008 harvest specifications apportioned 57% of the GOA catch to the Central GOA (28,426 mt), 39% to the Western GOA (19,449 mt), and 5% to the Eastern GOA (2,394 mt).

Table 2-2 summarizes levels of acceptable biological catch (ABC), total allowable catch (TAC), and actual catch of Pacific cod in the Federal and State waters fisheries in the GOA from 1985 to 2007. From 1989 to 1996, the Federal TAC was set at 100% of the acceptable biological catch (ABC). The Federal TAC has been set below the ABC since 1997 to accommodate the State waters Pacific cod fishery. Total catch in the Federal and State Pacific cod fisheries averaged 87% of the ABC from 1997 to 2007. Most of the unharvested Federal TAC during recent years has been the result of low harvests during the B season. In addition, 25% of the Western and Central GOA Pacific cod ABC is allocated to the State waters fisheries, and the State Guideline Harvest Levels (GHLs) have not been fully harvested during recent years. In 2006 and 2007, only 70% and 74% of the GOA ABC was harvested.

Effects of the proposed action depend to some extent on current and future abundance of the Pacific cod stock. Model projections indicate that the Pacific cod stock is not overfished. However, total allowable catch is projected to decline over the next several years due to below average recruitment levels during a series of recent years. A comprehensive description of recent survey data and biomass projections is available in the groundfish SAFE report (NMFS 2007a).

Table 2-2 Total catch in the Federal and State GOA Pacific cod fisheries, total allowable catch (TAC) for the Federal fishery, and acceptable biological catch (ABC), 1985-2007.

Year	Federal catch	Federal TAC	Percentage of TAC harvested	State catch	Total catch	ABC	Percentage of ABC harvested
1985	14,428	60,000	24.0	n/a	14,428	n/a	n/a
1986	25,012	75,000	33.3	n/a	25,012	136,000	18.4
1987	32,939	50,000	65.9	n/a	32,939	125,000	26.4
1988	33,802	80,000	42.3	n/a	33,802	99,000	34.1
1989	43,293	71,200	60.8	n/a	43,293	71,200	60.8
1990	72,517	90,000	80.6	n/a	72,517	90,000	80.6
1991	76,328	77,900	98.0	n/a	76,328	77,900	98.0
1992	80,747	63,500	127.2	n/a	80,747	63,500	127.2
1993	56,487	56,700	99.6	n/a	56,487	56,700	99.6
1994	47,484	50,400	94.2	n/a	47,484	50,400	94.2
1995	68,084	69,200	98.4	n/a	68,084	69,200	98.4
1996	68,150	65,000	104.8	n/a	68,150	65,000	104.8
1997	67,856	69,115	98.2	8,393	76,250	81,500	93.6
1998	61,504	66,060	93.1	10,422	71,926	77,900	92.3
1999	67,927	67,835	100.1	13,781	81,708	84,400	96.8
2000	54,266	58,715	92.4	12,037	66,303	76,400	86.8
2001	41,532	52,110	79.7	9,917	51,449	67,800	75.9
2002	42,306	44,230	95.6	12,211	54,516	57,600	94.6
2003	41,152	40,540	101.5	11,423	52,575	52,800	99.6
2004	43,017	48,033	89.6	13,605	56,622	62,810	90.1
2005	35,127	44,433	79.1	12,714	47,840	58,100	82.3
2006	37,807	52,264	72.3	10,338	48,145	68,859	69.9
2007	39,721	52,264	76.0	11,250	50,971	68,859	74.0

Source: 2006 Groundfish SAFE Report, Pacific cod stock assessment (Thompson et al., 2006), NMFS Blend and Catch Accounting databases (1995-2007 Federal catch), and Sagalkin (2007) (State waters catch).

Effects of the Alternatives

Current management of the GOA Pacific cod fisheries was analyzed in detail in the Groundfish PSEIS (NOAA 2004a). This analysis is updated annually during the harvest specifications process for the groundfish fisheries (NMFS 2006a). These analyses concluded that the Pacific cod stock is currently being managed at a sustainable level and that the probability of overfishing occurring is low. The status quo management of Pacific cod is not expected to have a significant impact on the long-term sustainability of the GOA Pacific cod stock.

The proposed action would remove latent licenses from the Western and Central GOA fixed gear groundfish fisheries. Participants with recent fishing history would be allowed to retain their LLP licenses. Alternative 2 would not change the proportion of catch harvested by the various fixed gear sectors. In effect, Alternative 2 maintains the status quo division of catch among the fixed gear sectors by stabilizing participation within each sector. The proposed action would not change the annual harvest specifications process, which sets TACs at appropriate levels to prevent the stock from being overfished. As a result, the proposed action is not expected have a significant effect on the sustainability of the Pacific cod stock.

2.1.3 Other Groundfish Fisheries

The fixed gear sectors primarily participate in the directed Pacific cod fisheries in the GOA and catch other groundfish species incidentally while targeting cod. More than 98% of groundfish catch by vessels using fixed gear is comprised of Pacific cod, excluding IFQ halibut and sablefish catch. Vessels participating in the IFQ fisheries are not required to hold LLP licenses, and these fisheries will not be discussed further in this EA. Other species retained by vessels using fixed gear include skates, rockfish, pollock, and octopus. The proposed action is not expected to result in significant changes in catch levels of other groundfish species. Overall levels of fishing effort by each gear sector, and the timing and location of fishing activities, are not expected to change under the proposed action.

2.2 Marine Mammals

Marine mammals occur in diverse habitats in the GOA, and include both resident and migratory species. Species that occur in the GOA are listed below (NOAA 2004b). The Groundfish PSEIS (NOAA 2004a) provides descriptions of the range, habitat, diet, abundance, and population status for these marine mammals. Annual stock assessment reports prepared by the National Marine Mammal Laboratory provide population estimates, population trends, and estimates of potential biological removals (Angliss and Outlaw 2007).

NMFS Managed Species

Pinnipeds: Steller sea lion (Western U.S., Eastern U.S.), Northern fur seal (Eastern Pacific), Harbor seal (Southeast Alaska, GOA, Bering Sea), Spotted seal (Alaska), Bearded seal (Alaska), Ringed seal (Alaska), Ribbon seal (Alaska).

Cetaceans: Beluga Whale (Beaufort Sea, Eastern Chukchi Sea, Eastern Bering Sea, Bristol Bay, Cook Inlet), Killer whale (Eastern North Pacific Northern Resident, Eastern North Pacific transient), Pacific White-sided dolphin (North Pacific), Harbor porpoise (Southeast Alaska, GOA), Dall's porpoise (Alaska), Sperm whale (North Pacific), Baird's beaked whale (Alaska), Cuvier's beaked whale (Alaska), Stejneger's beaked whale (Alaska), Gray whale (Eastern North Pacific), Humpback whale (Western North Pacific, Central North Pacific), Fin whale (Northeast Pacific), Minke whale (Alaska), North Pacific right whale (North Pacific)

USFWS Managed Species

Northern sea otter (Southeast Alaska, Southcentral Alaska, Southwest Alaska), Pacific walrus (Alaska)

Direct and indirect interactions between marine mammals and the groundfish fisheries result from temporal and spatial overlap between commercial fishing activities and marine mammal occurrence. Direct interactions include injury or mortality due to entanglement in fishing gear. Indirect interactions include overlap in the size and species of groundfish important both to the fisheries and to marine mammals as prey. The GOA Pacific cod target fisheries are classified as Category III fisheries under the Marine Mammal Protection Act. Category III fisheries are unlikely to cause mortality or serious injury to more than 1% of the marine mammal's potential biological removal level, calculated on an annual basis (50 CFR 229.2). Taking of marine mammals is monitored by the North Pacific observer program.

Marine mammals listed under the Endangered Species Act (ESA) that may be present in the GOA are listed in Table 2-3. All of these species are managed by NMFS, with the exception of Northern Sea Otter, which is managed by U.S. Fish and Wildlife Service. A Biological Opinion evaluating impacts of the groundfish fisheries on the endangered species managed by NMFS was completed in November 2000 (NMFS 2000). The western population segment of Steller sea lions was the only ESA-listed species

identified as likely to be adversely affected by the groundfish fisheries. A new Section 7 consultation was initiated in 2006. NMFS is also currently consulting with USFWS on the distinct southwest Alaska population of northern sea otters.

Table 2-3 ESA-listed marine mammal species that occur in the GOA.

Common Name	Scientific Name	ESA Status
Steller Sea Lion (Western Population)	<i>Eumetopias jubatus</i>	Endangered
Steller Sea Lion (Eastern Population)	<i>Eumetopias jubatus</i>	Threatened
Blue Whale	<i>Balaenoptera musculus</i>	Endangered
Fin Whale	<i>Balaenoptera physalus</i>	Endangered
Humpback Whale	<i>Megaptera novaeangliae</i>	Endangered
Right Whale	<i>Balaena glacialis</i>	Endangered
Sei Whale	<i>Balaenoptera borealis</i>	Endangered
Sperm Whale	<i>Physeter macrocephalus</i>	Endangered
Northern Sea Otter	<i>Enhydra lutris</i>	Threatened

A Biological Opinion addressing Steller sea lion management issues was completed in 2001 (NMFS 2001b), and found that the under the new suite of protection measures, the GOA groundfish fisheries were unlikely to jeopardize the continued existence of the western population of Steller sea lions or adversely modify critical habitat. Protection measures include area-specific closures around rookeries and haulouts and seasonal divisions of TACs to disperse fishing effort throughout the year. The Pacific cod fishing season was divided into two periods: 60% of the TAC was allocated to the A season (Jan. 1 – June 10) and 40% to the B season (June 10 – Dec. 31). The objective was to limit the total amount of cod harvested in the first half of the year. Pacific cod is one of the four most important prey items of Steller sea lions and is especially important to sea lions during winter (Sinclair and Zeppelin 2002).

Since 2000, the western population of Steller sea lions has been increasing. However, the 2004 count (38,988 animals) was still 7.4% lower than the 1996 count and 32.6% lower than the 1990 count. In the GOA, the 2004 count (9,005 animals) was 12.6% higher than the 2000 count (7,995 animals), but was 45.1% lower than the 1990 count. Annual counts at haulouts and rookeries represent a minimum population estimate and are not corrected to account for animals that were at sea during the surveys (Angliss and Outlaw 2007). The minimum estimate of incidental mortality due to commercial fishing activities in all waters off Alaska is 24.2 sea lions per year, which is slightly more than 10% of the allowable level (234 animals) of removal for this stock (Angliss and Outlaw 2007). No incidental mortalities of Steller sea lions caused by the fixed gear sectors in the GOA were observed during 2000-2005.

Effects of the Alternatives

Impacts of the GOA fixed gear Pacific cod fishery on Steller sea lions were analyzed in the Programmatic SEIS (NOAA 2004a) and in the 2001 Biological Opinion. Current management practices were found to have no adverse impacts on marine mammals, including Steller sea lions. As a result, the status quo alternative is not expected to have a significant impact on Steller sea lions or other marine mammals.

The proposed action would extinguish latent fixed gear LLP licenses with Western and Central GOA area endorsements, limiting future entry of latent effort into the fisheries. The action may also create gear-specific Pacific cod endorsements on licenses, limiting entry to the directed Pacific cod fishery to vessels with recent participation in the fishery. The timing, location, and overall level of fishing effort in the GOA Pacific cod and other groundfish fisheries is not expected to change, and there will be no changes in the harvest specifications process. Annual mortality of Steller sea lions is not expected to change under

the proposed action, because fishing effort by the various gear sectors will remain similar to the status quo. Sector allocations will continue to be divided into seasonal apportionments to disperse fishing effort throughout the year.

2.3 Seabirds

Various species of seabirds occur in the GOA, including resident species, migratory species that nest in Alaska, and migratory species that only occur in Alaska outside of the breeding season. The most numerous seabirds in Alaska are northern fulmars, storm petrels, kittiwakes, murre, auklets, and puffins. There are 38 species of seabirds that breed in Alaska. A list of species is provided below.³ Eight species breed only in Alaska and in Siberia. Populations of five other species are concentrated in Alaska but range throughout the North Pacific region. Marine waters off Alaska provide critical feeding grounds for these species as well as others that do not breed in Alaska but migrate to Alaska during summer, and for other species that breed in Canada or Eurasia and overwinter in Alaska. A detailed analysis of the effects of commercial fisheries on seabirds appears in the Alaska Groundfish Fisheries Programmatic Supplemental Environmental Impact Statement (NMFS 2004). The Groundfish PSEIS also provides descriptions of the range, habitat, diet, abundance, and population status for these seabirds.

Species nesting in Alaska

Tubenoses-Albatrosses and relatives: Northern Fulmar, Fork-tailed Storm-petrel, Leach's Storm-petrel

Kittiwakes and terns: Black-legged Kittiwake, Red-legged Kittiwake, Arctic Tern, Aleutian Tern

Pelicans and cormorants: Double-crested Cormorant, Brandt's Cormorant, Pelagic Cormorant, Red-faced Cormorant

Jaegers and gulls: Pomarine Jaeger, Parasitic Jaeger, Bonaparte's Gull, Mew Gull, Herring Gull, Glaucous-winged Gull, Glaucous Gull, Sabine's Gull

Auks: Common Murre, Thick-billed Murre, Black Guillemot, Pigeon Guillemot, Marbled Murrelet, Kittlitz's Murrelet, Ancient Murrelet, Cassin's Auklet, Parakeet Auklet, Least Auklet, Wiskered Auklet, Crested Auklet, Rhinoceros Auklet, Tufted Puffin, Horned Puffin

Species that visit Alaska waters

Tubenoses: Short-tailed Albatross, Black-footed Albatross, Laysan Albatross, Sooty Shearwater, Short-tailed Shearwater

Gulls: Ross's Gull, Ivory Gull

The Northern Fulmar accounts for the majority of incidental seabird take in the groundfish fisheries, and is one of the most abundant species breeding in Alaska. The hook-and-line sector causes most of this take. Three ESA-listed species occur in waters off Alaska (see Table 2-4), and Kittlitz's Murrelet is a candidate species for listing under the ESA. The U.S. Fish and Wildlife Service (USFWS) has primary responsibility for managing seabirds, and has evaluated effects of the BSAI and GOA FMPs and the harvest specifications process on currently listed species in two Biological Opinions (USFWS 2003a and 2003b). Both Biological Opinions concluded that the groundfish fisheries, including the GOA Pacific cod fishery, are unlikely to jeopardize populations of listed species or adversely modify or destroy critical habitat for listed species.

³Source: (USFWS web site Seabirds. Species in Alaska. Accessed at <http://alaska.fws.gov/mbmp/mbm/seabirds/species.htm> on August 31, 2007).

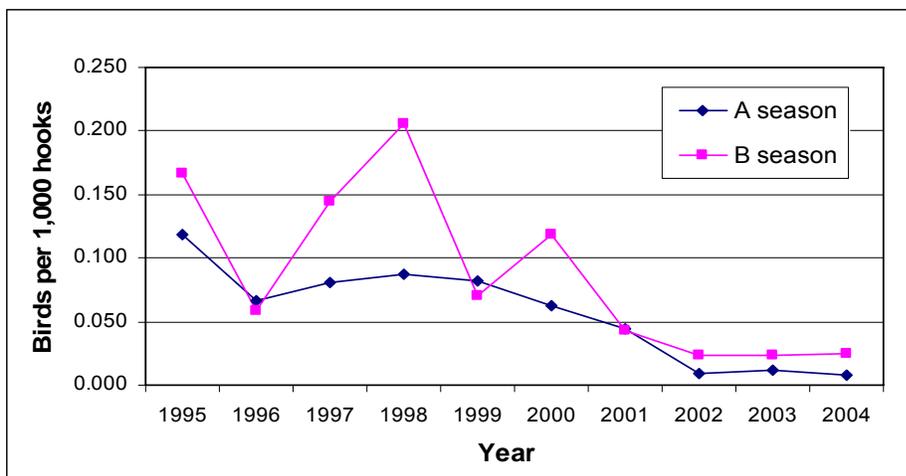
Table 2-4 ESA-listed and candidate seabird species that occur in the management area.

Common Name	Scientific Name	ESA Status
Short-tailed Albatross	<i>Phoebastria albatrus</i>	Endangered
Steller's Eider	<i>Polysticta stelleri</i>	Threatened
Spectacled Eider	<i>Somateria fishcheri</i>	Threatened
Kittlitz's Murrelet	<i>Brachyramphus brevirostris</i>	Candidate

The fixed gear fisheries in the GOA have direct and indirect impacts on seabirds. Seabird take is the primary direct effect of fishing operations. Seabirds are taken in the hook-and-line fisheries in two ways. While hooks are being set, seabirds attracted to the bait may become entangled in fishing lines. Seabirds are also caught directly on baited hooks. Hook-and-line and trawl gear accounts for the majority of the seabird take in the groundfish fisheries.

Indirect effects of fishing on seabirds include impacts to food sources. The fixed gear fisheries may reduce the biomass of prey species available to seabird populations. Fishing gear may disturb benthic habitat used by seabirds that forage on the seafloor and reduce available prey. Bottom trawl gear is the primary source of benthic habitat disturbance in the groundfish fisheries. Fishing activities may also create feeding opportunities for seabirds, for example when catcher processors discard offal.

Hook-and-line gear accounts for the majority of seabird take in the North Pacific groundfish fisheries. Depending on which estimates are used, hook-and-line gear accounts for either 65% or 94% of seabird bycatch in the BSAI and GOA combined (Fitzgerald et al. 2006). Seabird bycatch by the GOA hook-and-line fisheries consists of 46% fulmars, 34% albatrosses, 12% gull species, 5% unidentified seabirds, 2% shearwater species, and less than 1% of 'all other' species (Fitzgerald et al. 2006). Most bycatch of Black-footed Albatross in waters off Alaska occurs in the GOA hook-and-line fisheries. From 2000 to 2004, an estimated 88 Black-footed Albatross were taken annually in the GOA hook-and-line fisheries. Total seabird bycatch in the GOA hook-and-line fisheries peaked in 1996 at 1,649 birds, and decreased to 156 birds in 2004, despite an increase in fishing effort. The incidental catch rate in the GOA decreased from an annual average of 0.021 birds per 1,000 hooks from 1993 to 2004 to 0.01 birds per 1,000 hooks from 2000-2004.



Source: AFSC. Data include BSAI and GOA hook-and-line CP fisheries.

Figure 2-1 Seabird bycatch rates by hook-and-line catcher processors during the Pacific cod A and B seasons, 1995-2004.

Figure 2-1 compares seabird bycatch rates per 1,000 hooks by the hook-and-line catcher processor fleet during the A and B seasons from 1995 to 2004, and includes data from both the BSAI and GOA. Seabird bycatch by hook-and-line catcher processors is higher during the B season than during the A season, but bycatch rates have been reduced substantially since 2001 as a result of widespread use of seabird avoidance techniques such as paired streamer lines. The average bycatch rate for hook-and-line catcher processors from 2002 through 2004 was 0.018 birds per 1,000 hooks (Figure 2-1), a substantial reduction from previous years.

Due to different sampling procedures on trawl vessels, two sets of estimates are calculated for seabird bycatch. Average annual take by trawl vessels in the GOA from 1993 to 2004 was either 63 birds or 97 birds (Fitzgerald et al. 2006). Northern Fulmars comprised the majority of bycatch by trawl vessels during this period. Seabird bycatch by the groundfish pot sector has historically been very low. Average annual bycatch in the GOA pot sector from 1993–2004 was 55 seabirds, less than 1% of the average annual seabird bycatch in the groundfish fisheries.

Effects of the Alternatives

The Groundfish PSEIS (NMFS 2004a) concluded that the current GOA groundfish fisheries are not adversely impacting ESA-listed seabird species. Biological Opinions by the USFWS (2003a and 2003b) concluded that the groundfish fisheries in the GOA are unlikely to jeopardize populations of listed species or adversely modify or destroy critical habitat for listed species. Based on current estimates of seabird bycatch, the status quo alternative is not likely to have a significant impact on seabird populations.

The proposed action would extinguish Western and Central GOA endorsements on LLP licenses that do not have recent catch history in the GOA groundfish fisheries. Overall levels of fishing effort by each gear sector, and the timing and location of fishing activities are not expected to change. The proposed action will not modify the management practices analyzed in previous Biological Opinions (USFWS 2003a and 2003b), is not likely to cause additional adverse effects to ESA-listed species, and is not likely to increase incidental takes of listed species. Consequently, the proposed action is not likely to have a significant impact on seabird populations.

2.4 Essential Fish Habitat

Essential fish habitat (EFH) is defined as those areas necessary to fish for spawning, breeding, feeding, or growth to maturity. Section 303(a)(7) of the Magnuson-Stevens Act requires all FMPs to describe and identify Essential Fish Habitat (EFH). In addition, FMPs must minimize to the extent practicable adverse effects of fishing on EFH and identify other actions to conserve and enhance EFH. Maps and descriptions of EFH for the GOA groundfish species are available in the Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska (NMFS 2004). This document also describes the importance of benthic habitat to different groundfish species and the impacts of different types of fishing gear on benthic habitat. Benthic habitat is potentially impacted by fishing practices that contact the seafloor. The analysis concludes that there are long term effects of fishing on benthic habitat features off Alaska and acknowledges that considerable scientific uncertainty remains regarding the consequences of those effects on the sustained productivity of managed species. Based on the best available scientific information, the EIS concludes that there are no indications that current fishing activities are altering the capacity of EFH to support health populations of managed species over the long term. The analysis concludes that no Council-managed fishing activities have more than a minimally adverse effect on EFH, which is the regulatory standard requiring action to minimize adverse effects under the MSA. The Council elected to adopt a variety of new measures to conserve EFH, which are scheduled to be implemented by August 13, 2006.

Effects of the Alternatives

The effects of the GOA Pacific cod fixed gear fisheries on benthic habitat and EFH were analyzed in the EFH EIS (NMFS 2005e). In the hook-and-line fishery, anchors, groundline, ganglions, and hooks potentially contact the seafloor. The Pacific cod pot fishery has a very small footprint (an estimated 0.17 square mile footprint for the GOA and BSAI combined). The jig fishery has no direct contact with the seafloor, although contact may occur incidentally. Year-round area closures protect sensitive benthic habitat. Current fishing practices have minimal or temporary effects on benthic habitat and essential fish habitat. These effects are likely to continue under Alternative 1, and are not considered to be significant. Under the proposed action, the location, timing, and overall level of fishing effort by the various fixed gear sectors will remain essentially the same as under Alternative 1. As a result, impacts on benthic and essential fish habitat under this alternative are not expected to be significant.

2.5 Ecosystem Considerations

Ecosystems consist of communities of organisms interacting with their physical environment. Within marine ecosystems, competition, predation, and environmental disturbance cause natural variation in recruitment, survivorship, and growth of fish stocks. Human activities, including commercial fishing, can also influence the structure and function of marine ecosystems. Fishing may change predator-prey relationships and community structure, introduce foreign species, affect trophic diversity, alter genetic diversity, alter habitat, and damage benthic habitats.

The GOA Pacific cod fishery potentially impacts the GOA ecosystem by relieving predation pressure on shared prey species (i.e., species which are prey for both Pacific cod and other species), reducing prey availability for predators of Pacific cod, altering habitat, imposing bycatch mortality, or by ghost fishing caused by lost fishing gear. Ecosystem considerations for the GOA groundfish fisheries are summarized annually in the GOA Stock Assessment and Fishery Evaluation (SAFE) report (NPFMC 2005). These considerations are summarized according to the ecosystem effects on the groundfish fisheries as well as the potential fishery effects on the ecosystem.

Effects of the Alternatives

An evaluation of the effects of the GOA fixed gear groundfish fisheries on the ecosystem is conducted annually in the Ecosystem Assessment section of the Stock Assessment and Fishery Evaluation report (NMFS 2006b) and in the Harvest Specifications SAFE report (NMFS 2006c). These analyses conclude that the current GOA fixed gear groundfish fisheries do not produce population-level impacts to marine species or change ecosystem-level attributes beyond the range of natural variation. Consequently, Alternative 1 is not expected to have a significant impact on the ecosystem.

Alternative 2 will not change the overall level of Pacific cod or groundfish harvest from the status quo. The level of fishing effort by each fixed gear sector, and the location and timing of fishing activities is not expected to change. As a result, Alternative 2 is not likely to have a significant impact on the ecosystem.

2.6 Economic Impacts

A detailed description of the economic and socioeconomic components of the GOA fixed gear groundfish fisheries and an analysis of the effects of the proposed action may be found in the Regulatory Impact Review (Chapter 3 of this document).

2.7 Cumulative Effects

Analysis of the potential cumulative effects of a proposed action and its alternatives is a requirement of NEPA. Cumulative effects result from the incremental impact of the proposed action in addition to past, present, and reasonably foreseeable future actions. The Alaska Groundfish Fisheries PSEIS (NOAA 2004a) assesses the potential direct and indirect effects of groundfish FMP policy alternatives in combination with other factors that affect physical, biological and socioeconomic components of the BSAI and GOA environment.

Beyond the cumulative impacts analysis documented in the Groundfish PSEIS, no additional past, present, or reasonably foreseeable cumulative negative impacts on the natural and physical environment (including fish stocks, essential fish habitat, ESA-listed species, marine mammals, seabirds, or marine ecosystems), fishing communities, fishing safety or consumers have been identified that would occur as a result of the proposed action. The proposed action, in combination with other actions, may have additional economic effects on sectors participating in the GOA fixed gear groundfish fisheries. In recent years, several regulatory changes implemented to protect Steller sea lions have had economic effects on participants in the GOA fixed gear groundfish fisheries. The cumulative impacts from recent management actions are one of the driving forces behind industry support for the proposed amendment. Other fisheries in the region are subject to increasingly restrictive management measures. The GOA groundfish fisheries are among the few open access fisheries remaining. Participants that depend on these fisheries are concerned that changes in other fisheries will result in increased numbers of displaced vessels entering the GOA fisheries. Recent actions include:

- the IFQ halibut and sablefish fisheries
- AFA rationalization of the BSAI pollock fishery
- Amendment 67 to the BSAI groundfish management plan that established LLP endorsements specifically for fixed gear Pacific cod fishery participants
- BSAI crab rationalization
- GOA rockfish pilot program – initially approved for two years but recently extended under reauthorization of the Magnuson-Stevens Act
- GOA and BSAI trawl LLP recency

Several reasonably foreseeable future actions are expected to have additional social and economic effects on these sectors, including the GOA Pacific cod sector allocations and revisions to the GOA Pacific cod sideboards. These social and economic effects are addressed in the Regulatory Impact Review (RIR), found in Chapter 3 of this document.

3.0 REGULATORY IMPACT REVIEW

This chapter provides information on the economic and socioeconomic impacts of the alternatives, as required by Executive Order (E.O.) 12866 (58 FR 51735; October 4, 1993). This chapter includes a description of the current GOA fixed gear groundfish fisheries, an analysis of the potential effects of the proposed fixed gear recency action on the fisheries, identification of the individuals or groups that may be affected by the action, and a discussion of the nature of those impacts (quantifying the economic impacts where possible) and potential tradeoffs.

The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following Statement from the order:

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider. Further, in choosing among alternative regulatory approaches, agencies should select those approaches that 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.

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:

- (1) 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, the environment, public health or safety, or State, local, or tribal governments or communities;
- (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- (4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

3.1 The Limited License Program (LLP)

The Limited License Program (LLP) limits access to the Federal groundfish and crab fisheries in the BSAI and GOA.⁴ In the mid to late 1990s, the Council developed the LLP to address capacity concerns and take a first step toward rationalization of the groundfish fisheries under its management. Fishing under the program began in 2000. The LLP requirement does not apply to Pacific halibut or lingcod, which are not considered groundfish under the Federal Fisheries Management Plans (FMPs). In addition, some Federal groundfish fisheries are not subject to the LLP requirement. In Federal regulations, License Limitation groundfish includes target species and the ‘other species’ category, specified annually pursuant to 679.20(a)(2).

The LLP established criteria for the issuance of licenses to persons based on the fishing history of vessels. This discussion briefly summarizes the primary provisions applicable to the fixed gear participants. The LLP defined a general qualification period (GQP) and an endorsement qualification period (EQP) both of which must have been satisfied for a management subarea for a vessel owner to receive a license. Vessels that met requirements for more than one subarea endorsement were issued a single, non-severable LLP license with multiple area endorsements. Qualification criteria differ across areas and subareas, and include a variety of exceptions meant to address specific circumstances in the different areas.

Table 3-1 shows the primary GQP and EQP requirements applicable to trawl vessels in the various BSAI and GOA subareas. In general, the endorsements and EQP catch requirements apply to a single subarea. However, the Central GOA endorsement and EQP catch requirements treat the Central GOA area and West Yakutat district as a single LLP endorsement area. Catch in either the Central GOA or West Yakutat qualified a vessel for a Central GOA endorsement, and this endorsement allows a vessel to fish in both the Central GOA and West Yakutat. EQP requirements differ across the different endorsement areas.⁵

Table 3-1 General LLP license issuance criteria.

Management area	General Qualification Period (GQP) (Jan. 1, 1988 – June 27, 1992)	Endorsement area	Vessel length and operation	Endorsement Qualification Period (EQP) (Jan. 1, 1992 - June 17, 1995)
Bering Sea and Aleutian Islands	One landing	Bering Sea	All vessels	One landing
		Aleutian Islands	All vessels	One landing
GOA	One landing	Western GOA	CVs ≥ 125 ft and CPs ≥ 60 ft	One landing in at least two calendar years
			CVs < 125 ft and CPs < 60 ft	One landing
		Central GOA	All vessels, ≥ 60 ft	One landing in at least two calendar years
			All vessels < 60 ft	One landing

⁴ Amendment 39 to the BSAI groundfish plan and Amendment 41 to the groundfish plan for the GOA established the LLP. The primary rules governing the LLP are contained in 50 CFR 679.4(k).

⁵ Notably, persons fishing only inside 3 nm (i.e., in State waters only) were eligible for an LLP license based on their State waters participation. However, persons that never acquired a Federal fisheries permit (FFP), required for participation in fisheries in Federal waters, were issued LLPs that are not transferable from the originating vessel.

In addition to the different area endorsements, LLP licenses also carry a designation for operation type (catcher processor or catcher vessel), gear (trawl or fixed gear), and maximum vessel length (MLOA). LLP licenses were issued catcher processor designations if groundfish were processed on the vessel during the period from January 1, 1994 through June 17, 1995 or the last calendar year of the EQP. It is important to recognize that licenses of either operation type (catcher vessel or catcher processor) authorize participation as a catcher vessel. As a result, removing inactive catcher vessel licenses will not prevent entry of catcher processor licenses into the catcher vessel sector.⁶ Each license carries a gear designation (trawl or fixed gear) based on the gear used on the vessel during the period from January 1, 1988 through June 17, 1995. If a vessel used both trawl and fixed gear during the qualifying period, its license received both gear designations.

Primary LLP License Endorsements and Designations

Area endorsements – Each license carries one or more LLP area endorsements authorizing entry to fisheries in those LLP areas (BS, AI, CG, WG, or SEO).

Operation-type designations – Each license carries a designation for either catcher processor operation or catcher vessel operation. A catcher processor may choose to operate as a catcher vessel, delivering its catch to shore or to a mothership.

Gear designation – Each license carries a gear designation, trawl and/or fixed gear, authorizing its entry in fisheries for the designated gear.

MLOA designation – Each license carries a maximum LOA designation, limiting the length of the vessel that can use the license.

Non-severability – The endorsements and designations of a license are non-severable and only transfer with the license.

Finally, each license carries an MLOA endorsement. The MLOA of the vessel assigned to the license cannot exceed the MLOA endorsements on that license. For vessels 125 feet or greater in length on June 24, 1992, the MLOA endorsement is equal to the vessel length. For vessels less than 125 feet in length on that date, the MLOA endorsement is the lesser of 1.2 times the LOA or 125 feet. If a vessel was under reconstruction on June 24, 1995, the basis for determining the MLOA is the vessel's length on completion of the reconstruction. In addition, vessels under 60 feet on June 17, 1995 (or under construction on that date with a reconstructed LOA under 60 feet) cannot have an MLOA greater than 60 feet; vessels under 125 feet on June 17, 1995 (or under construction on that date with a reconstructed LOA under 125 feet) cannot have an MLOA greater than 125 feet; and vessels under construction on that date with a reconstructed LOA over 125 feet will have an MLOA equal to the vessel's reconstructed length.

3.1.1 Exemptions from the LLP requirement

Generally, vessels participating in the groundfish fisheries in Federal waters in the BSAI or GOA are required to have an LLP license with the applicable area endorsement, gear designation (trawl or fixed gear), and operation type designation (catcher processor or catcher vessel), and cannot exceed the allowed MLOA. There are several exemptions from the LLP requirement, including:

- (1) Vessels fishing exclusively in parallel or State waters fisheries
- (2) Vessels less than 26 feet LOA in the GOA and less than 32 feet LOA in the BSAI
- (3) Vessels less than 60 ft LOA using jig gear in the BSAI directed groundfish fisheries, subject to gear restrictions (maximum of 5 jig machines, one line per machine, and 15 hooks per line)

⁶ This transition could occur one of two ways. First, catcher processor licenses can be voluntarily (and irreversibly) converted to a catcher vessel license. In addition, a catcher processor may choose to deliver its catch to shore or to a mothership.

(4) Vessels participating in the IFQ halibut and sablefish fisheries. Vessels fishing IFQ may also retain groundfish bycatch without a license. This provision was included in the LLP to minimize discards, and is consistent with National Standard 9 of the Magnuson-Stevens Act.

3.1.2 Pacific cod endorsements

Participation in the directed fisheries for Pacific cod in the Bering Sea and Aleutian Islands with pot or hook-and-line gear requires a gear-specific Pacific cod endorsement, in addition to an LLP license with the appropriate gear designation and area endorsements. These endorsements were created under Amendment 67 to the BSAI FMP and became effective on January 1, 2003. Pacific cod endorsements are not required to participate in the BSAI fisheries using trawl and jig gear. Four endorsements were created under Amendment 67: hook-and-line catcher vessel, pot catcher vessel, hook-and-line catcher processor, and pot catcher processor. The program used a vessel basis for determining qualification, because the LLP had not been implemented during the qualification periods. Vessels were required to meet various catch thresholds to qualify for the different endorsements. Qualification criteria for endorsements are summarized in Table 3-2. Vessels using jig gear could qualify for either a hook-and-line catcher vessel or pot catcher vessel endorsement based on their combined jig and hook-and-line catch or jig and pot catch, respectively.

Table 3-2 Qualification criteria for BSAI Pacific cod LLP endorsements.

Operation type	Gear type used for harvests	Pacific cod harvest threshold	Pacific cod endorsement
Catcher vessel	Hook-and-line or jig	7.5 mt in one year from 1995 to 1999	Hook-and-line catcher vessel
	Pot or jig	100,000 pounds (45 mt) in each of any two years from 1995 to 1999	Pot catcher vessel
Catcher processor	Hook-and-line or jig	270 mt in any one year from 1996 to 1999	Hook-and-line catcher processor
	Pot	300,000 pounds (136 mt) in each of any two years from 1995 to 1998	Pot catcher processor

Under Amendment 67, vessels with multiple licenses were only allowed to qualify for BSAI Pacific cod endorsements on a single license, in order to avoid increasing the capacity for additional entry into the fishery. However, individual licenses could qualify for more than one gear endorsement, although they could not qualify for more than one operation type endorsement within each gear type. For example, a license can carry a pot catcher vessel or pot catcher processor endorsement, but not both. However, a pot catcher processor endorsement allows that vessel to fish as either a catcher processor or catcher vessel. It should be noted that one groundfish license currently has 3 BSAI Pacific cod endorsements. This license has both a catcher vessel and catcher processor endorsement for pot gear. These endorsements still have interim status and are being adjudicated by RAM. Once the adjudication process is completed, licenses will have a maximum of two BSAI Pacific cod endorsements, one for each gear type.

Qualification thresholds for BSAI Pacific cod endorsements were based on retained catch from the directed Pacific cod fishery and excluded catch used for personal bait. Any vessel under 60 feet was exempt from the endorsement requirements. The action also contained a provision to address unavoidable circumstances. Although the action only limited entry to the Pacific cod fishery, the Bering Sea and Aleutian Islands catcher processor capacity reduction act (which was part of the Consolidated Appropriations Act of 2005) extended the scope of the endorsements for catcher processors to several

other species, specifically Atka mackerel, flathead sole, Pacific Ocean perch, rock sole, Greenland turbot, and yellowfin sole.

Key BSAI Pacific cod LLP endorsement provisions under Amendment 67:

- Vessels with multiple LLP licenses only received Pacific cod endorsements on a single license, but individual licenses were eligible to qualify for up to 2 gear/operation type endorsements (pot and hook-and-line CV or CP)
- Jig catch could be combined with either pot or hook-and-line catch to qualify for a pot or hook-and-line endorsement
- Vessels less than 60 feet LOA are exempt from BSAI Pacific cod endorsement requirements
- Vessels exempt from the LLP and vessels catching Pacific cod for personal use bait are not required to hold Pacific cod endorsements

3.2 Existing conditions in the fisheries

Pacific cod is the primary groundfish species targeted by the fixed gear sectors in the Western and Central GOA. During 2000-2006, Pacific cod comprised nearly 98% of retained groundfish harvests by vessels using fixed gear in the Western and Central GOA, excluding the IFQ halibut and sablefish fisheries. The number of vessels participating in a fishery is one measure of effort, although it does not capture variables such as the catching power of the fleet. There have been notable increases in participation in the directed Pacific cod fisheries in the GOA during recent years (Table 3-3). For example, in both the Western and Central GOA, participation by pot hook-and-line catcher vessels <60 ft MLOA has increased substantially in recent years. In the Central GOA, the number of ≥60 ft pot CVs participating in the directed Pacific cod fisheries has increased during recent years. In the Western GOA, pot CV participation by vessels ≥60 ft LOA declined somewhat during the past several years. In 2006, sideboards went into effect that limit Pacific cod harvests by recipients of initial allocations of BSAI *C. opilio* crab quota. These sideboard provisions limit participation by some pot vessels that historically fished in the GOA. Specifically, the sideboards prohibit 137 vessels from directed fishing for GOA Pacific cod, and limit Pacific cod harvests by 82 additional vessels to a sideboard limit. In addition to these sideboarded vessels, 36⁷ fixed gear groundfish LLP licenses are subject to the Pacific cod sideboards, and 11 licenses are prohibited from directed fishing for Pacific cod in the GOA. Short season lengths are another indication that the Western and Central GOA Pacific cod fisheries are fully subscribed. During recent years, the Pacific cod A season TACs have typically been harvested within one month of the January 20 trawl season opening. Future increases in effort may cause economic dislocation and hardship for those participating in and dependent upon GOA groundfish fisheries.

Table 3-3 Number of fixed gear vessels participating in the directed Pacific cod fisheries.
Western GOA

Year	HAL <125	HAL ≥125	HAL CV <60	HAL CV ≥60	Jig CV	Pot CV <60	Pot CV ≥60	POT CP
2000	10	2	2	0	2	37	44	2
2001	9	2	4	0	16	31	10	3
2002	7	4	3	0	26	33	15	2
2003	5	9	1	0	11	42	17	1
2004	3	4	4	0	22	53	28	1
2005	2	3	15	0	6	39	19	1
2006	7	5	5	0	1	33	18	0
2007	7	3	13	1	4	30	17	1
2008	10	2	8	2	8	42	16	1

⁷ The Council took final action in October 2008 to exempt 3 vessels and 3 licenses from the sideboards. Previously, 85 vessels and 40 groundfish LLP licenses were subject to the sideboards.

Central GOA

Year	HAL <125	HAL ≥125	HAL CV <60	HAL CV ≥60	Jig CV	Pot CV <60	Pot CV ≥60	POT CP
2000	3	0	142	6	16	56	58	4
2001	1	0	110	2	14	34	28	3
2002	0	4	72	2	6	28	17	3
2003	2	2	63	2	7	22	13	0
2004	1	2	60	6	29	22	13	0
2005	1	1	64	6	25	25	22	0
2006	1	5	62	6	24	36	23	0
2007	2	2	82	5	18	40	22	1
2008	4	3	90	6	12	38	20	0

Source: ADFG Fish Tickets and NMFS Catch Accounting/Blend, 2000-2008. Note: Excludes IFQ fisheries

Table 3-4 reports the number of unique vessels that participated in the fixed gear Pacific cod fisheries during 2000-2006 in the Western and Central GOA. These numbers may be compared with the number of vessels that participated annually during 2000-2006 for some perspective on the frequency of new entrants into each sector. For example, the pot fleet in the Central GOA has been fairly stable. There were 76 pot vessels <60 ft LOA participating in the directed fishery during 2000-2006, and 56 of those vessels fished during 2000, indicating that there have only been 20 additional vessels participating in the <60 ft LOA pot sector since 2000. Participation in the jig sector has been more variable. During 2000-2006, 71 different vessels fished using jig gear in the Central GOA, but the maximum number of participants in any one year was 29 vessels. Similarly, 216 hook-and-line vessels <60 LOA had catch in the directed Pacific cod fisheries in the Central GOA during 2000-2006, but only 60 to 142 vessels have fished during a given year, indicating that a large number of vessels participate during some, but not all years.

Table 3-4 Number of unique vessels in each sector that participated in the directed Pacific cod fisheries in the Western and Central GOA during 2000-2006.

Number unique vessels from 2000-2006	HAL CP <125	HAL CP ≥125	HAL CV <60	HAL CV ≥60	Jig CV	Pot CV <60	Pot CV ≥60	Pot CP
Western GOA	12	16	28	0	61	80	74	5
Central GOA	6	8	216	15	71	76	73	6

Source: ADFG Fish Tickets and NMFS Catch Accounting/Blend, 2000-2007. Note: Excludes IFQ fisheries

3.3 Revenues from the fixed gear groundfish fisheries

Gross revenues in all Alaska commercial fisheries by catcher vessels that used fixed gear in the directed Pacific cod fisheries in the Central or Western GOA are summarized in Table 3-5. Revenues are reported based on the sector that a vessel participated in during a given year in the Central or Western GOA directed Pacific cod fisheries. Table 3-5 also shows each sector's economic dependence on the GOA Pacific cod fisheries versus other Alaska fisheries. Pot vessels that did not qualify for BSAI crab allocations were highly dependent on GOA Pacific cod (19.7% of revenues), as well as the State GOA Pacific cod fisheries (11.5%) and IFQ halibut (25.1%). Crab-qualified pot CVs earned 14.6% of revenues from GOA Pacific cod during 2001-2007, and 65.3% of revenues from crab. Hook-and-line CVs earned 8.4% from GOA Pacific cod and 58% from halibut IFQ. Finally, jig vessels earned only 6.5% from the GOA Pacific cod fisheries, but also earned an additional 19.3% of revenues from the State GOA Pacific cod fisheries, and 43.3% of revenues from salmon.

Table 3-5 Percentage of gross revenues from GOA Pacific cod and other fisheries by catcher vessels that participated in the GOA directed Pacific cod fisheries, averaged from 2001-2007.

Sector	Fishery	Vessels	Tons	Revenues	Percent of revenues
Hook-and-line CV	GOA Pacific Cod	132	5,564	\$4,422,751	8.4%
	State GOA Pacific Cod	24	1,006	\$815,727	1.5%
	BSAI Other Groundfish	13	961	\$1,416,293	2.7%
	BSAI Pacific Cod	17	1,040	\$815,479	1.5%
	GOA Other Groundfish	69	3,933	\$1,209,310	2.3%
	IFQ Halibut	105	4,630	\$30,578,179	58.0%
	IFQ Sablefish	54	1,498	\$7,295,575	13.8%
	Other	62	472	\$247,664	0.5%
	Salmon	62	5,025	\$3,517,411	6.7%
	Shellfish	20	508	\$2,410,427	4.6%
	Total	569	24,636	\$52,728,815	100.0%
Jig CV	GOA Pacific Cod	28	149	\$99,019	6.5%
	State GOA Pacific Cod	21	425	\$292,917	19.3%
	BSAI Other Groundfish	1	*	*	*
	BSAI Pacific Cod	3	28	\$21,096	1.4%
	GOA Other Groundfish	6	7	\$3,305	0.2%
	IFQ Halibut	6	65	\$346,984	22.9%
	IFQ Sablefish	1	*	*	*
	Other	10	60	\$38,358	2.5%
	Salmon	13	1,115	\$655,908	43.3%
	Shellfish	4	12	\$57,595	3.8%
	Total	100	1,860	\$1,516,116	100.0%
Crab qualified Pot CV	GOA Pacific Cod	13	2,285	\$1,634,973	14.6%
	State GOA Pacific Cod	2	*	*	*
	BSAI Other Groundfish	8	30	\$81,569	0.7%
	BSAI Pacific Cod	8	1,856	\$1,363,502	12.2%
	GOA Other Groundfish	4	2	\$501	0.0%
	IFQ Halibut	2	*	*	*
	IFQ Sablefish	1	*	*	*
	Other	8	12	\$13,542	0.1%
	Salmon	1	*	*	*
	Shellfish	12	1,285	\$7,299,936	65.3%
	Total	56	5,714	\$11,176,266	100.0%
Non Crab qualified Pot CV	GOA Pacific Cod	87	9,583	\$6,913,255	19.7%
	State GOA Pacific Cod	62	5,973	\$4,047,893	11.5%
	BSAI Other Groundfish	8	443	\$421,760	1.2%
	BSAI Pacific Cod	13	2,476	\$1,603,858	4.6%
	GOA Other Groundfish	35	6,673	\$1,577,411	4.5%
	IFQ Halibut	36	1,431	\$8,823,240	25.1%
	IFQ Sablefish	11	330	\$1,555,630	4.4%
	Other	54	1,570	\$608,213	1.7%
	Salmon	37	11,967	\$5,219,824	14.9%
	Shellfish	30	787	\$4,356,802	12.4%
	Total	382	41,233	\$35,127,885	100.0%

Source: ADFG fish tickets and CFEC gross revenues data, 2001-2007

Table 3-6. Total first wholesale revenues from Alaska fisheries by catcher processors participating in the GOA Pacific cod fisheries during 2001-2006.

Gear	Area	Fishery	Number of vessels	Total catch (mt)	Total revenues	Percent of revenues	
	BSAI	Atka Mackerel	8	8	\$4,909	0%	
		Flatfish	30	6,244	\$4,483,059	1%	
		Pacific Cod	34	232,770	\$282,121,120	77%	
		Pollock	34	8,209	\$6,275,126	2%	
		Rockfish	29	308	249,187	0%	
		Sablefish	20	945	\$4,681,280	1%	
		BSAI Total			248,485	\$297,814,682	82%
Hook-and-line CPs	GOA	Atka Mackerel	3	1	\$986	0%	
		Flatfish	23	323	\$358,847	0%	
		Pacific Cod	33	26,749	\$31,271,457	9%	
		Pollock	28	111	\$42,457	0%	
		Rockfish	25	844	\$763,599	0%	
		Sablefish	19	7,148	\$34,256,872	9%	
		GOA Total			35,176	\$66,694,219	18%
BSAI and GOA Total				283,661	\$364,508,901	100%	
Pot CPs	BSAI	Atka Mackerel	1	*	*	*	
		Flatfish	1	*	*	*	
		Pacific Cod	3	1,439	\$1,489,190	32%	
		Pollock	2	*	*	*	
		Sablefish	1	*	*	*	
	BSAI Total				*	32%	
	GOA	Atka Mackerel	2	*	*	*	
		Pacific Cod	6	2,828	\$3,153,216	68%	
		Rockfish	1	*	*	*	
		GOA Total		2,828	\$3,153,268	68%	
BSAI and GOA Total				4,274	\$4,648,667	68%	
Trawl CPs	BSAI	Atka Mackerel	20	228,946	\$148,745,652	19%	
		Flatfish	22	373,660	\$297,487,330	38%	
		Pacific Cod	22	110,012	\$131,020,996	17%	
		Pollock	22	60,413	\$47,685,964	6%	
		Rockfish	20	37,458	\$29,749,227	4%	
		Sablefish	19	721	\$3,532,277	0%	
	BSAI Total				811,210	\$658,221,446	84%
	GOA	Atka Mackerel	16	1,791	\$1,079,160	0%	
		Flatfish	22	51,408	\$48,828,975	6%	
		Pacific Cod	21	8,973	\$10,616,356	1%	
		Pollock	20	1,693	\$633,220	0%	
Rockfish		21	54,344	\$51,697,577	7%		
Sablefish	21	2,815	\$13,367,086	2%			
GOA Total				121,024	\$126,222,374	16%	
BSAI and GOA Total				932,234	\$784,443,820	100%	

Source: Retained catch data from Catch Accounting/Blend database, 2001-2006. First wholesale price per ton from Economic SAFE (Hiatt, 2007). *Withheld for confidentiality.

First wholesale revenues for catcher processors that participated in the GOA Pacific cod fisheries are summarized in Table 3-6. The table shows that the GOA Pacific cod fisheries are a relatively small proportion of total production by trawl catcher processors. Trawl catcher processors mostly catch GOA

Pacific cod incidentally while participating in other directed fisheries, and revenues from GOA Pacific cod comprised only 1% of first wholesale revenues during 2001-2006. Revenues for hook-and-line catcher processors were mainly from the BSAI Pacific cod fishery during 2001-2006 (77%). GOA Pacific cod and sablefish each comprised 9% of first wholesale revenues for hook-and-line catcher processors during 2001-2006. Relatively few pot catcher processors participate in the GOA and BSAI Pacific cod fisheries. During 2001-2006, those pot CPs that participated in the GOA Pacific cod fisheries earned the majority of first wholesale revenues from the GOA Pacific cod fisheries (68%), and the remainder of revenues from the BSAI Pacific cod fishery.

3.4 Expected Effects of the Alternatives

This section provides an overview of the expected effects of the proposed action on the number of fixed gear groundfish licenses eligible to participate in the groundfish fisheries in Federal waters of the Western and Central GOA. Data are presented to show the effects of the various components and options on existing fixed gear licenses. Following this overview is a discussion of the potential economic and socioeconomic effects which may occur as a result of removing latent fixed gear licenses from the GOA groundfish fisheries. This discussion also addresses the potential effects of creating Pacific cod endorsements, which would further limit entry to the directed Pacific cod fisheries in the GOA. Finally, effects on harvesters, processors, and communities are analyzed, followed by a description of the cumulative effects of the proposed amendment and other recent actions, and an analysis of the net benefits to the Nation.

3.4.1 Alternative 1 – No Action

Under the no action alternative, there would be no reduction in the number of fixed gear groundfish licenses with Western and Central GOA endorsements. If this alternative is selected, latent fixed gear licenses could enter the GOA groundfish fisheries in the future and dilute revenues, increase costs, or both, for licenses that have participated in the fisheries during recent years. Increased participation may result in negative economic impacts on current participants in the fisheries. The number of licenses that might enter the fisheries in the absence of this action is unknown, and depends on future market conditions, the size of groundfish TACs, opportunities to participate in other fisheries, the future regulatory environment, and operating costs in the fisheries. Consequently, this analysis does not provide a quantitative estimate of the potential economic impacts of the no action alternative.

Current number of fixed gear groundfish licenses

The number of fixed gear licenses with Western and Central GOA endorsements is reported by operation type and maximum length overall (MLOA) in Table 3-7. The table also indicates the number of licenses that have other area endorsements in addition to a Western or Central GOA endorsement. There are 884 fixed gear catcher vessel licenses with Central GOA endorsements and 266 fixed gear catcher vessel licenses with Western GOA endorsements. Most of these licenses may only be used on vessels less than 60 feet LOA. Fewer than 25% of catcher vessel licenses with Central GOA endorsements also have BSAI or Western GOA endorsements. In contrast, more than half of catcher vessel licenses with Western GOA endorsements also have BSAI or Central GOA endorsements. There are 49 Central GOA and 31 Western GOA CP licenses, and the majority of these licenses also carry BSAI endorsements. Only a small number of catcher processor licenses are restricted for use on vessels less than 60 feet LOA. This is the universe of fixed gear licenses that would continue to exist in the absence of the proposed amendment to remove inactive licenses from the fisheries.

Table 3-7 GOA fixed gear LLP licenses by endorsement area, operation type, MLOA, and gear designation.

	Number of endorsements		Licenses that also have an endorsement (or designation) for:					
	All licenses	Licenses with MLOA <60 feet	Central GOA	Western GOA	Aleutian Islands	Bering Sea	Southeast Outside	Trawl
Central GOA CV	884	703	--	176	62	159	179	114
Central GOA CP	49	5	--	27	41	45	5	8
Western GOA CV	266	156	176	--	64	158	43	78
Western GOA CP	31	1	27	--	30	31	3	4

Source: NMFS RAM groundfish license file, October 2008.

3.4.2 Alternative 2 – Proposed Recency Action

This section describes the impacts of the proposed action on the universe of fixed gear licenses that are currently eligible to participate in the groundfish fisheries in Federal waters of the Western and Central GOA. The proposed action has two parts. First, the action would remove Western and Central GOA area endorsements from fixed gear LLP licenses that do not have recent catch history in the parallel or Federal waters groundfish fisheries. Second, the action would add Pacific cod endorsements to fixed gear licenses. Licenses would be required carry a Pacific cod endorsement, in addition to the appropriate area endorsement, to participate in the directed Pacific cod fisheries in Federal waters of the Western and Central GOA. The Council could choose to implement both parts of this action, or could add Pacific cod endorsements to fixed gear licenses without removing licenses from the fisheries. The action would result in an amendment to the GOA Fisheries Management Plan (FMP).

The tables in this section show the number of fixed gear licenses that meet the various landings and catch thresholds during the 4 potential qualifying periods (2000-2005, 2000-2006, 2002-2005, 2002-2006), and also show the additional number of licenses that would qualify if landings during 2007 through June 4, 2008 are included in addition to landings during the 4 qualifying periods, based on:

- (1) All retained catch of groundfish from the parallel and Federal fisheries, and
- (2) Retained catch of directed Pacific cod from the parallel and Federal fisheries.

Both catch definitions exclude IFQ catch and State waters catch, and both catch definitions only credit licenses with landings made with fixed gear in the endorsement area. Note that licenses with Central GOA endorsements are also credited with landings in the West Yakutat management area, because under the LLP, the Central GOA endorsement authorizes licenses to fish in Federal waters of West Yakutat. Each table shows the number of licenses that would qualify under each of the 4 options under Component 4:

Option 1 – All groundfish 1, 3, 5 landings

Option 2 – All directed Pacific Cod 1, 3, 5 landings (resulting in a Pcod endorsement)

Option 3 – All groundfish 5, 10, 25, 100 mt

Option 4 – All directed Pacific Cod 5, 10, 25, 100 mt (resulting in a Pcod endorsement)

Options 1 and 3 define the criteria licenses must meet to retain their Central and/or Western GOA area endorsements. Licenses are credited with all retained catch of groundfish from the Federal and parallel fisheries, excluding IFQ catch. Under these options, licenses that meet a landings threshold of 1, 3, or 5

landings or a catch threshold of 5, 10, 25, or 100 mt of groundfish in the Western or Central GOA would qualify to retain the respective area endorsement.

Options 2 and 4 define the criteria licenses must meet to qualify for a Pacific cod endorsement. Under these options, licenses are only credited with retained catch from the directed Pacific cod fisheries in Federal and parallel waters. Licenses that meet a landings threshold of 1, 3, or 5 landings or a catch threshold of 5, 10, 25, 100 mt in the respective management area would receive a Pacific cod endorsement. Directed Pacific cod catch is defined as landings made when the directed Pacific cod fisheries are open. Licenses are credited with landings made up to 7 days after the directed season closes.

Note that the Council could select either Option 1 or 3 to determine which licenses qualify to retain area endorsements, and could also select either Option 2 or 4 to determine which licenses qualify for Pacific cod endorsements. Again, the Council could implement both parts of this action, or could add Pacific cod endorsements to licenses without removing area endorsements from latent licenses. Finally, the Council could choose different landings or catch thresholds for different sectors based on operation type, gear type, or vessel length.

Potential Range of Outcomes from this Action

Based on the existing set of options, there is a range of possible outcomes from this action:

1. Status quo- no fixed gear licenses removed from the Western and Central GOA fisheries.
2. Remove Western and/or Central GOA area endorsements from fixed gear licenses with no recent participation in the fisheries.
3. Add Pacific cod endorsements to fixed gear licenses to limit entry to the directed Pacific cod fisheries in Federal waters of the Western or Central GOA.
4. Add gear-specific Pacific cod endorsements to fixed gear licenses to limit entry to the directed Pacific cod fisheries and to limit access to the Pacific cod sector allocations.
5. Add gear-specific Pacific cod endorsements to fixed gear licenses, and restrict licenses to the operation type on their license, i.e. licenses with a catcher processor designation could only fish off the catcher processor sector allocations.

Catcher Vessel Licenses

The number of fixed gear catcher vessel licenses that meet each landings and catch threshold is reported in Table 3-8. The number of licenses that would qualify to retain Western and Central GOA area endorsements depends upon the catch definition, landings or catch threshold, and qualification period selected. There are potentially two parts to the proposed action. First, the action could remove Western and Central GOA area endorsements from fixed gear LLP licenses that do not have recent catch history in the parallel or Federal waters groundfish fisheries. The upper portion of each table shows the number of licenses that would qualify to retain Western and Central GOA area endorsements based on all qualified groundfish landings in the respective management area. Second, the proposed action could add Pacific cod endorsements to fixed gear licenses. Licenses would be required carry a Pacific cod endorsement, in addition to the appropriate area endorsement, to participate in the directed Pacific cod fisheries in the Western and Central GOA. The lower portion of each table shows the number of licenses that meet the catch and landings thresholds based on catch in the directed Pacific cod fisheries in parallel and Federal waters in the respective management area. If the Council chooses to add Pacific cod endorsements to fixed gear licenses, this is the number of licenses with each area endorsement that would potentially qualify for Pacific cod endorsements. The Council could choose to implement both parts of this action, or

could add Pacific cod endorsements to fixed gear licenses without removing latent licenses from the fisheries.

There are currently 266 Western GOA fixed gear licenses, and 51 to 101 of these licenses meet the various landings or catch (mt) thresholds based on all groundfish catch during the qualification periods in Options 1 through 4 and would retain Western GOA area endorsements. Under the second part of the action, 51 to 94 of these licenses would qualify for a Pacific cod endorsement. There are 884 Central GOA fixed gear licenses, and based on all groundfish catch during the qualifying periods in Options 1 through 4, 98 to 296 licenses would retain Central GOA area endorsements; 97 to 269 of these licenses would qualify for a Pacific cod endorsement. If area endorsements are removed from latent licenses, the number of fixed gear catcher vessel licenses would be reduced to 19% to 38% of current capacity in the Western GOA and 11% to 33% of current capacity in the Central GOA, based on the qualifying periods in Options 1 through 4.

The number of qualifying Central GOA licenses varies substantially depending on the range of qualifying years used to determine catch history. If 2000-2001 catch history is included, more than 80 additional Central GOA licenses meet the 1 landing threshold. The qualification period makes somewhat less of a difference for Western GOA licenses. In general, most Western GOA licenses with fishing history during 2000-2005 or 2000-2006 were also active during 2002-2005 and 2002-2006. Most Western and Central GOA licenses that have 3 or 5 landings also meet the 5 mt or 10 mt catch thresholds. However, only about half of the licenses that meet the 1 landing threshold during a given qualifying period meet the 100 mt threshold during the same time period.

If landings during 2007 through June 4, 2008 are included (Option 5), in addition to landings during one of the qualifying periods under Options 1 through 4, approximately 10% to 15% more CV licenses meet the one landing threshold based on groundfish or directed cod landings (see Table 3-10). For example, 327 Central GOA licenses have at least one groundfish landing during 2000 through June 4, 2008, versus only 296 licenses during 2000-2006. Similarly, 114 Western GOA CV licenses have at least one groundfish landing during 2000-2008, versus only 101 licenses during 2000-2006. Licenses that qualify only under Option 5 would be designated non-transferable. Any area endorsement that is retained or Pacific cod endorsement that is granted under Option 5 would be extinguished upon transfer of the license to another vessel or owner.

Catcher Vessel Licenses by Gear Type Used

The number of licenses that meet each landings and catch threshold based on catch made while using a specific gear type is reported in Table 3-9. It is important to note that the gear type columns are not mutually exclusive. Licenses may have qualified landings using more than one fixed gear type, and as a result, the number of licenses in the columns in Table 3-9 may sum to more than the number of qualifying licenses in Table 3-8. In the absence of specific fixed gear type endorsements (i.e., pot, hook-and-line, or jig endorsements), these licenses could continue to fish using any fixed gear type.

The Council is considering options to add Pacific cod endorsements to fixed gear licenses. Licenses would be required to carry Pacific cod endorsements, in addition to the appropriate area endorsements, to participate in the directed Pacific cod fisheries in Federal waters of the GOA. Pacific cod endorsements could also have a specific gear designation, similar to the BSAI Pacific cod endorsements created under Amendment 67. Pacific cod endorsements could limit the number of licenses eligible to participate in the directed Pacific cod fisheries in the Western and Central GOA. However, vessels without LLP licenses, and licenses without Pacific cod endorsements, could continue to participate in the directed Pacific cod fisheries in parallel waters. Licenses would qualify for Pacific cod endorsements based on catch in the directed Pacific cod fisheries in Federal and parallel waters. Under the current options being considered,

incidental catch of Pacific cod outside of the directed season would not count toward the landings and catch thresholds. The lower portion of each table shows the number of licenses meeting each threshold based on catch in the directed Pacific cod fisheries using a specific gear type.

Under the current landings and catch thresholds, the number of gear-specific Pacific cod endorsements that would be added to fixed gear catcher vessel licenses includes:

Central GOA

- 62 to 169 hook-and-line endorsements (up to 196 under Option 5)
- 35 to 111 pot endorsements (up to 120 under Option 5)
- 0 to 19 jig endorsements (up to 22 under Option 5)

Western GOA

- 0 to 8 hook-and-line endorsements (up to 13 under Option 5)
- 51 to 83 pot endorsements (up to 93 under Option 5)
- 0 to 9 jig endorsements (up to 9 under Option 5)

The Council could choose different catch or landings thresholds for different gear types and MLOAs to account for differences in catch history among licenses in each sector. The qualification criteria used to establish BSAI Pacific cod endorsements under Amendment 67 are shown in Table 3-2. In the BSAI, vessels with pot history needed 100,000 lbs (45 mt) of catch in each of 2 years during 1995-1999 to qualify for a pot catcher vessel endorsement, and vessels with hook-and-line history needed 7.5 mt of catch in any one year during 1995-1999 to qualify for a hook-and-line catcher vessel endorsement. In determining the criteria that licenses will need to meet to qualify for GOA Pacific cod endorsements, the Council could take into consideration the differences in catch history among the gear types. For example, approximately 65% to 75% of Western GOA licenses that have at least one directed Pacific cod landing using pot gear also meet the highest (100 mt) catch threshold. Under most options, more than 50% of Central GOA licenses with pot and hook-and-line landings in the directed Pacific cod fishery in the Central GOA meet the 100 mt threshold. However, in the Western GOA, no licenses with hook-and-line catch history in the directed Pacific cod fishery meet the 100 mt threshold during any of the qualification periods. Similarly, most licenses with jig history have less than 10 mt of Pacific cod catch during all of the qualifying periods.

Some catcher vessel licenses have catch history using more than one fixed gear type. Under the current set of options being considered by the Council, these licenses could potentially qualify for more than one gear-specific Pacific cod endorsement. Note that under Amendment 67, licenses could qualify for up to 2 BSAI Pacific cod endorsements (pot and hook-and-line CP or CV). If licenses are allowed to qualify for more than one Western or Central GOA Pacific cod endorsement, the endorsements could be made non-severable to prevent license holders from selling their Pacific cod endorsements, which could result in an expansion of the fleet. Allowing individual licenses to hold more than one gear endorsement would give those licenses the flexibility to use different fixed gear types during a given fishing year or over a series of years.

Below is a summary of the number of licenses that meet the minimum catch threshold of 1 landing of directed Pacific cod during 2000-2006 using more than one fixed gear type (note that the number of licenses using more than one gear type for all groundfish landings is larger):

Central GOA

- 18 licenses have both pot and hook-and-line landings
- 10 licenses have both hook-and-line and jig landings

- 3 licenses have both pot and jig landings
- 1 license has pot, hook-and-line, and jig landings

Western GOA

- 2 licenses have both pot and hook-and-line landings
- 1 license has both hook-and-line and jig landings
- 4 licenses have both pot and jig landings
- 1 license has pot, hook-and-line, and jig landings

Catcher Vessel Licenses by Gear Type Used and MLOA

Table 3-10 reports the number of licenses that meet the landings and catch thresholds while using a specific gear type, reported by the MLOA on the license. This table provides an estimate of the number of licenses that would be eligible to fish the catcher vessel Pacific cod sector allocations, if separate allocations are established for vessels of different lengths (e.g. vessels <60 ft LOA and ≥60 ft LOA). However, it should be noted that the number of licenses shown in each size category in Table 3-10 is based on the MLOA on the license, and is not based on the length of the vessel assigned to the license. In some cases, the MLOA on the license is larger than the LOA of the vessel assigned to that license. Also, note that some vessels have multiple (i.e., stacked) licenses, and the number of licenses in each length category may be greater than the number of vessels in that length category with recent participation in the fisheries. These estimates provide some perspective on how the catcher vessel sectors could be divided by vessel length for the purpose of establishing Pacific cod sector allocations. For example, dividing the pot catcher vessel sector at 60 feet LOA results in a fairly even distribution of licenses that could potentially fish the <60 ft LOA and ≥60 feet LOA allocations. In contrast, the hook-and-line sector is mostly comprised of licenses with an MLOA of <60 feet, and few active licenses are ≥60 feet MLOA. Vessels ≥60 feet LOA have historically taken a relatively small proportion of the Pacific cod catch in the Western GOA (less than 1%) and Central GOA (1 to 2%). Dividing the hook-and-line catcher vessel allocation at 50 feet LOA would result in a more even distribution of licenses eligible to fish those allocations.

The tables also show the number of additional licenses that would qualify in each gear and MLOA class if catch during 2007 through June 4, 2008 is included in addition to catch during one of the qualifying periods in Options 1 through 4. In the Central GOA, the majority of additional licenses that qualify are 50-60 ft MLOA and have pot history (8 additional licenses with 1 groundfish landing) or hook-and-line history (17 additional licenses with 1 groundfish landing). Similarly, in the Western GOA, the majority of additional licenses that qualify have an MLOA of 50-60 ft and have pot history (9 additional licenses with 1 groundfish landing).

**Table 3-8 Number of fixed gear catcher vessel licenses that meet the landings and catch thresholds.
The right hand side of the table includes landings from 2007- June 4, 2008.**

Western GOA – 266 CV licenses

Fishery	Threshold	2007- June 4, 2008 plus the period:							
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	101	98	89	83	114	114	104	102
	3 landings	85	82	78	74	99	96	94	91
	5 landings	77	73	71	67	93	89	88	85
	5 mt	85	84	77	74	101	101	95	94
	10 mt	79	78	73	69	95	95	91	89
	25 mt	74	72	66	63	89	87	83	81
	100 mt	55	53	54	51	62	61	62	59
Directed Pacific cod	1 landing	94	92	83	79	107	107	97	96
	3 landings	83	81	76	73	95	93	90	88
	5 landings	74	71	68	64	87	85	82	80
	5 mt	85	84	77	74	101	101	95	94
	10 mt	79	78	73	69	94	94	90	88
	25 mt	74	72	66	63	88	86	82	80
	100 mt	55	53	54	51	62	61	62	59

Central GOA – 884 CV licenses

Fishery	Threshold	2007- June 4, 2008 plus the period:							
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	296	278	215	193	327	320	256	249
	3 landings	251	239	185	168	279	275	223	218
	5 landings	232	218	169	150	258	255	206	201
	5 mt	250	235	187	166	281	274	224	216
	10 mt	236	222	178	160	264	258	214	207
	25 mt	202	190	162	142	233	227	196	189
	100 mt	151	141	111	98	171	165	142	132
Directed Pacific cod	1 landing	269	252	198	176	297	292	234	229
	3 landings	240	226	179	160	266	262	215	210
	5 landings	219	206	164	144	246	242	200	195
	5 mt	237	223	180	161	267	261	216	209
	10 mt	223	211	171	154	250	245	205	199
	25 mt	190	180	154	137	220	217	188	183
	100 mt	151	141	110	97	169	161	139	128

Source: ADFG Fish Tickets and RAM LLP groundfish license file dated October 2008.

Table 3-9 Number of fixed gear catcher vessel licenses that meet the landings and catch thresholds based on catch using a specific gear type. The lower table includes landings from 2007- June 4, 2008.

Western GOA licenses - 266 CV licenses

		Hook-and-line				Jig				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	13	11	10	8	13	12	13	12	85	83	74	70
	3 landings	4	3	4	3	7	7	7	7	79	76	71	67
	5 landings	2	2	1	1	5	5	5	5	73	70	67	63
	5 mt	6	5	5	4	6	6	6	6	78	77	69	66
	10 mt	3	*	3	*	3	3	3	3	75	75	68	65
	25 mt	0	0	0	0	*	*	*	*	71	69	63	60
	100 mt	0	0	0	0	0	0	0	0	55	53	54	51
Directed cod	1 landing	8	6	8	6	9	9	8	8	83	82	72	69
	3 landings	4	3	3	2	7	7	7	7	77	75	69	66
	5 landings	1	1	1	1	5	5	5	5	71	68	64	60
	5 mt	6	5	5	4	6	6	6	6	78	77	69	66
	10 mt	3	*	3	*	3	3	3	3	75	75	68	65
	25 mt	0	0	0	0	*	*	*	*	71	69	63	60
	100 mt	0	0	0	0	0	0	0	0	55	53	54	51

Western GOA licenses - 266 CV licenses

2007-June 4, 2008 plus the period below:

		Hook-and-line				Jig				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	18	18	15	15	13	12	13	12	97	96	87	85
	3 landings	8	7	8	7	7	7	7	7	90	88	84	82
	5 landings	6	6	5	5	5	5	5	5	85	82	80	77
	5 mt	12	12	11	11	6	6	6	6	88	88	81	80
	10 mt	10	10	10	10	3	3	3	3	86	86	81	79
	25 mt	6	6	6	6	*	*	*	*	81	79	75	73
	100 mt	0	0	0	0	0	0	0	0	62	61	62	59
Directed cod	1 landing	13	13	13	13	9	9	8	8	93	93	83	82
	3 landings	8	7	7	6	7	7	7	7	86	85	80	79
	5 landings	5	5	5	5	5	5	5	5	80	78	74	72
	5 mt	12	12	11	11	6	6	6	6	88	88	81	80
	10 mt	10	10	10	10	3	3	3	3	85	85	80	78
	25 mt	6	6	6	6	*	*	*	*	80	78	74	72
	100 mt	0	0	0	0	0	0	0	0	62	61	62	59

Source: ADFG Fish Tickets and RAM LLP groundfish license file dated October 2008. *Withheld for confidentiality.

Note: Gear type columns are not mutually exclusive, and the number of licenses in the columns in Table 3-11 may sum to more than the number of qualifying licenses in Table 3-10.

Central GOA licenses – 884 CV licenses

		Hook-and-line				Jig				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	192	179	139	124	45	42	30	26	113	106	79	69
	3 landings	158	148	115	104	19	14	11	7	102	98	70	62
	5 landings	144	134	103	92	12	9	8	5	93	89	66	57
	5 mt	160	147	119	104	7	5	6	4	103	99	72	64
	10 mt	146	135	111	100	4	3	4	3	99	95	69	61
	25 mt	121	112	101	90	*	0	*	0	84	81	62	53
	100 mt	85	80	70	64	0	0	0	0	66	61	42	35
Directed cod	1 landing	169	158	123	110	19	17	15	12	111	104	78	67
	3 landings	149	138	111	100	9	6	6	4	100	96	70	62
	5 landings	133	124	98	87	7	5	5	3	91	87	66	56
	5 mt	149	137	112	99	7	5	6	4	99	95	72	64
	10 mt	135	126	104	94	4	3	4	3	96	92	69	61
	25 mt	112	105	94	85	0	0	0	0	83	80	62	53
	100 mt	84	79	68	62	0	0	0	0	66	61	42	35

Central GOA licenses – 884 CV licenses

2007-June 4, 2008 plus the period below:

		Hook-and-line				Jig				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	220	213	172	165	51	50	36	35	125	123	95	92
	3 landings	182	178	143	139	23	21	16	14	109	108	83	81
	5 landings	164	161	127	124	16	15	12	11	101	100	79	77
	5 mt	187	179	148	140	10	8	9	7	110	109	82	80
	10 mt	171	165	139	133	4	3	4	3	106	105	80	78
	25 mt	143	140	123	120	*	0	*	0	92	91	74	71
	100 mt	96	95	84	83	0	0	0	0	75	69	59	50
Directed cod	1 landing	196	191	154	149	22	21	18	16	120	118	90	87
	3 landings	172	169	138	135	10	8	7	6	106	105	82	80
	5 landings	155	152	123	120	9	7	7	5	98	97	78	76
	5 mt	176	169	141	134	8	6	7	5	106	105	82	80
	10 mt	159	154	130	125	4	3	4	3	103	102	80	78
	25 mt	134	132	116	114	*	0	*	0	91	90	74	71
	100 mt	94	92	81	79	0	0	0	0	75	69	59	50

Source: ADFG Fish Tickets and RAM LLP groundfish license file dated October 2008. *Withheld for confidentiality.

Note: Gear type columns are not mutually exclusive, and the number of licenses in the columns in Table 3-11 may sum to more than the number of qualifying licenses in Table 3-10.

Table 3-10 Number of catcher vessel licenses that meet the landings and catch thresholds during 2000-2006 and 2000-2008 based on catch using a specific gear type, reported by the MLOA on the license. The lower table includes landings from 2007- June 4, 2008.

Western GOA- 266 CV licenses

MLOA	Hook-and-line				Jig				Pot				
	<40 feet	40-49 feet	50-59 feet	≥60 feet	<40 feet	40-49 feet	50-59 feet	≥60 feet	<40 feet	40-49 feet	50-59 feet	≥60 feet	
All groundfish	1 landing	0	0	9	4	1	3	9	0	0	2	60	23
	3 landings	0	0	3	1	1	2	4	0	0	2	54	23
	5 landings	0	0	2	0	1	1	3	0	0	1	52	20
	5 mt	0	0	*	0	0	*	*	0	0	*	55	22
	10 mt	0	0	*	0	0	*	*	0	0	*	53	21
	25 mt	0	0	*	0	0	*	*	0	0	*	50	21
	100 mt	0	0	0	0	0	0	0	0	0	0	37	18
Directed cod	1 landing	0	0	7	1	1	3	5	0	0	2	59	22
	3 landings	0	0	3	1	1	2	4	0	0	2	53	22
	5 landings	0	0	1	0	1	1	3	0	0	1	51	19
	5 mt	0	0	*	0	0	*	*	0	0	*	55	22
	10 mt	0	0	*	0	0	*	*	0	0	*	53	21
	25 mt	0	0	*	0	0	*	*	0	0	*	50	21
	100 mt	0	0	0	0	0	0	0	0	0	0	37	18

Western GOA- 266 CV licenses

2007-June 4, 2008 plus the period below:

MLOA	Hook-and-line				Jig				Pot				
	<40 feet	40-49 feet	50-59 feet	≥60 feet	<40 feet	40-49 feet	50-59 feet	≥60 feet	<40 feet	40-49 feet	50-59 feet	≥60 feet	
All groundfish	1 landing	0	1	9	6	1	3	9	0	0	2	69	26
	3 landings	0	1	4	1	1	2	4	0	0	2	60	25
	5 landings	0	0	3	1	1	1	3	0	0	1	56	23
	5 mt	0	0	7	3	0	*	4	0	0	*	62	25
	10 mt	0	0	5	3	0	*	*	0	0	*	61	24
	25 mt	0	0	*	*	0	*	*	0	0	0	57	24
Directed cod	1 landing	0	1	7	3	1	3	5	0	0	2	66	25
	3 landings	0	1	4	1	1	2	4	0	0	2	56	24
	5 landings	0	0	2	1	1	1	3	0	0	1	55	22
	5 mt	0	0	7	3	0	*	4	0	0	*	62	25
	10 mt	0	0	5	3	0	*	*	0	0	*	60	24
	25 mt	0	0	*	*	0	*	*	0	0	0	56	24
100 mt	0	0	0	0	0	0	0	0	0	0	43	19	

Source: ADFG Fish Tickets and RAM LLP groundfish license file dated October 2008. *Withheld for confidentiality.

Note: Length classes are based on the MLOA on each license, and not on the vessel assigned to that license. A vessel may have an LOA less than the MLOA on its license. The number of licenses qualifying in each MLOA length class may differ from the number of vessels in each LOA length class that have participated in the fisheries.

Central GOA- 884 CV licenses

	MLOA	Hook-and-line				Jig				Pot			
		<40 feet	40-49 feet	50-59 feet	≥60 feet	<40 feet	40-49 feet	50-59 feet	≥60 feet	<40 feet	40-49 feet	50-59 feet	≥60 feet
All groundfish	1 landing	18	83	75	16	4	18	20	3	0	7	57	49
	3 landings	18	78	56	6	1	8	9	1	0	6	50	46
	5 landings	16	72	50	6	1	3	6	1	0	5	49	39
	5 mt	18	77	56	9	*	*	3	*	*	*	51	*
	10 mt	16	69	53	8	0	*	*	*	0	*	*	*
	25 mt	15	56	43	7	0	*	0	0	0	*	43	37
	100 mt	12	*	30	5	0	*	0	0	0	*	35	30
Directed cod	1 landing	18	79	62	10	3	8	7	1	0	7	56	48
	3 landings	17	75	51	6	1	4	3	1	0	6	49	45
	5 landings	16	66	45	6	1	3	2	1	0	5	48	38
	5 mt	17	73	52	7	*	*	3	*	*	*	50	*
	10 mt	16	63	49	7	0	*	*	*	0	*	*	*
	25 mt	15	52	39	6	0	0	0	0	0	4	43	36
	100 mt	12	*	30	4	0	0	0	0	0	*	35	30

Central GOA- 884 CV licenses

2007-June 4, 2008 plus the period below:

	MLOA	Hook-and-line				Jig				Pot			
		<40 feet	40-49 feet	50-59 feet	≥60 feet	<40 feet	40-49 feet	50-59 feet	≥60 feet	<40 feet	40-49 feet	50-59 feet	≥60 feet
All groundfish	1 landing	20	87	92	21	5	20	23	3	0	8	65	52
	3 landings	19	83	63	8	1	10	10	1	0	6	54	47
	5 landings	17	75	57	8	1	5	8	1	0	6	52	40
	5 mt	20	80	73	14	*	*	6	*	0	5	56	49
	10 mt	18	73	67	13	0	*	*	*	0	4	56	46
	25 mt	15	60	57	11	0	*	0	*	0	4	49	39
	100 mt	13	41	36	6	0	0	0	0	0	3	39	33
Directed cod	1 landing	20	83	79	14	3	9	9	1	0	7	62	51
	3 landings	18	80	58	8	1	4	4	1	0	6	53	46
	5 landings	17	70	53	8	1	3	4	1	0	6	51	39
	5 mt	19	77	69	11	*	*	4	*	0	5	55	46
	10 mt	18	68	62	11	0	*	*	*	0	4	55	44
	25 mt	15	56	54	9	0	0	0	*	0	4	49	38
	100 mt	13	40	36	5	0	0	0	0	0	3	39	33

Source: ADFG Fish Tickets and RAM LLP groundfish license file dated October 2008. *Withheld for confidentiality.

Note: Length classes are based on the MLOA on each license, and not on the vessel assigned to that license. A vessel may have an LOA less than the MLOA on its license. The number of licenses qualifying in each MLOA length class may differ from the number of vessels in each LOA length class that have participated in the fisheries.

Catcher Processor Licenses

The number of catcher processor licenses that meet the various landings and catch thresholds is reported in Table 3-11. For the purpose of this analysis, catcher processor licenses were credited with both catcher processor and catcher vessel landings. The same rule was used for the trawl recency action. Catch Accounting data was used to determine the number of landings and retained catch (mt) by catcher processors. The Council elected to use Catch Accounting data rather than Weekly Production Reports for the GOA Pacific cod sector allocations to catcher processors. Catch Accounting data was used in this analysis to be consistent with the sector split analysis, but the Council could choose to use Weekly Production Reports instead. For the purpose of determining whether licenses meet the recency criteria, Catch Accounting data and Weekly Production Reports should produce similar results. One advantage of using Catch Accounting data to generate the estimates in this analysis is that landings by all vessels are stored in a single database, making it easier to ensure that catcher processors are credited for any landings made as catcher vessels.

The Council elected to exclude IFQ catch from qualifying catch for the purpose of determining recent participation in the groundfish fisheries. However, the Catch Accounting and Weekly Production Report databases have not historically tracked IFQ catch in a consistent manner. NMFS staff suggested excluding all halibut and sablefish targeted catch as a proxy for identifying IFQ catch. This approach may exclude some qualified groundfish catch, particularly directed Pacific cod catch, when Pacific cod comprised more than 20%, but less than 50% of a vessel's catch while it was targeting halibut or sablefish. Directed fishing is defined as any fishing activity that results in the retention of greater than the maximum retainable amount (MRA) for that species (679.2). For this reason, these trips were identified and groundfish and directed cod catch was credited to licenses.

There are 31 Western GOA catcher processor licenses, and between 12 and 23 licenses meet the various landings and catch thresholds based on all groundfish landings during the qualifying periods in Options 1 through 4, and would qualify to retain Western GOA area endorsements. The majority of Western GOA licenses that have catch history during the various qualifying periods also meet the highest catch threshold (100 mt) and landings threshold (5 landings). Most Western GOA licenses that meet the catch thresholds based on all groundfish landings would also qualify for a Pacific cod endorsement. There are 49 Central GOA licenses, and between 5 and 24 licenses meet the landings and catch thresholds in Options 1 through 4 based on all groundfish catch and would qualify to retain Central GOA area endorsements. Only 4 to 14 of Central GOA CP licenses would qualify for a Pacific cod endorsement. In general, a smaller proportion of Central GOA CP licenses that have been active in the fisheries during recent years meet the highest catch and landings thresholds.

If landings during 2007 through June 4, 2008 are included (Option 5), in addition to landings during one of the qualifying periods under Options 1 through 4, 5 additional Central GOA licenses meet the 1 landing threshold for all groundfish and 7 additional licenses have 1 landing of directed cod. No additional Western GOA licenses meet the 1 landing criteria for all groundfish, but 1 additional license has 1 landing of directed cod. In the Central GOA, 6 of the 7 of the additional licenses that have 1 landing of directed cod also meet the 100 mt threshold for directed cod, and the 1 Western GOA license also meets this 100 mt threshold for directed cod.

The number of catcher processor licenses that would qualify for gear-specific Pacific cod endorsements includes:

Western GOA

- 9 to 18 hook-and-line catcher processor endorsements (up to 19 under Option 5)
- Up to 5 pot catcher processor endorsements
- 2 licenses have both hook-and-line and pot landings

Central GOA

- 4 to 12 hook-and-line catcher processor endorsements (up to 18 under Option 5)
- 0 to 3 pot catcher processor endorsements (up to 4 under Option 5)
- 1 license has both hook-and-line and pot landings

Table 3-12 shows the number of hook-and-line catcher processor licenses in each length class that qualify under the various catch thresholds. Vessel length (of the vessel currently assigned to each license) rather than the MLOA on the license was used in this table, because there is currently one fixed gear GOA catcher processor license with an MLOA of ≥ 125 feet that is assigned to a vessel < 125 feet in length. If Pacific cod sector allocations for hook-and-line catcher processors are established based on vessel length, Pacific cod endorsements could specify the maximum vessel length allowed (in addition to the MLOA on the license). This provision would cap the number of hook-and-line catcher processors in each size class that could fish the proposed Pacific cod sector allocations. In the absence of this provision, licenses with an MLOA of ≥ 125 feet that are currently assigned to vessels < 125 feet in length could be transferred to a larger vessel, resulting in an increase in the number of vessels fishing the ≥ 125 feet LOA hook-and-line catcher processor allocation.

There are 5 to 10 Western GOA licenses on < 125 ft vessels and 6 to 9 licenses on ≥ 125 ft vessels that have at least 1 directed cod landing during the different qualification periods (including Option 5). There are 2 to 11 Central GOA licenses on < 125 ft vessels and 4 to 7 licenses on ≥ 125 ft vessels that have at least 1 directed cod landing during the different qualification periods. Similarly, there are very few catcher processor licenses with pot landings during the qualification periods. Under the current set of options being considered, a maximum of 4 Central GOA licenses and 5 Western GOA licenses would receive pot catcher processor Pacific cod endorsements.

Table 3-11 Number of fixed gear catcher processor licenses qualifying under various landings and catch thresholds. The lower table includes landings from 2007- June 4, 2008.

Western GOA – 31 CP licenses

		All Gear Types				Hook-and-line				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	23	20	21	17	20	17	18	14	5	5	3	3
	3 landings	20	18	18	14	16	14	15	11	5	5	3	3
	5 landings	19	17	16	13	15	13	13	10	3	3	3	3
	5 mt	20	18	18	14	17	15	15	11	5	5	3	3
	10 mt	20	18	18	14	17	15	15	11	5	5	3	3
	25 mt	19	18	17	14	16	15	14	11	5	5	3	3
	100 mt	*	*	*	*	15	14	14	11	*	*	*	*
Directed cod	1 landing	21	18	19	14	18	15	16	11	5	5	3	3
	3 landings	20	18	17	14	16	14	14	11	5	5	3	3
	5 landings	18	15	16	12	15	12	13	9	3	3	3	3
	5 mt	20	18	18	14	17	15	15	11	5	5	3	3
	10 mt	19	18	17	14	16	15	14	11	5	5	3	3
	25 mt	19	18	17	14	15	14	14	11	5	5	3	3
	100 mt	*	*	*	*	15	14	14	11	*	*	*	*

Western GOA – 31 CP licenses

2007-June 4, 2008 plus the period below:

		All Gear Types				Hook-and-line				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	23	20	22	19	20	17	18	15	5	5	4	4
	3 landings	22	19	20	17	18	15	17	14	5	5	3	3
	5 landings	20	19	18	17	16	15	15	14	4	4	3	3
	5 mt	21	19	20	18	18	16	16	14	5	5	4	4
	10 mt	21	19	20	18	18	16	16	14	5	5	4	4
	25 mt	20	19	19	18	17	16	15	14	5	5	4	4
	100 mt	18	17	*	*	15	14	14	13	4	4	*	*
Directed cod	1 landing	22	19	21	18	19	16	17	14	5	5	4	4
	3 landings	21	19	19	17	17	15	16	14	5	5	3	3
	5 landings	19	17	17	15	15	13	14	12	4	4	3	3
	5 mt	21	19	20	18	18	16	16	14	5	5	4	4
	10 mt	20	19	19	18	17	16	15	14	5	5	4	4
	25 mt	20	19	19	18	16	15	15	14	5	5	4	4
	100 mt	18	17	*	*	15	14	14	13	4	4	*	*

Source: Catch Accounting/Blend data and RAM LLP license file, October 2008. *Withheld for confidentiality.

Note: Gear type columns are not mutually exclusive, because some licenses have catch history using more than one gear type. The number of licenses in the gear columns may sum to more than the total number of licenses qualifying.

Central GOA – 49 CP licenses

		All Gear Types				Hook-and-line				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	24	21	22	17	21	18	19	15	4	3	3	2
	3 landings	15	11	14	8	13	9	12	8	3	2	2	0
	5 landings	14	9	13	6	12	7	11	6	3	2	2	0
	5 mt	18	14	15	*	15	11	12	8	4	3	3	*
	10 mt	15	*	*	8	13	9	12	8	3	*	*	0
	25 mt	14	*	*	6	12	7	11	6	3	*	*	0
	100 mt	*	*	*	5	7	5	7	5	*	*	*	0
Directed cod	1 landing	14	11	12	7	12	9	10	6	3	2	2	1
	3 landings	12	8	11	5	10	6	9	5	3	2	2	0
	5 landings	11	7	9	4	8	5	7	4	3	2	2	0
	5 mt	14	*	*	5	12	8	9	5	3	*	*	0
	10 mt	12	*	*	5	10	6	9	5	3	*	*	0
	25 mt	12	*	*	5	10	6	9	5	3	*	*	0
	100 mt	*	*	*	5	7	5	7	5	*	*	*	0

Central GOA – 49 CP licenses

2007-June 4, 2008 plus the period below:

		All Gear Types				Hook-and-line				Pot			
		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	29	27	27	23	26	23	24	20	4	4	3	3
	3 landings	21	19	20	17	18	15	17	14	4	4	3	3
	5 landings	18	15	17	13	15	11	14	10	4	4	3	3
	5 mt	24	22	21	18	21	18	18	15	4	4	3	3
	10 mt	22	20	21	18	19	16	18	15	4	4	3	3
	25 mt	21	19	20	17	18	15	17	14	4	4	3	3
	100 mt	15	13	14	12	11	9	11	9	4	4	3	3
Directed cod	1 landing	21	19	19	15	18	15	16	12	4	4	3	3
	3 landings	18	16	17	14	15	12	14	11	4	4	3	3
	5 landings	14	12	12	10	10	8	9	7	4	4	3	3
	5 mt	21	19	18	15	18	15	15	12	4	4	3	3
	10 mt	19	17	18	15	16	13	15	12	4	4	3	3
	25 mt	18	16	17	14	15	12	14	11	4	4	3	3
	100 mt	15	13	14	12	11	9	11	9	4	4	3	3

Source: Catch Accounting/Blend data and RAM LLP license file, October 2008. *Withheld for confidentiality.

Note: Gear type columns are not mutually exclusive, because some licenses have catch history using more than one gear type. The number of licenses in the gear columns may sum to more than the total number of licenses qualifying.

**Table 3-12 Number of hook-and-line catcher processor licenses, reported by the MLOA on the license.
The lower table includes landings from 2007- June 4, 2008.**

Western GOA—31 CP licenses

		HAL <125	HAL ≥125	HAL <125	HAL ≥125	HAL <125	HAL ≥125	HAL <125	HAL ≥125
		2000- 2006	2000- 2006	2000- 2005	2000- 2005	2002- 2006	2002- 2006	2002- 2005	2002- 2005
All groundfish	1 landing	11	9	10	7	10	8	8	6
	3 landings	8	8	8	6	7	8	5	6
	5 landings	8	7	8	5	6	7	5	5
	5 mt	8	9	8	7	7	8	5	6
	10 mt	8	9	8	7	7	8	5	6
	25 mt	8	8	8	7	7	7	5	6
	100 mt	8	7	8	6	7	7	5	6
Directed cod	1 landing	9	9	8	7	8	8	5	6
	3 landings	8	8	8	6	6	8	5	6
	5 landings	8	7	8	4	6	7	5	4
	5 mt	8	9	8	7	7	8	5	6
	10 mt	8	8	8	7	7	7	5	6
	25 mt	8	7	8	6	7	7	5	6
	100 mt	8	7	8	6	7	7	5	6

Western GOA—31 CP licenses

2007-June 4, 2008 plus the period below:

		HAL <125	HAL ≥125	HAL <125	HAL ≥125	HAL <125	HAL ≥125	HAL <125	HAL ≥125
		2000- 2006	2000- 2006	2000- 2005	2000- 2005	2002- 2006	2002- 2006	2002- 2005	2002- 2005
All groundfish	1 landing	11	9	10	7	10	8	9	6
	3 landings	10	8	9	6	9	8	8	6
	5 landings	9	7	9	6	8	7	8	6
	5 mt	9	9	9	7	8	8	8	6
	10 mt	9	9	9	7	8	8	8	6
	25 mt	9	8	9	7	8	7	8	6
	100 mt	8	7	8	6	7	7	7	6
Directed cod	1 landing	10	9	9	7	9	8	8	6
	3 landings	9	8	9	6	8	8	8	6
	5 landings	8	7	8	5	7	7	7	5
	5 mt	9	9	9	7	8	8	8	6
	10 mt	9	8	9	7	8	7	8	6
	25 mt	9	7	9	6	8	7	8	6
	100 mt	8	7	8	6	7	7	7	6

Source: Catch Accounting/Blend data and RAM LLP license file, October 2008. *Withheld for confidentiality.

Note: Length classes are based on vessel length (of the vessel currently named on each license) rather than MLOA.

One license with an MLOA ≥125 ft is assigned to a vessel with an LOA of <125 feet.

Central GOA—49 CP licenses

		HAL <125	HAL ≥125	HAL <125	HAL ≥125	HAL <125	HAL ≥125	HAL <125	HAL ≥125
		2000- 2006	2000- 2006	2000- 2005	2000- 2005	2002- 2006	2002- 2006	2002- 2005	2002- 2005
All groundfish	1 landing	13	8	12	6	11	8	9	6
	3 landings	5	8	4	5	4	8	3	5
	5 landings	4	8	3	4	3	8	2	4
	5 mt	7	8	6	5	4	8	3	5
	10 mt	5	8	4	5	4	8	3	5
	25 mt	5	7	4	3	4	7	3	3
	100 mt	*	*	*	*	*	*	*	*
Directed cod	1 landing	6	6	5	4	4	6	2	4
	3 landings	4	6	3	3	3	6	2	3
	5 landings	3	5	3	2	2	5	2	2
	5 mt	6	6	5	3	3	6	*	*
	10 mt	4	6	3	3	3	6	*	*
	25 mt	4	6	3	3	3	6	*	*
	100 mt	*	*	*	*	*	*	*	*

Central GOA—49 CP licenses

2007-June 4, 2008 plus the period below:

		HAL <125	HAL ≥125	HAL <125	HAL ≥125	HAL <125	HAL ≥125	HAL <125	HAL ≥125
		2000- 2006	2000- 2006	2000- 2005	2000- 2005	2002- 2006	2002- 2006	2002- 2005	2002- 2005
All groundfish	1 landing	16	10	15	8	14	10	12	8
	3 landings	9	9	8	7	8	9	7	7
	5 landings	6	9	5	6	5	9	4	6
	5 mt	12	9	11	7	9	9	8	7
	10 mt	10	9	9	7	9	9	8	7
	25 mt	10	8	9	6	9	8	8	6
	100 mt	5	6	5	4	5	6	5	4
Directed cod	1 landing	11	7	10	5	9	7	7	5
	3 landings	8	7	7	5	7	7	6	5
	5 landings	4	6	4	4	3	6	3	4
	5 mt	11	7	10	5	8	7	7	5
	10 mt	9	7	8	5	8	7	7	5
	25 mt	8	7	7	5	7	7	6	5
	100 mt	5	6	5	4	5	6	5	4

Source: Catch Accounting/Blend data and RAM LLP license file, October 2008. *Withheld for confidentiality.

Note: Length classes are based on vessel length (of the vessel currently named on each license) rather than MLOA.

One license with an MLOA ≥125 ft is assigned to a vessel with an LOA of <125 feet.

Licenses subject to crab sideboards

There are 36 fixed gear groundfish licenses that are subject to the GOA Pacific cod sideboards for BSAI crab qualified vessels and licenses, and an additional 11 fixed gear licenses that are prohibited from fishing in the directed Pacific cod fisheries in the GOA. Of the 36 sideboarded licenses, 6 are CP licenses and 30 are CV licenses (see Table 3-13). The 6 CP licenses include 4 Central GOA and 4 Western GOA endorsed licenses. The 30 CV licenses include 20 Central GOA and 14 Western GOA endorsed licenses. All but one of the sideboarded CV licenses has an MLOA of ≥ 60 ft. The crab sideboards became effective in 2006. In addition to the licenses subject to Pacific cod sideboards, the sideboards prohibit 137 vessels from directed fishing for GOA Pacific cod, and limit Pacific cod harvests by 82 additional vessels to a sideboard limit. This discussion only addresses sideboarded licenses. The sideboard amounts are calculated as a percentage of the Western and Central GOA inshore and offshore Pacific cod TACs (see Table 3-14).

Table 3-13 Number of licenses subject to crab sideboards or prohibited from directed fishing for Pacific cod

Operation Type	P. Cod Prohibited			P. Cod Sideboarded		
	Number of licenses	Number WG endorsed	Number CG endorsed	Number of licenses	Number WG endorsed	Number CG endorsed
Catcher Vessel	11	8	6	30	14	20
Catcher Processor	0	0	0	6	4	4

Source: RAM LLP license file, October 2008. Does not include 3 licenses recently exempted from the sideboards in Oct 2008.

Table 3-14 Crab sideboards for the Western and Central GOA Pacific cod fisheries.

Management Area	TAC	Percent of TAC
Western Gulf	Inshore	9.02%
	Offshore	20.46%
Central Gulf	Inshore	3.83%
	Offshore	20.74%

Source: NMFS Harvest Specifications.

All of the crab sideboarded Western GOA CV licenses that have qualified landings during 2000-2006 have MLOAs ≥ 60 ft, and all of these licenses have only pot landings. Table 3-10 shows the number of Western GOA CV licenses with MLOAs ≥ 60 ft that qualify using pot gear during 2000-2006: 18 licenses at the 100 mt directed cod threshold, and 23 licenses at the 1 groundfish landing threshold. Of these licenses, 11 of the 18 that qualify at the 100 mt threshold are subject to the crab sideboards, and 13 of 23 licenses with 1 landing are sideboarded. The sideboarded Central GOA CV licenses that have qualified landings have pot or hook-and-line landings. Again, Table 3-10 shows the number of Central GOA CV licenses with MLOAs ≥ 60 ft that qualify with pot gear during 2000-2006: 30 licenses at the 100 mt directed cod threshold and 49 licenses at the 1 groundfish landing threshold. Of these licenses, 14 of the 30 licenses qualifying at 100 mt are sideboarded, and 16 of the 49 licenses with 1 groundfish landing are sideboarded. In addition, 1 sideboarded Central GOA license with an MLOA greater than 60 ft has at least one qualified hook-and-line landing. Finally, either 2 or 3 (depending on the threshold) of the ≥ 60 ft MLOA Western GOA CV licenses that have qualified pot landings are prohibited from participating in the GOA directed Pacific cod fisheries, and one ≥ 60 ft MLOA Central GOA license with qualified pot landings cannot participate in the directed Pacific cod fisheries. In sum, 16 of the 101 Western GOA CV licenses that have at least one groundfish landing during 2000-2006 are subject to the crab sideboards (13 licenses) or prohibited from directed fishing for Pacific cod (3 licenses), and all of these licenses have

MLOAs of ≥ 60 ft. A total of 18 of the 296 Central GOA licenses that have at least one groundfish landing during 2000-2006 that are subject to the crab sideboards (17 licenses) or prohibited from directed fishing for Pacific cod (1 license).

Six of the crab sideboarded licenses are CP licenses; none of the Pacific cod-prohibited licenses are CP licenses. Four of these sideboarded CP licenses have a Western GOA endorsement and at least 3 of these licenses have one groundfish landing in the Western GOA during 2000-2006. Four licenses have a Central GOA endorsement, and at least 3 of these licenses have at least one qualified Central GOA landing.

Licenses with no qualified GOA fixed gear landings

Table 3-15 provides an overview of the fishing activities of Western and Central GOA fixed gear licenses that do not qualify under any of the landings or catch thresholds. For this purpose of the table, non-qualified licenses were defined as licenses that do not meet the minimum recency threshold of one fixed gear groundfish landing in the endorsement area during 2000-2006. Most non-qualified catcher vessel licenses have catch in other fisheries in Alaska. Non-qualified catch includes fixed gear landings of groundfish in areas other than the LLP endorsement area, and any trawl catch, IFQ catch, State waters groundfish catch, and non-groundfish catch (e.g., salmon, shellfish, and herring). Out of 884 Central GOA catcher vessel licenses, there are 588 non-qualified licenses, and 474 of these licenses had landings in other fisheries during 2000-2006. Of 266 Western GOA catcher vessel licenses, there are 165 non-qualified licenses, and 138 of these licenses had landings in other fisheries during 2000-2006. Notably, there are very few licenses that had no commercial landings in Alaska fisheries during 2000-2006. Only 114 Central GOA catcher vessel licenses and 27 Western GOA catcher vessel licenses did not have landings in any commercial fishery in Alaska during 2000-2006.

Similarly, Table 3-15 shows that most catcher processor licenses that did not have qualified landings during 2000-2006 are active participants in other groundfish fisheries in Alaska, including the BSAI fixed gear fisheries and the BSAI and GOA trawl fisheries. There are 8 non-qualified catcher processor licenses with Western GOA endorsements, and 6 of these licenses had landings in other Alaska fisheries. Four licenses had trawl landings during 2000-2006, and 2 licenses had fixed gear landings in other management areas or in the IFQ halibut and sablefish fisheries. There are 25 non-qualified catcher processor licenses with Central GOA endorsements, and 23 of these licenses had landings in other Alaska fisheries. Six Central GOA licenses had trawl landings, and 17 licenses had fixed gear landings in other management areas or in the IFQ fisheries.

Table 3-15 Number of non-qualified licenses with catch history in other fisheries.

	Number of licenses with qualified fixed gear landings in the endorsement area during 2000-2006			Catch history of licenses with no qualified fixed gear landings during 2000-2006	
	Number of licenses	At least one qualified fixed gear landing	No qualified fixed gear landings	At least one non-qualified landing in another fishery	No landings in any fishery
Central Gulf CV	884	296	588	474	114
Central Gulf CP	49	24	25	23	2
Western Gulf CV	266	101	165	138	27
Western Gulf CP	31	23	8	6	2

Note: Non-qualified landings include fixed gear landings in management areas other than the endorsement area, and trawl, State waters, IFQ, and other fisheries.

3.5 Analysis of the Components and Options

3.5.1 Years included in catch history

The Limited License Program was implemented in 2000, and during the first two years of the program persons participating in the GOA groundfish fisheries were required to hold LLP licenses, but RAM did not require a vessel to be formally assigned to each license. Consequently, the official record of license use is incomplete during 2000-2001. For the purposes of this analysis, catch during 2000-2001 was assigned to both the original qualifying vessel and current vessel in cases where the license was transferred to a different vessel during this period. The rationale for this approach was that both vessels that held the license may have had catch history during this time. Double counting catch on these licenses during 2000-2001 may have resulted in more licenses appearing to meet the catch thresholds. For this reason, the Council should consider the data presented in the tables to be an estimate of the actual number of qualifying licenses.

If the qualification period includes 2000-2001, NMFS may need to rely on alternative forms of documentation, such as individual affidavits or private contracts, to document catch history on licenses that were transferred during this period. Use of these forms of documentation is also likely to make the action more difficult to implement. Excluding 2000 and 2001 from the qualification period would simplify implementation of the action. Beginning in 2002, licenses were required to be formally assigned to a vessel in order to participate in LLP fisheries, and a complete record of license transfers exists. The transfer data was used to assign catch from each vessel to all licenses assigned to the vessel from 2002 to the present. Table 3-16 summarizes the number of licenses that have been transferred from the original qualifying vessel.

Table 3-16 Number of GOA fixed gear licenses no longer assigned to the original qualifying vessel.

Area endorsement	Operation designation	Number of licenses	Number of licenses not on original vessel
Central GOA	Catcher vessel	884	214
	Catcher processor	49	9
Western GOA	Catcher vessel	266	77
	Catcher processor	31	6

Source: RAM groundfish LLP license file, October 2008

3.5.2 Definition of qualifying catch

The options include two definitions of qualifying catch: (1) all retained catch of groundfish from the parallel and Federal fisheries, and (2) retained catch of directed Pacific cod from the parallel and Federal fisheries. Both catch definitions exclude IFQ catch and State waters catch. The IFQ halibut and sablefish fisheries are exempt from the LLP requirement, and the LLP allows bycatch of LLP groundfish species during the IFQ fisheries to be retained without a groundfish license. This exemption was included in the LLP to minimize discards, and is consistent with National Standard 9 of the Magnuson-Stevens Act.

Catch thresholds are currently based on retained catch. Retained catch is likely a better indicator of dependence than total catch, because discards provide no direct return. Also, retained catch can be estimated more precisely, because discards by catcher vessels are typically extrapolated from observer estimates of at-sea discards. Currently, these definitions of qualifying catch do not exclude catch used for meal production. Data provided in the draft preliminary review EA/RIR/IRFA for the GOA Pacific cod sector allocations indicated that catcher processors in the GOA did not produce meal from Pacific cod

during 1995-2006, and typically less than 1% of Pacific cod harvests by catcher vessels are used for meal production. The Council has excluded catch destined for meal production from some allocation programs based on the rationale that meal is a relatively low value product and its inclusion could disadvantage some small catcher processors that do not have meal production capacity.

3.5.3 Exemptions from recency action

The Council is considering exempting some licenses from the fixed gear recency action based on vessel size, and exempting vessels using jig gear from the LLP requirement. The purpose of these exemptions is to ensure that there are adequate entry level opportunities for small vessels in the GOA Pacific cod fisheries. In developing these exemptions, the Council may wish to consider balancing the objective of creating opportunities for new entry with the need to protect long-term participants from an influx of additional effort into the fisheries.

Under Component 2, the Council included an option to exempt vessels that are both under 60 ft and under a capacity limit (to be determined by the Council) from the fixed gear recency action. **Staff suggests that the language in this option be revised so that it states that licenses with an MLOA of <60 ft will be exempted from the recency action, rather than vessels <60 ft LOA.** This action is specifically directed at licenses, not at the vessels assigned to each license. Vessel assignments change over time, and some licenses are not currently assigned to a specific vessel. Currently, there is no tonnage or other capacity endorsement attached to licenses, which may make it impracticable to base the recency exemption on vessel capacity. Again, some licenses are not currently assigned to vessels. If the exemption is based on the capacity of the vessel currently assigned to the license, a license holder could simply transfer the larger capacity vessel off the license and assign a lower capacity vessel to the license for purposes of obtaining an exemption from the recency action, and transfer the larger vessel back to the license afterward. Licenses may be transferred once per year (Jan 1 – Dec 31).

If fixed gear LLPs with an MLOA of <60 ft are exempted from the recency action they would (1) not lose WG or CG area endorsements, if they do not meet a minimum catch or landings threshold, and (2) not be required to hold a Pacific cod endorsement to participate in the directed Pacific cod fishery. Currently in the GOA, vessels <26 ft LOA are exempt from the LLP requirement. The Council is also considering exempting jig vessels from the LLP requirement in the GOA to provide entry level opportunities. In the BSAI, jig vessels <60 ft LOA may participate in the directed groundfish fisheries without an LLP license. In addition, catcher vessels <60 ft LOA using pot or hook-and-line gear are exempt from the BSAI Pacific cod endorsement requirement. The <60 ft LOA fixed gear fleet in the BSAI has historically been very small, and under Amendment 85, this sector received an allocation of 2% of the BSAI Pacific cod TAC. However, during recent years the number of vessels fishing in the <60 ft pot and hook-and-line sector has doubled, from 25 vessels in 2004 to 50 vessels in 2007.

The fixed gear fleet in the GOA is relatively large. The majority of fixed gear licenses with Western and Central GOA endorsements have MLOAs of less than 60 feet, and much of the Pacific cod catch by fixed gear vessels in the GOA is harvested by vessels less than 60 ft LOA (approximately 45% of WGOA catch and 40% of CGOA catch in 2008). One concern that has been expressed in public testimony is that smaller vessels may be less likely to meet the landings and catch thresholds. Table 3-17 and Table 3-18 show the number of licenses that meet the various landings and catch thresholds during 2000-2006, summarized by the MLOA on each license. Overall, Central GOA licenses with MLOAs of less than 50 feet were more likely to have at least one fixed gear landing during 2000-2006 than licenses with larger MLOAs. In the Western GOA, no licenses with MLOAs of less than 50 ft meet the highest catch threshold (100 mt). In the Central GOA, 51 licenses with MLOAs of less than 50 ft meet the 100 mt threshold based on either groundfish or directed Pacific cod landings.

It is important to note that exempting all licenses with a <60 ft MLOA from the fixed gear LLP requirement would mean that any of the estimated 566 CGOA and 82 WGOA fixed gear CV licenses with <60 ft MLOAs that do not have any qualified landings during 2000-2006 could enter the GOA Pacific cod fisheries. If sector allocations were implemented, these vessels would fish off the <60 ft LOA Pacific cod sector allocations to fixed gear vessels. Entry into the fisheries by these latent licenses would result in a substantial influx of effort into these sectors.

Table 3-17 Percentage of licenses with at least one landing during 2000-2006, by MLOA on license.

MLOA on license	Western GOA		Central GOA	
	Number of licenses	Percent with at least one fixed gear landing in the endorsement area	Number of licenses	Percent with at least one fixed gear landing in the endorsement area
<40 ft MLOA	13	8%	64	31%
40- 49 ft MLOA	22	23%	182	51%
50- 49 ft MLOA	121	56%	457	27%
≥60 ft MLOA	110	25%	181	33%

Source: ADFG Fish Tickets and RAM groundfish LLP license file, October 2008

If total catch (mt) rather than number of landings is used to determine which licenses meet the qualification thresholds for retaining Central and Western GOA endorsements, or for receiving a Pacific cod endorsement, the Council may wish to consider setting lower catch thresholds for licenses with small MLOAs. Such an approach may be desirable if these licenses have actively participated in the fisheries during the qualifying period, but were less likely to meet the higher catch thresholds. This approach may also be appropriate if opportunities in the parallel and State waters fisheries are perceived to be inadequate. Participants wishing to enter fisheries in Federal waters would need to purchase an LLP license, and the availability of licenses allowing for that entry is critical. In developing this action, the Council will need to balance the interests of those wishing to limit entry to the fixed gear groundfish fisheries against the interests of creating adequate opportunities for potential future entrants.

Table 3-18 Number of fixed gear catcher vessel licenses meeting qualification thresholds during 2000-2006 by the MLOA on the license.

Western GOA- 266 CV licenses

MLOA	13 licenses	22 licenses	121 licenses	110 licenses	
	<40 feet	40-49 feet	50-59 feet	≥60 feet	
All Groundfish	1 landing	1	5	68	27
	3 landings	1	4	56	24
	5 landings	1	2	54	20
	5 mt	0	3	60	22
	10 mt	0	*	56	*
	25 mt	0	*	52	*
	100 mt	0	0	37	18
	Directed cod	1 landing	1	5	65
3 landings		1	4	55	23
5 landings		1	2	52	19
5 mt		0	3	60	22
10 mt		0	*	56	*
25 mt		0	*	52	*
100 mt		0	0	37	18

Source: ADFG Fish Tickets and RAM groundfish LLP license file, October 2008

*withheld for confidentiality

Central GOA- 884 CV licenses

		64 licenses	182 licenses	457 licenses	181 licenses
MLOA		<40 feet	40-49 feet	50-59 feet	≥60 feet
All Groundfish	1 landing	20	93	124	59
	3 landings	19	84	98	50
	5 landings	17	78	92	45
	5 mt	19	82	97	52
	10 mt	16	75	95	50
	25 mt	15	62	81	44
	100 mt	12	39	65	35
Directed cod	1 landing	19	86	109	55
	3 landings	18	80	93	49
	5 landings	17	71	88	43
	5 mt	18	78	93	48
	10 mt	16	69	91	47
	25 mt	15	57	77	41
	100 mt	12	39	65	35

Source: ADFG Fish Tickets and RAM groundfish LLP license file, October 2008

3.5.4 Exemptions for jig vessels

The Council's current motion includes two options to exempt jig participants from the LLP requirement:

- (1) Exempt vessels using jig gear from any LLP requirement
- (2) Exempt vessels using jig gear from any Pacific cod endorsement requirement

A suboption, applicable to either option, would exempt vessels using a maximum of 5 jigging machines, 5 lines, and 30 hooks per line or one line of 150 hooks. In the BSAI, vessels <60 ft LOA using a maximum of 5 jig machines, one line per jig machine, and 15 hooks per line may participate in the directed groundfish fisheries in the BSAI without an LLP license.

At its October 2007 meeting, the Council discussed the possibility of limiting these two jig exemptions to vessels less than 58 feet LOA, and asked staff to bring back additional information on the number of vessels using jig gear in the Federal fisheries that hold LLP licenses. Table 3-19 shows the number of vessels using jig gear that have retained catch of Pacific cod from the Federal and parallel waters fisheries in the Western and Central GOA during 2000-2006, and the number of these vessels that hold an LLP license. The majority of vessels using jig gear during 2000-2006 did not hold an LLP license and were only eligible to fish in parallel waters. Also, most vessels that used jig gear are less than 58 feet LOA.

The Council also requested additional information on LLP licenses that have recent jig landings. Most jig landings are on licenses with an MLOA of less than 58 feet (Table 3-20). However, some licenses with larger MLOAs have groundfish and directed Pacific cod catch using jig gear. Table 3-19 reports the number of vessels participating in the fisheries in each length (LOA) class, and Table 3-20 reports the number of licenses with jig history based on the MLOA on the license. Note that there may be some differences between the number of vessels and licenses in each length class reported in the two tables. The MLOA may be greater than the actual length of the vessel assigned to the license. As a result, some licenses with an MLOA of ≥58 ft may be assigned to vessels <58 ft LOA. Vessels that use jig gear, hold LLPs, and are not exempted from the LLP requirement, or from the Pacific cod endorsement requirement, would need to meet landings or catch thresholds to retain area endorsements and to qualify for a Pacific cod endorsement.

When BSAI fixed gear Pacific cod endorsements were created under Amendment 67, no jig endorsements were created. Instead, vessels with jig history were eligible to qualify for a pot or hook-and-line endorsement with their combined jig and pot, or jig and hook-and-line, catch history. Several licenses that could qualify for a Western or Central GOA Pacific cod endorsement based on jig landings also have pot or hook-and-line landings, and could potentially qualify for a pot or hook-and-line Pacific cod endorsement based on catch using these gear types, or based on a combination of pot and jig or pot and hook-and-line landings. However, some licenses only have jig history. If the vessels holding these licenses are not exempted from the LLP requirement or from the Pacific cod endorsement requirement, these licenses would need to meet the landings or catch thresholds to continue to participate in the Federal waters fisheries.

The number of vessels using jig gear in the parallel and Federal fisheries in the GOA during a given year has been relatively small. However, if vessels less than 58 feet in length using jig gear were exempted from the LLP requirement, new vessels could potentially enter the jig fishery and fish in Federal waters without a license. This outcome may be desirable if the Council perceives a need to provide new entry level opportunities in the fisheries. Finally, it should be noted that the data indicate that a large number of vessels that use jig gear and hold LLP licenses participate in the State waters Pacific cod fisheries, but not in the parallel and Federal waters fisheries. This suggests that LLP licenses may not be the most important factor limiting jig participation in the Federal fisheries. The timing of the Pacific cod A and B seasons may limit these vessels from participating in the parallel and Federal fisheries in the GOA.

Table 3-19 Number of vessels with Pacific cod catch using jig gear in the parallel and Federal fisheries in the Western and Central GOA during 2000-2007, and their LLP status.

Year	Central GOA						Western GOA					
	<58 feet		58-59 feet		≥60 feet		<58 feet		58-59 feet		≥60 feet	
	LLP	No LLP	LLP	No LLP	LLP	No LLP	LLP	No LLP	LLP	No LLP	LLP	No LLP
2000	5	11	0	1	0	0	3	1	0	0	0	0
2001	4	11	0	0	0	0	3	14	0	0	0	0
2002	2	4	0	0	1	0	8	20	1	0	0	1
2003	5	7	0	0	0	0	4	7	0	0	0	0
2004	7	26	0	0	0	2	8	15	0	0	0	0
2005	5	19	0	1	1	2	1	5	0	0	0	0
2006	6	16	0	0	1	1	0	1	0	0	0	0
2007	5	12	0	1	1	0	2	2	0	0	0	0

Source: ADFG fish tickets and RAM Groundfish license file, October 2008

Notes: Includes all Pacific cod catch (both directed and incidental).

Table 3-20 Number of fixed gear catcher vessel licenses meeting the landings and catch thresholds with jig landings during 2000-2006, reported by the MLOA on the license.

Western GOA	<40 feet	40-49 feet	50-57 feet	≥58 feet
1 landing	1	3	2	7
3 landings	1	2	2	2
5 landings	1	1	2	1
All Groundfish				
5 mt	0	*	*	*
10 mt	0	*	*	*
25 mt	0	*	*	0
100 mt	0	0	0	0
Directed cod				
1 landing	1	3	2	3
3 landings	1	2	2	2
5 landings	1	1	2	1
5 mt	0	*	*	*
10 mt	0	*	*	*
25 mt	0	*	*	0
100 mt	0	0	0	0

Central GOA		<40 feet	40-49 feet	50-57 feet	≥58 feet
All Groundfish	1 landing	4	18	9	14
	3 landings	1	8	4	6
	5 landings	1	3	3	4
	5 mt	*	*	*	*
	10 mt	0	*	0	*
	25 mt	0	*	0	0
	100 mt	0	0	0	0
Directed cod	1 landing	3	8	4	4
	3 landings	1	4	2	2
	5 landings	1	3	1	2
	5 mt	*	*	*	*
	10 mt	0	*	0	*
	25 mt	0	0	0	0
	100 mt	0	0	0	0

Source: ADFG Fish Tickets and RAM Groundfish license file, October 2008. *Withheld for confidentiality.

3.5.5 Restrictions on movement between gear sectors

The Council has considered several options that would limit licenses from using more than one gear type in the groundfish fisheries. The intent of these options was to protect vessels that use a particular gear and operation type from an influx of vessels that have historically used another gear or operation type. Specific endorsements or designations added to fixed gear licenses could prohibit cross over among sectors.

The Council considered, but rejected, options that would have limited licenses to using either fixed or trawl gear in the groundfish fisheries. The options would have precluded catcher vessel licenses with both fixed and trawl gear designations from participating in both sectors. These licenses would be required to make either an annual election or a one-time election to participate in the trawl or fixed gear fisheries. A substantial number of catcher vessel licenses have both fixed and trawl gear designations, including 114 Central GOA licenses and 78 Western GOA licenses. Of these licenses, 30 Central GOA and 41 Western GOA licenses have at least one fixed gear groundfish landing during 2000-2006 and would qualify to remain in the fisheries under this minimum recency threshold (Table 3-21). However, some of these licenses may lose their Central or Western GOA trawl area endorsements under the trawl recency action.

Table 3-21 Fishing activity by catcher vessel licenses that have both fixed and trawl gear designations.

	Number of licenses with fixed and trawl gear designations	Number of licenses with at least 1 fixed gear landing during 2000-2006	Number of licenses with at least 1 fixed gear landing during 2000-2006 that also qualify under trawl recency		Number of licenses that used fixed and trawl gear during the same year in the <u>same management area</u>
			<60 ft MLOA	≥60 ft MLOA	
Central Gulf	114	30	5	12	4-6 licenses per year during 2000-2006
Western Gulf	78	41	33	3	10-15 licenses per year during 2000-2006

Source: ADFG Fish Tickets and RAM groundfish LLP license file, October 2008.

Table 3-21 shows that 17 of 30 Central GOA licenses with dual gear designations both have at least one fixed gear landing during 2000-2006 and qualify under the trawl recency action, and 36 Western GOA licenses meet both these criteria. The majority of the Central GOA licenses that meet these criteria have MLOAs of ≥ 60 ft (12 of 17 licenses); the majority of Western GOA licenses with dual gear designations and catch history have MLOAs of < 60 ft (33 of 36 licenses). Most of these licenses used both pot and trawl gear, although several used hook-and-line and trawl gear. Within a given year, there were typically 4 to 6 Central GOA licenses and 10 to 15 Western GOA licenses that used both fixed and trawl gear to harvest Pacific cod during the same year.

The catch data indicate that a number of these vessels use both gear types during a given fishing year on a regular basis, and that this harvest strategy is part of the annual fishing operations of these vessels. This is a particularly common practice in the Western GOA, where there are a number of vessels that regularly fish for Pacific cod with both trawl and pot gear during the same year. A typical pattern is for vessels to fish with pot gear when the fixed gear season opens on January 1 and to switch to trawl gear on January 20 when the trawl season opens. This strategy also allows these vessels to have a longer B season. The Pacific cod B season often closes to trawl gear in early October when the final trawl halibut PSC apportionment has been used. Vessels then switch back to pot gear and continue fishing late into the year. In recent years, the GOA Pacific cod B seasons have remained open to vessels using fixed gear until December 31.

Movement among fixed gear sectors

The Council's current motion does not include options to limit vessels with fixed gear licenses from using more than one fixed gear type in the Federal fisheries. Most vessels use only one fixed gear type during the directed Pacific cod fisheries during a given year. For example, in 2006 there were 193 vessels that used a single fixed gear type during the directed Pacific cod fisheries in the Western and Central GOA. There were 8 vessels that used two fixed gear types, including vessels that used both jig and hook-and-line gear and vessels that used both pot and hook-and-line gear.

When fishing activity across a period of years is considered, a larger number of vessels have used more than one fixed gear type during the directed Pacific cod fisheries. During the period from 2000-2006, 51 vessels used two fixed gear types and 5 vessels used three fixed gear types (pot, hook-and-line, and jig) during the directed Pacific cod fisheries in the GOA. These estimates also include vessels that fished only in parallel waters and do not have a valid LLP license, and are intended to give the Council a general perspective on the number of vessels that actively fish using more than one gear type and that could be precluded from continuing to do so in the future. A total of 42 licenses (32 Central GOA licenses and 10 Western GOA licenses) had at least one directed Pacific cod landing using two or more fixed gear types during 2000-2006.

Qualification for multiple Pacific cod endorsements

The Council may wish to consider adding options under Component 5 that would limit the number of Pacific cod endorsements that a license or vessel could receive. First, the Council could specify whether individual licenses could qualify for more than one gear endorsement. Under Amendment 67, individual licenses were eligible to qualify for both hook-and-line and pot endorsements, but cannot carry endorsements for both operation types within a given gear type (e.g., a license cannot carry both pot catcher processor and pot catcher vessel endorsements). However, under Amendment 85, vessels with pot or hook-and-line catcher processor endorsements are eligible to act as catcher vessels and deliver shoreside or to a mothership. When this occurs, this catch is deducted from the catcher vessel allocations for the respective gear types. If gear-specific Pacific cod endorsements are added to fixed gear licenses, the operation type on each license could determine which sector allocations that license could access, i.e.

licenses with a catcher processor designation could only fish off the catcher processor sector allocations, regardless of their mode of operation.

Second, the Council could specify whether vessels that have more than one fixed gear license, and duplicate Western and/or Central GOA area endorsements on those licenses, could qualify for duplicate gear and operation type endorsements on stacked licenses. For example, if two fixed gear licenses are stacked on a vessel, and both licenses have Central GOA endorsements, the Council could specify that only one of these licenses could receive a Pacific cod endorsement. Under Amendment 67, vessels with stacked licenses could only qualify for Pacific cod endorsements on a single license. This provision was included to avoid increasing the capacity for additional entry into the fishery. In the absence of a provision that limits vessels with stacked licenses from qualifying for duplicate Pacific cod endorsements, vessels with duplicate endorsements could potentially sell those licenses to other vessels, resulting in an overall increase in effort in the Western and Central GOA Pacific cod fixed gear fisheries. The complications associated with stacked licenses are addressed in detail in the next section.

In summary, there are two issues regarding multiple Pacific cod endorsements that the Council may wish to address:

- (1) Allowing individual licenses to carry multiple gear endorsements (e.g., pot and longline)
- (2) Allowing vessels with stacked licenses to qualify for duplicate gear/operation endorsements (e.g., two licenses with Central GOA pot catcher vessel endorsements)

3.5.6 Stacked licenses

The Council addressed the issue of ‘stacked’ licenses (i.e., more than one license assigned to a single vessel) during the trawl recency action. Licenses are stacked for several reasons, most often to increase the number of areas that a vessel can fish by adding area endorsements. A vessel may also hold multiple LLPs to increase the number of gear or operation type endorsements it holds or to gain access to a fishery that requires a species and gear-specific endorsement, such as the BSAI fixed gear Pacific cod fishery. Stacking licenses is necessary because endorsements are not severable under the current LLP. If a vessel wishes to expand its operations into a new area or fishery and does not have the necessary endorsements on its current license, it needs to obtain another license with the appropriate area endorsement.

The Council considered several approaches to crediting catch to stacked licenses for the trawl recency action. Based on staff analysis and its own deliberations, the Council adopted a provision that credited catch to both licenses if they were stacked on a single vessel at the time the landing was made. The rationale for this approach was that both licenses were being used at the time of landing. Currently, groundfish catch is not assigned to a specific license. When vessels report catch on Fish Tickets or Weekly Production Reports, they are not required to report the LLP license that was assigned to the vessel at the time of landing. This data gap is problematic, because if a vessel holds multiple LLPs with duplicate area endorsements, and the vessel makes a landing in that area, there are no clear rules regarding which license is credited with that catch. Apportioning history among 2 or more stacked licenses would require the Council to develop detailed rules describing how catch should be apportioned, which could complicate and possibly delay implementation of the action. The landings threshold selected for the trawl recency action was low (2 landings), and it was not clear that apportioning landings among stacked licenses would have a sufficient impact on the number of qualifying licenses to justify complicating the action by creating specific rules for stacked licenses.

The fixed gear recency action differs in several respects from the trawl recency action. The current set of options under consideration include relatively minimal landings thresholds (1, 3, or 5 landings), but there are also tonnage thresholds (5, 10, 25, or 100 mt) that could potentially be selected. If the Council chooses a minimal landings threshold, double counting catch history is unlikely to result in many stacked licenses qualifying that would not qualify if catch were apportioned among stacked licenses. However, if the Council chooses more substantial catch thresholds, some stacked licenses would likely benefit from double counting of catch. Also, the Council is considering options to add fixed gear Pacific cod endorsements to licenses. If vessels with stacked licenses are eligible to qualify for duplicate fixed gear Pacific cod endorsements on stacked licenses, they could potentially lease or sell the duplicate license and the fleet's capacity would increase.

There are currently 18 stacked Western GOA catcher vessel licenses (assigned to 9 vessels, each with 2 licenses) and 98 stacked Central GOA catcher vessel licenses (assigned to 47 vessels; 43 vessels have 2 licenses, and 4 vessels have 3 licenses). These totals only include fixed gear licenses that are currently stacked with other fixed gear licenses that have duplicate Western and/or Central GOA area endorsements. There is also one Central GOA catcher processor license that is currently stacked with a Central GOA catcher vessel license. There are no fixed gear catcher processor licenses with Western or Central GOA endorsements currently stacked with other catcher processor licenses, and agency records indicate that no CP licenses have been stacked in the past. Of the currently stacked licenses, 8 Western GOA licenses and 47 Central GOA licenses have at least one qualified fixed gear landing during 2000-2006. These currently stacked licenses, in addition to licenses that were stacked in the past, are potentially the universe of licenses at issue if the Council chooses to develop rules to apportion landings among stacked licenses.

Table 3-22 Number of currently stacked fixed gear catcher vessel licenses with Western and/or Central GOA area endorsements.

Area endorsement	Number of stacked licenses	Number of stacked licenses with at least one qualified fixed gear landing during 2000-2006
Central GOA	98	47 ¹
Western GOA	18	8 ²

Source: ADFG Fish Tickets and RAM groundfish LLP license file, October 2008

1 Licenses are stacked on 23 vessels. 22 vessels have 2 licenses, and 1 vessel has 3 licenses

2 Licenses are stacked on 4 vessels, each with 2 licenses

In past actions (e.g., Amendment 80), the Council has apportioned catch history among stacked licenses for the purpose of making allocations. Allocations were calculated by splitting catch evenly among all licenses held by a vessel at the time of landing. There are several complications that could arise if the Council chooses to apportion catch history among licenses for the fixed gear recency action. For example, if a vessel has two stacked licenses, and catch is split evenly between the two licenses, it is possible that neither license would meet the qualification threshold selected by the Council. The Council could include a provision that would give the license owner(s) the opportunity to choose which license would be credited with landings so that one of the stacked licenses could qualify. In the absence of an agreement among license owners, catch history could be split evenly. If a catcher processor license is stacked with a catcher vessel license, and there are different qualification criteria for these operation types, the license owners could potentially choose to split history between the two licenses so that both licenses qualified.

In summary, the Council's current motion for the proposed fixed gear recency action credits catch to both licenses if they were stacked on a single vessel at the time the landing was made, and all of the previous

license tables in this document fully credit all catch to stacked CV licenses. The motion also has an option to divide landings and catch (mt) evenly between licenses that are stacked on a vessel at the time of landing. Table 3-23 shows the results of dividing catch history among stacked CV licenses. These results may be compared to those in Table 3-8 to see the number of licenses that do not qualify when catch history is divided among stacked licenses. Few Western GOA fixed gear licenses are stacked, and Table 3-23 shows that in most cases, the same number of licenses qualify when stacked history is split among licenses. In contrast, a large number of active Central GOA licenses are stacked, and splitting catch history reduces the total number of licenses that qualify under each of the options. For example, at the 1 groundfish landing threshold, 296 Central GOA licenses qualify during 2000-2006 when catch is split among stacked licenses, as compared with 291 when history is split among stacked licenses. At the 100 mt threshold for directed Pacific cod, 12 fewer Central GOA licenses qualify during 2000-2006 (139 licenses) when history is divided among stacked licenses than when history is fully credited to all stacked licenses (151 licenses, see Table 3-8).

Table 3-23 Number of qualifying CV licenses when catch is divided among stacked licenses.
Columns on right hand side of table include landings from 2007 through June 2008.

Western Gulf- 266 licenses

		<u>2007- June 4, 2008 plus the period:</u>							
period		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	101	98	89	83	114	114	102	104
	3 landings	85	82	78	74	95	98	90	93
	5 landings	77	72	71	66	85	89	80	84
	5 mt	85	84	77	74	101	101	94	95
	10 mt	79	78	73	69	93	93	87	89
	25 mt	74	72	66	63	86	88	80	82
	100 mt	55	53	54	51	61	62	58	61
Directed Pacific cod	1 landing	94	92	82	78	107	107	96	97
	3 landings	83	81	76	73	91	93	86	88
	5 landings	74	71	68	64	84	86	78	81
	5 mt	85	84	77	74	101	101	94	95
	10 mt	79	78	73	69	92	92	86	88
	25 mt	74	72	66	63	86	88	80	82
	100 mt	55	53	54	51	60	61	58	61

Central Gulf- 884 licenses

		<u>2007- June 4, 2008 plus the period:</u>							
period		2000-2006	2000-2005	2002-2006	2002-2005	2000-2006	2000-2005	2002-2006	2002-2005
All groundfish	1 landing	291	274	212	191	314	322	243	251
	3 landings	249	236	179	161	268	272	210	215
	5 landings	228	213	161	141	245	250	191	198
	5 mt	250	235	187	166	274	281	216	224
	10 mt	236	222	177	159	255	261	203	210
	25 mt	197	185	153	133	221	228	181	190
	100 mt	143	134	103	90	151	159	119	128
Directed Pacific cod	1 landing	268	252	197	176	289	295	224	230
	3 landings	238	223	173	153	256	260	203	208
	5 landings	215	201	154	133	231	237	182	189
	5 mt	237	223	180	161	259	265	208	215
	10 mt	223	210	170	152	243	248	196	202
	25 mt	185	177	144	129	213	215	176	181
	100 mt	139	132	97	87	148	156	111	119

Source: ADFG Fish Tickets and RAM Groundfish license file, October 2008.

If the Council wishes to treat stacked licenses in a different way, there are a number of questions that would need to be addressed, including:

(1) What is the definition of a stacked license? Currently, staff assumes that licenses are stacked, for the purpose of the GOA fixed gear recency action, if 2 or more licenses assigned to a single vessel at any point in time all have: (a) fixed gear designations, and (b) at least one duplicate area endorsement (Western GOA or Central GOA). Stacked licenses may have different operation type designations, i.e. one license could have a catcher vessel designation and the other license a catcher processor designation. Stacked licenses may have additional area endorsements (AI, BS, SE), trawl designations, and BSAI Pacific cod endorsements that do not duplicate each other.

(2) What are the rules for apportioning catch among stacked licenses? Catch could simply be split evenly among stacked licenses (as the default rule), or license owners could be given the option to agree upon another method for apportioning catch. These rules would not only apply to licenses that are stacked at the time this action is implemented, they would also apply retroactively (to 2000 or 2002, depending upon the qualification period selected) to any fixed gear licenses that were stacked at any point in time. If license owners are given the opportunity to choose how catch will be apportioned, implementation of the action would likely be delayed. Even if a default rule is used, and catch is split evenly among stacked licenses, apportioning catch would complicate implementation of the action.

(3) How would the Council address ownership issues? Stacked licenses may be held by different persons, and the vessel assigned to those licenses may be owned by another person. Stacked licenses may not be connected in any way except through the vessel assigned to those licenses. License owners may enter into temporary partnerships to combine the endorsements and designations on their licenses and maximize their opportunities to participate in the fisheries. If the Council simply splits catch history evenly among stacked licenses for the purpose of the GOA fixed gear recency action, it could avoid the complications that could arise if multiple license owners were allowed to choose which license is credited with catch history. However, if the Council chooses to limit the number of Pacific cod endorsements that stacked licenses may receive so that, for example, two stacked licenses do not both qualify for Western GOA pot catcher vessel endorsements, the action may be complicated if stacked licenses have different owners. Also, licenses may be transferred once per year, and license holders could circumvent this rule by simply unstacking licenses prior to implementation of this action, and thereby qualify for Pacific cod endorsements on each of the formerly stacked licenses.

3.5.7 Potential issues with limiting access to Pacific cod sector allocations

Parallel waters catch by vessels without LLP licenses

If Pacific cod endorsements are added to Western and Central GOA fixed gear licenses, these endorsements would limit entry to the directed Pacific cod fisheries in each management area. Specific gear designations could be included on these endorsements to limit the number of licenses eligible to participate in each sector. Several tables in this document provide estimates of the number of licenses that could receive Pacific cod gear and operation type endorsements. If Pacific cod sector allocations are implemented, these licenses would be eligible to fish off the respective gear and operation type allocations. However, there are several gaps in the limited entry provisions of the LLP that would allow vessels to fish off sector allocations without an LLP license or Pacific cod endorsement.

First, vessels are not required to hold an LLP license to fish in the parallel waters fisheries. Although the LLP limits entry into the groundfish fisheries in Federal waters, vessels can fish in parallel waters without

an LLP license. If sector allocations are implemented, vessels without LLP licenses, and licenses without Pacific cod endorsements, could be restricted from fishing in Federal waters during the directed Pacific cod fisheries, but could continue to fish in the parallel waters fisheries. In years when fish are concentrated in inside waters, or when conditions in other fisheries are unfavorable, participation by vessels without LLP licenses may increase in the parallel waters fisheries. In the GOA, the presence of a local fleet that can readily access the parallel waters fisheries makes it more likely that during certain years, vessels without LLP licenses will fish for Pacific cod in parallel waters.

During recent years, vessels without LLP licenses have harvested a relatively small proportion of the catch in each management area. Table 3-24 shows the average number of vessels without LLPs that fished for Pacific cod during the parallel waters seasons in 2002-2007, retained catch, and the average% of catch within each sector by these vessels. These numbers are an estimate, and are intended to provide the Council with some perspective on the extent of participation in the Pacific cod fisheries by vessels without LLP licenses.

Table 3-24 Average number of vessels fishing in the parallel waters fisheries without an LLP license, retained catch (mt), and percent of retained catch of Pacific cod within each sector by vessels without LLPs during 2002-2007.

Year	HAL CV		Jig CV		Pot CV		Trawl CV		All sectors Catch	
	Vessels	Catch	Vessels	Catch	Vessels	Catch	Vessels	Catch		
Central GOA	2002-2007 average	63	106	15	45	5	211	1	*	362
Western GOA	2002-2007 average	11	16	9	50	7	629	1	*	695

Year	HAL CV		Jig CV		Pot CV		Trawl CV		All sectors Percent of total catch
	Percent of sector catch								
Central GOA	2002-2007 average	2%	69%	3%	*	2%			
Western GOA	2002-2007 average	11%	64%	9%	*	5%			

Source: ADFG Fish Tickets and RAM groundfish license file, October 2008. *Withheld due to confidentiality.

Notes: Excludes State waters fisheries. Includes IFQ fisheries, because IFQ participants may retain groundfish without an LLP (and are required to retain Pacific cod up to the MRA).

The table also provides some insight into the level of participation within each sector by vessels without licenses. If Pacific cod sector allocations are implemented, and Pacific cod endorsements are added to fixed gear licenses, vessels without licenses, or without Pacific cod endorsements on their licenses, will continue to be eligible to fish in the parallel waters. Most hook-and-line catcher vessels that do not have LLPs and that have retained catch of Pacific cod from the parallel waters fisheries were participating in the IFQ fisheries at the time they made these Pacific cod landings. Under the LLP, vessels participating in the IFQ fisheries that do not have LLP licenses are allowed to retain incidental catch of Pacific cod. This provision in the LLP is consistent with National Standard 9 of the Magnuson-Stevens Act, and was intended to reduce the waste that occurs when discards of groundfish are required. In the Central GOA, an average of 63 hook-and-line vessels per year during 2002-2007 that did not have LLP licenses had at least one landing of Pacific cod, but catch by these vessels amounted to only 2% of the catch by hook-and-line catcher vessels in the Central GOA. Overall, vessels without LLP licenses harvest a small proportion of the retained catch of Pacific cod in the Central GOA (2%) and Western GOA (5%). The majority of this catch was by pot vessels fishing without LLPs in the Western and Central GOA. Hook-and-line vessels without LLPs harvested 11% of the Western GOA hook-and-line catch during 2002-2007, but hook-and-line catcher vessels typically catch less than 1% of the Western GOA catch. The

majority of the jig catch in each management area is harvested by vessels without LLP licenses, but these vessels generally harvest less than 1% of the Western and Central GOA catch.

Catcher processors acting as catcher vessels

Second, Pacific cod endorsements could restrict vessels to using a specific gear type in the directed Pacific cod fisheries, but may not prevent catcher processors from fishing off catcher vessel allocations. Under Amendment 67, gear and operation type endorsements limit entry into the gear sectors, and only vessels with catcher processor endorsements are eligible to fish off the BSAI Pacific cod catcher processor allocations. However, licenses with catcher processor endorsements can also act as catcher vessels and deliver shoreside or to a mothership. Historically, few catcher processors in the GOA have acted as catcher vessels, but sector allocations could potentially create an incentive for catcher processors to opportunistically fish as catcher vessels. If this activity becomes more common than it has in the past, it could potentially erode the catch shares of vessels that can only act as catcher vessels and who contributed history to the catcher vessel allocations.

Under previous amendments (e.g., Amendment 85), catch is counted against allocations based on vessel activity. If a vessel catches and processes its own catch, that catch is deducted from the catcher processor allocation. If a vessel delivers its catch shoreside or to a mothership, that catch is deducted from the catcher vessel allocation. If the Council perceives that catcher processors may opportunistically fish off catcher vessel Pacific cod allocations in the GOA, it could modify the catch accounting system for the sector allocations. Instead of accounting for catch based on mode of operation, NOAA fisheries could account for catch based on the mode of operation on a vessel's Pacific cod endorsement. Currently, the Catch Accounting system does not track catch by LLP licenses. Modifying the Catch Accounting system to track licenses and license endorsements would require substantial programming effort. However, given the small number of catcher processor licenses which would likely qualify for a Pacific cod endorsement in the Western or Central GOA, this modification to the Catch Accounting system may be practicable. Licenses may only be transferred once per year. The Catch Accounting system would link catch by each vessel holding a Pacific cod catcher processor endorsement to the appropriate sector allocation account. In this way, vessels holding Pacific cod catcher processor endorsements could only fish off the catcher processor allocations, regardless of their mode of operation. Revisions to the Catch Accounting system could be minimized by continuing to base other aspects of the Catch Accounting system (e.g., estimates of bycatch, discards, and PSC) on the mode of operation of the vessel.

Finally, it is important to note that the State of Alaska does not legally recognize Federal allocations between catcher vessels and catcher processors using the same gear type to harvest fish in the same management area. For example, the BSAI Pacific cod fishery is allocated by gear type and processing sector. The State recognizes allocations by gear type, but does not recognize the separate pot and hook-and-line CP and CV allocations.⁸ If the directed fishery for one of the pot or hook-and-line sectors is open in Federal waters, any vessel using that gear type and meeting any applicable vessel length restrictions is eligible to participate in the parallel waters fishery. In 2008, pot catcher processors continued to fish in the Aleutian Islands parallel waters fishery even after the Amendment 85 pot CP allocation had been fully harvested, because the adjacent Federal waters fishery was still open to pot catcher vessels. In the same way, catcher vessels may fish in the parallel waters fishery even if it is only open to catcher processors in adjacent Federal waters.

⁸ State v. Grunert, 139 P.2d 1226 (Alaska 2006); Grunert v. State, 109 P.2d 924 (Alaska 2005). In the 2005 case, the Alaska Supreme Court ruled that the Board of Fisheries could not allocate within a single fishery. 109 P.2d at 931-32. In the 2006 case, the Court held that 'fisheries' could only be distinguished by differences in the gear that is actually used to harvest the fish. 139 P.2d at 1235-39.

The Council is currently considering options to address these parallel waters issues in the BSAI Pacific cod fishery. The Council and NOAA fisheries have broad authority over vessels that hold Federal permits and licenses. This authority may extend into the parallel waters fisheries. Vessels that hold Federal fisheries permits or LLP licenses may be subject to Federal groundfish regulations, even while fishing in State waters adjacent to the GOA or BSAI. For example, vessels that hold FFPs are subject to Federal recordkeeping and reporting, observer, and VMS requirements while fishing in Federal, parallel, or State waters fisheries. In 2006, sideboards were implemented that limit harvests of GOA Pacific cod by vessels that received initial allocations of *C. opilio* crab quota. The sideboard regulations were written such that vessels cannot circumvent sideboard closures by fishing in parallel waters fisheries. Vessels that hold *either* an FFP or an LLP are subject to the sideboards while participating in any groundfish fishery in the parallel waters fisheries in the GOA (680.22). Options that the Council is considering for the BSAI Pacific cod fishery include extending the LLP and Pacific cod endorsement requirement to parallel waters for CPs only; and requiring CPs to surrender Federal permits and licenses if they choose to fish in the BSAI Pacific cod parallel waters fishery. The Council is scheduled to review the draft analysis of the proposed action in February 2009.

3.5.8 Harvest Cooperative Formation

Long term allocations of the Western and Central GOA Pacific cod TACs to the sectors and provisions that limit entry to the directed Pacific cod fisheries may provide opportunities for the formation of harvest cooperatives. Individual sectors may be more likely to form cooperatives if all eligible participants are easily identified through a restrictive license limitation program, and if separate allocations are made to each sector. Pacific cod endorsements on fixed gear licenses would limit entry to the directed Pacific cod fisheries in Federal waters, but would not restrict vessels without LLP licenses, or without Pacific cod endorsements on licenses, from participating in the directed Pacific cod fisheries in parallel waters. NOAA Fisheries does not currently have a mechanism to allocate catch history to cooperatives in the GOA Pacific cod fisheries. All vessel owners within a sector would need to voluntarily join a cooperative and abide by its bylaws, or additional regulations would need to be implemented to provide NOAA fisheries with the necessary authority to allocate Pacific cod to individual cooperatives.

In the GOA Pacific cod fisheries, the hook-and-line catcher processor sector may be the sector that is most likely to form a harvest cooperative. Most of the freezer longliner fleet fishes for Pacific cod in the BSAI, then moves into the GOA after the BSAI Pacific cod seasons close. In 2005, the BSAI freezer longliner fleet did not fish in the GOA during the B season, because NMFS inseason management was concerned that there was not sufficient halibut PSC to support this fleet. As a result, in both 2006 and 2007, the freezer longliners set up an informal 'PSC co-op' with NMFS inseason management during the B season. Under this arrangement, the third seasonal apportionment of halibut PSC was informally divided between catcher processors and catcher vessels. The freezer longliners then further divided the catcher processor PSC among vessels fishing the B season. This informal cooperation in sharing PSC suggests that this sector has the potential to establish a formal harvest cooperative.

The freezer longliner fleet is relatively small, and the proposed fixed gear recency action could potentially limit the number of participants in this sector by adding gear-specific Pacific cod endorsements to fixed gear licenses. There are currently 53 fixed gear catcher processor licenses with Central and/or Western GOA area endorsements; 49 of these licenses have Central GOA endorsements and 31 licenses have Western GOA endorsements. A total of 17 Western GOA licenses and 12 Central GOA licenses have at least one hook-and-line landing in the directed Pacific cod fisheries during 2000-2006 and could potentially qualify for Pacific cod hook-and-line catcher processor endorsements. If the landings or catch thresholds are set higher, even fewer licenses would qualify for Pacific cod endorsements. If Pacific cod sector allocations are implemented, total catch by hook-and-line catcher processors would be capped by the allocations. If vessels in this sector form a harvest cooperative subsequent to the implementation of

sector allocations, this sector could potentially take advantage of increased production efficiencies of fishing cooperatively, but would not be able to increase the sector's overall harvest shares of the Western and Central GOA TACs. However, if vessels fish the catcher processor allocations cooperatively, some vessels in this fleet could opportunistically act as catcher vessels and fish off the hook-and-line catcher vessel allocations. Again, if the Council perceives this to be a potential problem, NOAA fisheries could account for catch based on the operation type on a license's Pacific cod endorsement, rather than based on the vessel's activity.

3.6 Analysis of the Impacts of the Alternatives

3.6.1 Effects on harvesters

Under the no action alternative, there would be no reduction in the number of fixed gear groundfish licenses with Western and Central GOA endorsements. If this alternative is selected, latent fixed gear licenses could enter the GOA groundfish fisheries in the future and dilute revenues, increase costs, or both, for licenses that have participated in the fisheries during recent years. Increased participation may result in negative economic impacts to current participants in the fisheries. If Pacific cod endorsements are not added to fixed gear licenses, latent licenses with no recent catch history in the GOA Pacific cod fisheries could enter the fisheries and erode the catch shares of long-term participants. Finally, if gear-specific Pacific cod endorsements are not created, and Pacific cod sector allocations are implemented, participants in each sector will be vulnerable to an influx of effort into the sectors. If effort increases substantially in a particular sector, the erosion of catch shares resulting from latent licenses re-entering the fisheries will be exacerbated, because each sector's catch will be constrained by its allocation. The number of licenses that might enter the fisheries in the absence of this action is unknown, and depends on future market conditions, the size of groundfish TACs, opportunities to participate in other fisheries, the future regulatory environment, and operating costs in the fisheries. Consequently, this analysis does not provide a quantitative estimate of the potential economic impacts of the no action alternative.

This proposed action would extinguish Western and Central GOA area endorsements on fixed gear licenses that do not have recent qualifying catch history. If licenses have no other area endorsements, the action would extinguish those licenses. If the Council chooses the minimum landings threshold of 1 groundfish landing, this action would have minimal effects on recent participants in the fisheries. The primary effect of this action on the harvesting sector would be to limit the potential for future entry of latent licenses into GOA groundfish fisheries subject to the LLP requirement. If the Council chooses a higher landings threshold, this action has the potential to exclude some recent participants from continuing to participate in the Federal groundfish fisheries in the GOA.

This action would reduce the existing capacity in the GOA fixed gear fisheries to include only licenses that have recent catch history in the fisheries. Extinguishing latent licenses may prevent future gross revenues from groundfish harvests in the respective management areas from being diluted by future increases in fishing effort by latent licenses. Those LLP holders exhibiting dependence and participation in the fixed gear groundfish fisheries, (i.e., those meeting the selected threshold criteria), would be protected from possible future increases in effort and dilution of their gross revenue share. However, this action may not result in increased production efficiencies to licenses that would generally be expected from a comprehensive rationalization program. Following implementation of the amendment, each qualified LLP holder will still have an incentive to expand their fishing effort and maximize their respective share of the gross revenues in the open access GOA groundfish fisheries. The action will not necessarily result in an 'optimum' harvesting capacity in any of the sectors or management areas. The Council is considering a range of potential catch and landings thresholds, qualification periods, and catch

definitions. The number of latent LLPs to be removed under any of these options was not based on a predetermined optimum capacity for the fixed gear groundfish fleet. The action would revise the LLP by removing latent effort, and is a more modest approach to revolving participation issues than a fully rationalized fixed gear groundfish fishery.

The GOA groundfish fisheries are among the few remaining open access fisheries. Pacific cod is the primary species targeted by the fixed gear sectors. Increases in Pacific cod prices in recent years have the potential to attract re-entry of latent effort into the fisheries. In the absence of this action, latent LLP licenses would not necessarily re-enter the fisheries in the future. The re-entry of these latent licenses would depend on future market conditions, conditions in the fisheries, the future regulatory environment, and opportunities to participate in other fisheries. The proposed action is not likely to result in any immediate reduction of effort. Instead, it would prevent the potential future re-entry of latent fixed gear licenses into the fisheries. Therefore, the short term effects on efficiency should be negligible. In the longer term, the proposed action has the potential to limit overcrowding in the fisheries. However, in the absence of this action, the number of latent licenses that would have re-entered the fixed gear groundfish fisheries is not known. Therefore, the economic effects of the proposed action cannot be precisely quantified.

The action would potentially reduce the number of fixed gear catcher vessel licenses to 19% to 38% of current capacity in the Western GOA and 11% to 33% of current capacity in the Central GOA. The number of catcher processor licenses would be reduced to 29% to 68% of existing capacity in the Western GOA and 8% to 43% in the Central GOA, if the qualifying periods in Options 1 through 4 are selected. If catch history during 2007 through June 4, 2008 is included, additional licenses would meet the recency thresholds. If Pacific cod endorsements are added to fixed gear licenses, even fewer licenses would be eligible to participate in the directed Pacific cod fisheries in each management area. As a result, the number of participants in the fisheries will be permanently capped at the number of available licenses, and new entrants will have to purchase an existing license if they wish to fish in Federal waters. Reducing the pool of available licenses has the potential to increase demand for and cost of remaining licenses.

3.6.2 Gross Revenues from GOA Groundfish and Other Fisheries

Catcher Vessel Licenses

Many fixed gear licenses were active in other Alaska commercial fisheries in addition to the GOA fixed gear fisheries during 2000-2006. Groundfish licenses may have up to five area endorsements (Bering Sea, Aleutian Islands, Western GOA, Central GOA, and Southeast Outside), two gear designations (trawl and fixed gear), and two BSAI Pacific cod endorsements, and these endorsements and designations allow licenses to participate in a suite of groundfish fisheries. In addition, many license owners hold halibut and sablefish IFQ, BSAI crab quota, and other permits that allow them to participate in other fisheries in Alaska.

Gross revenues data indicate that the majority of fixed gear catcher vessel and catcher processor licenses that did not have any qualified fixed gear landings during 2000-2006 elected to participate in other Alaska fisheries during this period. Tables 3-25 and 3-26 show the number of licenses that had at least one qualified fixed gear groundfish landing in the Western or Central GOA (top line, left hand column) and did not have one qualified fixed gear landing in the Western or Central GOA during 2000-2006 (top line, right hand column). The tables also show the number of licenses that participated in other fisheries in Alaska, based on the activity of the vessel(s) assigned to the license during 2000-2006. The tables report total revenues during 2000-2006 for licenses that participated in each fishery and average annual revenues

per license across all fisheries. Note that ‘licenses’, per se, are not participating in each of the fisheries; the analysis is based on the fishing activities of the vessel(s) assigned to each license during 2000-2006. The tables provide an indication of the level of participation by active and inactive fixed gear licenses in the various fisheries during 2000-2006.

Several fisheries overlap temporally with the Western and Central GOA Pacific cod fisheries. Removing area endorsements from fixed gear licenses that participate in other fisheries, and not the GOA fixed gear fisheries, would not impact the status quo fishing operations of these licenses. However, extinguishing area endorsements on fixed gear licenses would limit the opportunity for future entry of these licenses into the GOA fixed gear fisheries. Allowing these latent licenses to retain Western and Central GOA area endorsements should be balanced against the interests of current participants in protecting long-term investments and historic catch shares in the GOA Pacific cod fisheries.

Most catcher vessel licenses that did not have fixed gear groundfish landings in the Western or Central GOA during 2000-2006 were active in other Alaska commercial fisheries. Out of 266 Western GOA licenses, there are 165 licenses that did not have any qualified landings during 2000-2006. However, 138 of these licenses had landings in other Alaska fisheries. Gross revenues for these licenses were mainly from the IFQ halibut (34%) and sablefish (20.7%) fisheries, and the BSAI trawl fisheries (33%). Less than 1% of revenues were from GOA Federal (0.9%) or State waters (0.2%) fixed gear fisheries. In contrast, most Western GOA licenses that had at least one fixed gear groundfish landing during 2000-2006 also participate in the State waters Pacific cod fisheries (74 of 101 licenses), and many licenses had landings in the Central GOA fixed gear Federal fisheries (24 licenses). The majority of active Western GOA licenses also had shellfish, salmon, and IFQ halibut landings. Gross revenues for licenses with qualified Western GOA landings were from IFQ halibut landings (35.5%), followed by shellfish (26.8%), and salmon (16.5%). Notably, GOA trawl groundfish fisheries comprised 15.4% revenues for these qualified licenses during 2000-2006, and fixed gear landings from the Western GOA groundfish fisheries comprised only 8.9% of gross revenues.

Of 884 Central GOA licenses, 588 licenses did not have qualified groundfish landings during 2000-2006; 474 of these non-qualified licenses had landings in other Alaska fisheries. Similar to non-qualified Western GOA licenses, the majority of revenues by these licenses were from IFQ halibut (34.6%) and sablefish (21.6%), and the BSAI trawl fisheries (14.2%). Only a small proportion of revenues by these licenses were from the fixed gear groundfish fisheries in the Western GOA (0.7%) or from the GOA State waters Pacific cod fisheries (1.4%). Most Central GOA licenses that made at least one groundfish landing during 2000-2006 also participate in the halibut IFQ fisheries (240 of 296 licenses). Active licenses also fished for salmon (176 licenses), IFQ sablefish (153 licenses), State GOA Pacific cod (144 licenses), and shellfish (133 licenses). Revenues by active licenses were from halibut IFQ landings (45.0%), followed by IFQ sablefish (9.9%), and shellfish (9.5%). Fixed gear groundfish landings in the Central GOA comprised 9.3% of gross revenues by active Central GOA licenses during 2000-2006.

Table 3-25 Gross revenues by fixed gear catcher vessel licenses in Alaska commercial fisheries during 2000-2006.

Western GOA

Fishery	Western GOA licenses with at least one Western GOA fixed gear landing (101 licenses)				Western GOA licenses with no qualified Western GOA fixed gear landings (165 licenses)			
	Number of licenses in fishery	Percent revenues	Total revenues 2000-2006	Annual revenues per license	Number of licenses in fishery	Percent revenues	Total revenues 2000-2006	Annual revenues per license
WG Groundfish- Fixed Gear	101	8.9%	\$19,959,057	\$28,231	0	0.0%	\$0	\$0
CG Groundfish- Fixed Gear	24	2.9%	\$6,471,679	\$38,522	30	0.9%	\$5,239,599	\$24,950
GOA Groundfish- Trawl	38	15.4%	\$34,410,207	\$129,362	23	6.5%	\$38,622,978	\$239,894
State GOA Pacific Cod	74	10.3%	\$23,103,358	\$44,601	20	0.2%	\$970,665	\$6,933
BSAI Fixed Gear	49	8.3%	\$18,615,407	\$54,272	47	1.9%	\$11,264,457	\$34,238
BSAI Trawl	12	1.7%	\$3,750,099	\$44,644	25	33.0%	\$195,148,317	\$1,115,133
IFQ Halibut	54	35.5%	\$79,448,375	\$210,181	89	34.0%	\$200,738,313	\$322,212
IFQ Sablefish	23	10.6%	\$23,792,159	\$147,777	69	20.7%	\$122,008,559	\$252,606
Salmon	65	16.5%	\$36,877,999	\$81,051	53	2.2%	\$13,144,325	\$35,429
Shellfish	84	26.8%	\$59,904,165	\$101,878	43	7.9%	\$46,428,753	\$154,248
Herring	11	0.5%	\$1,083,821	\$14,076	6	0.2%	\$1,158,735	\$27,589
Other fisheries	59	0.0%	\$71,665	\$174	42	0.1%	\$828,089	\$2,817
Total*	101*	100.0%	\$223,543,690	\$316,186	138*	100.0%	\$590,719,548	\$611,511
No landings in any fishery	0	0.0%	\$0	\$0	27	0.0%	\$0	\$0

*Note: Licenses may have participated in more than one fishery during 2000-2006.

Central GOA

Fishery	Central GOA licenses with at least one Central GOA fixed gear landing (296 licenses)				Central GOA licenses with no qualified Central GOA fixed gear landings (588 licenses)			
	Number of licenses in fishery	Percent revenues	Total revenues 2000-2006	Annual revenues per license	Number of licenses in fishery	Percent revenues	Total revenues 2000-2006	Annual revenues per license
CG Groundfish- Fixed Gear	296	9.3%	\$60,852,693	\$29,369	0	0.0%	\$0	\$0
WG Groundfish- Fixed Gear	57	0.7%	\$4,277,315	\$10,720	55	0.7%	\$8,144,251	\$21,154
GOA Groundfish- Trawl	19	5.4%	\$35,324,378	\$265,597	64	8.6%	\$101,940,604	\$227,546
State GOA Pacific Cod	144	3.0%	\$19,623,620	\$19,468	84	1.4%	\$16,823,552	\$28,611
BSAI Fixed Gear	87	4.4%	\$28,914,879	\$47,479	68	1.6%	\$18,686,759	\$39,258
BSAI Trawl	8	2.6%	\$17,101,209	\$305,379	33	14.2%	\$167,689,679	\$725,929
IFQ Halibut	240	45.0%	\$295,229,435	\$175,732	318	34.6%	\$408,088,430	\$183,328
IFQ Sablefish	153	9.9%	\$65,026,493	\$60,716	217	21.6%	\$254,362,144	\$167,454
Salmon	176	8.9%	\$58,711,959	\$47,656	308	11.5%	\$135,784,513	\$62,980
Shellfish	133	9.5%	\$62,187,982	\$66,797	172	4.5%	\$53,042,207	\$44,055
Herring	22	1.3%	\$8,374,343	\$54,379	41	1.1%	\$13,340,336	\$46,482
Other	149	0.2%	\$1,037,500	\$995	144	0.2%	\$2,428,652	\$2,409
Total	296	100.0%	\$656,661,806	\$316,922	474	100.0%	\$1,180,331,128	\$355,736
No landings in any fishery	0	0.0%	\$0	\$0	114	0.0%	\$0	\$0

Source: ADFG Fish Tickets, CFEC gross revenues data, and RAM groundfish LLP license file from October 2008

*Note: Licenses may have participated in more than one fishery during 2000-2006.

Note: Revenues from Western and Central GOA license tables are not additive; licenses may have both area endorsements.

Table 3-26 First wholesale revenues by qualifying and nonqualifying fixed gear catcher processor licenses in Alaska commercial fisheries during 2000-2006.

Western GOA- 31 licenses

Fishery	Western Gulf licenses with at least one Western Gulf fixed gear landing (23 licenses)				Western Gulf licenses with no qualified Western Gulf fixed gear landings (8 licenses)			
	Number of licenses in fishery	Percent revenues	Total revenues 2000-2006	Annual revenues per license	Number of licenses in fishery	Percent revenues	Total revenues 2000-2006	Annual revenues per license
WG Fixed Gear	23	5%	\$26,582,156	\$165,107	0	0%	\$0	\$0
CG Fixed Gear	14	1%	\$2,860,329	\$29,187	0	0%	\$0	\$0
Gulf Trawl	0	0%	\$0	\$0	3	*	*	*
BSAI Fixed Gear	22	82%	\$402,342,056	\$2,612,611	2	*	*	*
BSAI Trawl	0	0%	\$0	\$0	4	47%	\$34,318,123	\$1,225,647
IFQ Sablefish	17	12%	\$56,936,750	\$0	0	0%	\$0	\$0
Total	23	100%	\$488,721,291	\$3,035,536	6	100%	\$72,305,338	\$1,721,556
No landings in fisheries	0	0%	\$0	\$0	2	0%	\$0	\$0

Central GOA- 49 licenses

Fishery	Central Gulf licenses with at least one Central Gulf fixed gear landing (24 licenses)				Central Gulf licenses with no qualified Central Gulf fixed gear landings (25 licenses)			
	Number of licenses in fishery	Percent revenues	Total revenues 2000-2006	Annual revenues per license	Number of licenses in fishery	Percent revenues	Total revenues 2000-2006	Annual revenues per license
CG Fixed Gear	24	2%	\$6,293,064	\$37,459	0	0%	\$0	\$0
WG Fixed Gear	17	6%	\$24,269,769	\$203,948	10	1%	\$4,411,819	\$0
Gulf Trawl	0	0%	\$0	\$0	5	6%	\$20,684,032	\$590,972
BSAI Fixed Gear	22	81%	\$335,939,892	\$2,181,428	13	66%	\$242,860,060	\$2,668,792
BSAI Trawl	0	0%	0	\$0	6	24%	\$88,384,094	\$2,104,383
IFQ Sablefish	16	12%	\$49,815,179	\$444,778	15	3%	\$9,621,056	\$91,629
Total	24	100%	\$416,317,904	\$2,478,083	23	100%	\$365,961,061	\$2,273,050
No landings in fisheries	0				2	0%	\$0	\$0

Source: Catch Accounting/Blend – retained catch data; Economic SAFE Report (Hiatt 2007) – First wholesale prices per ton.

*Note: Licenses may have participated in more than one fishery during 2000-2006. Table excludes halibut and sablefish targeted catch. Revenues from Western and Central GOA license tables are not additive; licenses may have both area endorsements.

During 2000-2006, the majority of first wholesale revenues for catcher processor licenses with fixed gear landings in the GOA fisheries were from the BSAI fixed gear fisheries. Revenues from Western GOA fixed gear catch (5%) and Central GOA fixed gear catch (2%) were a small proportion of total revenues for licenses that have qualifying catch in the respective management areas. Nearly all catcher processor licenses that did not have qualified GOA groundfish landings were active in other fisheries during 2000-2006. The majority of revenues for these licenses were from the BSAI trawl and fixed gear fisheries and GOA trawl fisheries. Only 2 Western GOA and 2 Central GOA CP licenses did not have any landings in any commercial fisheries in Alaska during 2000 through 2006.

When comparing gross annual revenues per license, the most apparent difference between catcher vessel licenses with fixed gear landings and licenses without qualified fixed gear landings is that they are participating in a different suite of fisheries. Western GOA licenses with at least one qualified landing during 2000-2006 had annual gross revenues of \$316,186 per license. In contrast, Western GOA licenses without qualified fixed gear landings had substantially higher revenues, on average \$611,511 per license.

Non-qualifying licenses active in the BSAI trawl fisheries had over \$1 million in gross revenues per year during 2000-2006. There was not a strong difference between annual gross revenues for Central GOA licenses with qualified fixed gear landings (\$316,922) and without qualified landings (\$355,736). However, there was again a sharp contrast in gross earnings in the BSAI trawl fisheries. Non-qualified licenses had more than twice (\$725,929) the revenues that qualified licenses earned (\$305,379) in the BSAI trawl fisheries, indicating that non-qualifying licenses are making a choice to participate in the BSAI trawl fisheries rather than the GOA fixed gear fisheries.

3.6.3 Effects on processors

Groundfish landings by fixed gear LLP license holders in the Western and Central GOA are primarily delivered to shoreside processors in Kodiak, King Cove, Sand Point, and Dutch Harbor. During some years, there have been deliveries to at-sea processors operating offshore. The proposed action is not expected to directly impact the distribution of landings among shoreside processing communities or at-sea processors. The proposed action, in tandem with the recent trawl recency action, may stabilize the number of participants in the fixed gear and trawl gear fisheries in the GOA. The proposed Pacific cod sector allocations also have the potential to stabilize the distribution of catch between catcher vessels and catcher processors, as well as stabilize the distribution of catch among gear types. Catcher vessels could continue to deliver to shoreside or at-sea processors, and this action would not directly impact that choice.

3.6.4 Effects on management, monitoring, and enforcement

Implementation of the proposed action will require NOAA Fisheries to process and adjudicate the qualifying and non-qualifying licenses, and revoke licenses or license endorsements that do not meet the qualification criteria. Also, it will be necessary for NOAA Fisheries to make changes to databases used to administer and record license information. Specifically, area endorsements and gear designations will need to be tracked separately so that licenses with dual gear designations that lose an area endorsement because they lack fixed gear landings in an area will retain that area endorsement for trawl gear.

Under the current motion, the Council is also considering adding Pacific cod endorsements to fixed gear licenses, similar to the BSAI fixed gear Pacific cod endorsements created under Amendment 67. The development of species endorsements may also complicate license administration. Adding Pacific cod endorsements could be justified if the Council perceives a need to restrict access to that fishery. Pacific cod is the primary target fishery of fixed gear vessels in the GOA, and Pacific cod comprises more than 98% of retained catch by fixed gear vessels in the GOA, excluding halibut and sablefish IFQ catch. The Pacific cod endorsement would limit targeting, and it is possible that some participants that do not have a cod endorsement may use retained incidental catch to supplement their catch revenue in less lucrative target fisheries. However, aside from the IFQ fisheries, fixed gear catch in other target fisheries is relatively low. When the directed Pacific cod season is closed, vessels targeting other species are only allowed to retain incidentally harvested Pacific cod up to the MRA (20%). It is unlikely that many vessels will prosecute other fixed gear fisheries only as a means of accessing incidental catch of Pacific cod. Currently, a relatively small number of fixed gear vessels target other groundfish species in the GOA, and some of these vessels likely already have LLP licenses and would qualify for fixed gear Pacific cod endorsements. Requiring fixed gear LLP licenses to have Pacific cod endorsements would further reduce the number of open access fisheries available to the fixed gear sectors. However, vessels that do not have an LLP license with a fixed gear Pacific cod endorsement could continue to harvest Pacific cod in the parallel and State waters fisheries.

3.6.5 Effects on communities

Impacts of the proposed action on communities are difficult to assess, because licenses may be freely bought and sold by residents of any state or community. Licenses are held by individuals, not communities, and individual license holders may sell or lease licenses to residents of other communities. In-depth profiles of GOA fishing communities may be found in Community Profiles for North Pacific Fisheries (NMFS 2005). This document includes profiles of 136 fishing communities in Alaska. The profiles provide demographic information on each community, and describe the history, geography, and local economy of each community. In addition, they provide detailed descriptions of each community's involvement in the North Pacific fisheries, including data on the number and type of fishing permits held by residents, and participation by those permit holders in the different fisheries. Finally, each profile provides information on subsistence and sport fishing activities in each community. The profiles may be found at: <http://www.afsc.noaa.gov/REFM/Socioeconomics/Projects/CPU.php>

The State of Alaska's Community Information Summaries, which are compiled by the Alaska Department of Commerce, Community, and Economic Development (DCCED), include information on community location, population, taxes, climate, history, culture, demographics, utilities, schools, health care, economy, and transportation. The summaries may be found at: http://www.commerce.State.ak.us/dca/commdb/CF_CIS.htm

The number of catcher vessel licenses that meet the 1 groundfish landing threshold during 2000-2006 is reported by the current residency of license holders in Table 3-27. Alaska residents hold the greatest number of Western and Central GOA fixed gear licenses. Licenses owned by Alaska residents are more likely to have 1 landing during 2000-2006 than licenses owned by residents of other states. Forty-four percent of Western GOA licenses owned by Alaska residents had fixed gear landings during 2000-2006, compared with 33% of licenses owned by Washington residents, 13% of licenses owned by Oregon residents, and 11% of licenses owned by residents of other states. Forty percent of Central GOA licenses that are owned by Alaska residents had fixed gear landings during 2000-2006, versus 33% of all Central GOA licenses. Most Central GOA licenses that had fixed gear landings during 2000-2006 are owned by Alaska residents (248 of 296 active licenses). The majority of Western GOA licenses with fixed gear landings are also owned by Alaska residents (68 of 101 licenses), and 31 active licenses are owned by residents of Washington.

Table 3-27 Number of CV licenses with 1 landing during 2000-2006 by license owner's residence.

	WG licenses	WG licenses with 1 landing	Percent of licenses qualifying	CG licenses	CG licenses with 1 landing	Percent of licenses qualifying
Alaska	154	68	44%	620	248	40%
Oregon	8	1	13%	53	16	30%
Washington	95	31	33%	182	23	13%
Other State	9	1	11%	29	9	31%
Grand Total	266	101	38%	884	296	33%

Source: ADFG fish tickets and RAM groundfish license file, October 2008

The number of catcher processor licenses that meet the 1 groundfish landing threshold during 2000-2006 is reported by the residency of license holders in Table 3-28. Out of 49 Central GOA CP licenses, 12 are held by residents of Alaska and 37 are held by residents of other states. Licenses held by Alaska residents are more likely to have at least 1 landing during 2000-2006 than licenses owned by residents of other states. Seven of 12 licenses (58%) held by Alaska residents meet the 1 groundfish landing threshold during 2000-2006, and 17 of 37 licenses (46%) held by residents of other states have at least one landing.

Out of 31 Western GOA CP licenses, 3 are held by Alaska residents, and all 3 of these licenses have at least one groundfish landing during 2000-2006. The other 28 licenses are held by residents of other states, and 20 of these licenses have at least one landing. No CP licenses are held by residents of CQE communities. Additional information on homeport locations of CPs that participate in the GOA Pacific cod fisheries, ownership of CPs by CDQ groups, and contributions of CPs to local tax revenues may be found in the EA/RIR/IRFA for the GOA Pacific cod sector allocations.

Table 3-28 Number of CP licenses with 1 landing during 2000-2006 by license owner's residence.

	WG licenses	WG licenses with 1 landing	Percent of licenses with 1 landing	CG licenses	CG licenses with 1 landing	Percent of licenses with 1 landing
Alaska*	3	3	100%	12	7	58%
Other States	28	20	71%	37	17	46%
Grand Total	31	23	74%	49	23	47%

Source: NMFS Catch Accounting and RAM groundfish license file, October 2008. *Western GOA licenses held by Alaska residents from Juneau (1), Petersburg (1), and Seward (1). Central GOA licenses held by Alaska residents from Anchorage (1), Juneau (1), Kenai (1), Kodiak (4), Petersburg (3), Seward (1), and Sitka (1).

There are 21 Community Quota Eligible (CQE) communities located in the GOA management areas subject to the proposed action. Under the LLP, the Central GOA endorsement area also authorizes vessels to fish in the West Yakutat management area, and communities located in this area are included in this discussion. The CQE communities have fewer than 1,500 residents, lack direct road access, have direct access to saltwater, and have historic participation in the halibut and sablefish fisheries. These communities were identified under Amendment 66 to the GOA FMP and are eligible to purchase community Quota Shares (QS) of halibut. Table 3-29 lists the CQE communities, and shows the 2000 U.S. Census population in each community and the number of Western and Central GOA fixed gear licenses held by residents of these communities.

Table 3-29. Community Quota Entity (CQE) eligible communities in Southwest and Southcentral Alaska, and the number of fixed gear LLP licenses held by community residents.

Name	Population	Management Area	WG licenses	CG licenses
Akhiok	80	Central GOA	0	0
Chenega Bay	86	Central GOA	0	0
Chignik	79	Central GOA	0	3
Chignik Lagoon	103	Central GOA	1	4
Chignik Lake	145	Central GOA	0	0
Halibut Cove	35	Central GOA	0	1
Ivanof Bay	22	Western GOA	0	0
Karluk	27	Central GOA	0	0
King Cove	792	Western GOA	24	5
Larsen Bay	115	Central GOA	0	1
Nanwalek	177	Central GOA	0	0
Old Harbor	237	Central GOA	0	9
Ouzinkie	225	Central GOA	0	8
Perryville	107	Western GOA	1	1
Port Graham	171	Central GOA	0	1
Port Lions	256	Central GOA	0	8
Sand Point	952	Western GOA	30	17
Seldovia	286	Central GOA	0	10
Tatitlek	107	West Yakutat	0	1
Tyonek	193	Central GOA	0	0
Yakutat	680	Central GOA	0	4
Total			56	73

Source: Population from 2000 U.S. Census. Residency information is from the RAM groundfish LLP license file, October 2008

Currently, residents in 14 of the 21 CQE communities own a total of 56 licenses with Western GOA endorsements and 73 licenses with Central GOA endorsements. Table 3-30 shows the number of licenses in each community that had at least one qualified fixed gear landing during 2000-2006. Residents of King Cove and Sand Point own most (54) of the Western GOA licenses, and the majority (67%) of these licenses had at least one landing during 2000-2006. Residents of two other communities in Southwest Alaska, Perryville and Chignik Lagoon, own the other 2 Western GOA licenses. One license (owned by the Chignik Lagoon resident) was active in the Western GOA fixed gear fisheries during 2000-2006.

The majority of Central GOA licenses held by residents of CQE communities are owned by residents of Sand Point (17 licenses), Seldovia (10 licenses), Old Harbor (9 licenses), Ouzinkie (8 licenses), and Port Lions (8 licenses). However, only 1 of 17 Central GOA licenses held by Sand Point residents had at least one fixed gear landing during 2000-2006. Overall, only 3 of 30 Central GOA licenses held by residents of Southwest Alaska CQE communities had at least one fixed gear groundfish landing in the Central GOA during 2000-2006, whereas 17 of 43 Central GOA licenses held by residents of Southcentral Alaska CQE communities had at least one fixed gear landing during the same time period. In sum, residents of 3 CQE communities currently hold active Western GOA licenses, and residents of 9 CQE communities hold active Central GOA licenses.

Overall, the majority of Central GOA licenses that have at least 1 qualified fixed gear landing during 2000-2006 are owned by residents of Kodiak, Homer/Anchor Point, Cordova, and Anchorage. Central GOA licenses owned by residents of Kodiak Island communities and Homer area communities (including Anchor Point, Homer, and Nikolaevsk) were among the most likely to have landings during 2000-2006. Licenses held by residents of Southeast Alaska communities were among the least likely to have landings in the fisheries. Sitka and Petersburg residents each hold more than 30 Central GOA licenses. Only 2 of 34 Sitka licenses and 1 of 32 Petersburg licenses had at least one fixed gear landing during 2000-2006. Western GOA licenses that have been active in the fisheries and are held by Alaska residents are primarily owned by residents of Sand Point, King Cove, and Kodiak. Western GOA licenses held by residents of Southcentral and Southeast Alaska were less likely to have fixed gear landings in the Western GOA fisheries. For example, no Western GOA licenses held by Homer residents (14 licenses) or Sitka residents (8 licenses) had fixed gear landings in the Western GOA during 2000-2006.

Again, under the no action alternative, all of these licenses would retain their Western and/or Central GOA area endorsements, and latent licenses would have the opportunity to enter the GOA fixed gear Federal fisheries in the future. If a substantial number of latent licenses re-enter the fisheries, increased effort may intensify competition among fixed gear participants in the fisheries and have negative economic impacts on license holders who are long-term participants in the fisheries. If the Council chooses to advance options to add Pacific cod endorsements to licenses, these endorsements could limit participation in the directed Federal Pacific cod fisheries by license holders who do not meet the selected catch or landings thresholds. Estimates of the number of licenses owned by residents of Alaska communities and other States who would qualify for a Pacific cod endorsement will be generated for the next version of this analysis, if these options are retained.

Table 3-30. Number of catcher vessel licenses with at least one fixed gear landing in the endorsement area during 2000-2006, reported by license owner's community of residence (Alaska communities only).

City	CQE	WG licenses	WG licenses w/ 1 landing	Percent	CG licenses	CG licenses w/ 1 landing	Percent
Adak		1	0	0%	1	0	0%
Akutan		2	1	50%	0	0	0%
Anchor Point		2	1	50%	16	13	81%
Anchorage		12	5	42%	34	8	24%
Chignik	Y	0	0	0%	3	1	33%
Chignik Lagoon	Y	1	1	100%	4	1	25%
Clam Gulch		0	0	0%	3	1	33%
Cold Bay		2	1	50%	0	0	0%
Copper Center		0	0	0%	1	0	0%
Cordova		5	0	0%	30	10	33%
Craig		0	0	0%	1	0	0%
Delta Junction		2	0	0%	7	7	100%
Douglas		0	0	0%	2	0	0%
Dutch Harbor		3	2	67%	4	1	25%
Eagle River		0	0	0%	1	1	100%
Elfin Cove		0	0	0%	1	0	0%
Fairbanks		0	0	0%	1	0	0%
False Pass		3	2	67%	2	0	0%
Fritz Creek		0	0	0%	3	1	33%
Girdwood		2	1	50%	8	1	13%
Gustavus		1	0	0%	0	0	0%
Haines		0	0	0%	3	0	0%
Halibut Cove	Y	0	0	0%	1	0	0%
Homer		14	0	0%	109	66	61%
Hoonah		0	0	0%	3	0	0%
Juneau		3	1	33%	14	1	7%
Kasilof		0	0	0%	9	1	11%
Kenai		0	0	0%	3	0	0%
Ketchikan		2	1	50%	7	1	14%
King Cove	Y	24	16	67%	5	0	0%
Klawock		0	0	0%	1	0	0%
Kodiak		20	10	50%	137	92	67%
Larsen Bay	Y	0	0	0%	1	1	100%
Nikiski		0	0	0%	2	0	0%
Nikolaevsk		0	0	0%	15	8	53%
Nome		1	0	0%	2	1	50%
Old Harbor	Y	0	0	0%	9	7	78%
Ouzinkie	Y	0	0	0%	8	2	25%
Palmer		1	1	100%	3	0	0%
Pelican		0	0	0%	2	0	0%
Perryville	Y	1	0	0%	1	0	0%
Petersburg		6	3	50%	32	1	3%
Port Graham	Y	0	0	0%	1	0	0%
Port Lions	Y	0	0	0%	8	2	25%
Sand Point	Y	30	20	67%	17	1	6%
Seldovia	Y	0	0	0%	10	4	40%
Seward		1	0	0%	23	2	9%
Sitka		8	0	0%	34	2	6%
Soldotna		0	0	0%	2	0	0%
St Paul Island		1	0	0%	0	0	0%
Sterling		0	0	0%	2	0	0%
Tatitlek	Y	0	0	0%	1	1	100%
Tenakee Springs		0	0	0%	2	0	0%
Unalaska		4	0	0%	0	0	0%
Valdez		0	0	0%	5	0	0%
Wasilla		1	1	100%	10	4	40%
Whittier		0	0	0%	2	1	50%
Willow		1	1	100%	5	5	100%
Wrangell		0	0	0%	5	0	0%
Yakutat	Y	0	0	0%	4	0	0%
Total Alaska		154	68	44%	620	248	40%

Source: ADFG Fish Tickets and RAM groundfish LLP license file, October 2008

Finally, a summary of the number of catcher vessel owners from Alaska communities that have participated in the fixed gear fisheries in the GOA is included in Appendix A. The table reports the number of catcher vessel owners who have participated in the Federal waters, parallel waters, and State waters Pacific cod fisheries using fixed gear during 1995-2006, by community of residence. Note that this table includes landings from the Western GOA, Central GOA, and West Yakutat, because the LLP authorizes licenses with Central GOA endorsements to fish in Federal waters of West Yakutat. The tables also report gross revenues from the fisheries, and the percentage of total revenues from all Alaska fisheries comprised by the GOA Pacific cod fisheries in each community. This provides a measure of the relative economic importance of the GOA Pacific cod fisheries to these communities.

3.6.6 Interactions with other recent or proposed actions

A number of past actions have limited effort by individual vessels or sectors in the BSAI and GOA groundfish and crab fisheries. The halibut and sablefish IFQ program, BSAI crab rationalization program, Amendment 67 (BSAI Pacific cod fixed gear endorsements), and Amendments 64 and 85 (BSAI Pacific cod sector allocations) limit entry to some fisheries and sectors. For example, the halibut and sablefish IFQ program and BSAI crab rationalization program provide exclusive allocations to fixed gear vessels and limit entry by holders of latent licenses excluded from those programs. In effect, these programs foreclose certain fisheries to new entry. Holders of latent licenses who wish to reenter the fisheries have access to fewer fisheries.

Rationalization programs can expose participants in remaining open access fisheries to increased effort by these displaced participants. In addition, such programs can result in increased effort in open access fisheries by recipients of exclusive allocations. Sideboards are often imposed on participants in rationalized programs to prevent these spillover effects. For example, in developing the BSAI crab rationalization program, the Council imposed sideboards on the GOA fisheries. Pot vessels generally participate in only the crab and cod fisheries. As a result, the only perceived increase in opportunity arising from the crab rationalization program was thought to be in the Pacific cod fisheries in the GOA that are prosecuted in January, when the Bering Sea *C. opilio* fishery is typically prosecuted. Only recipients of initial allocations⁹ in the Bering Sea *C. opilio* fishery are subject to the sideboards. There are 85 sideboarded vessels and 40 sideboarded groundfish licenses. The sideboards limit these vessels and licenses to their historic share of retained catch of GOA Pacific cod and other GOA groundfish during 1996-2000, excluding catch of fixed gear sablefish. Vessels that have limited history in the GOA groundfish fisheries – less than 50 mt of catch during 1996 to 2000 – are prohibited from directed fishing for Pacific cod in the GOA. Vessels that landed less than 100,000 pounds of Bering Sea *C. opilio* and more than 500 mt of Pacific cod in the GOA from 1996 to 2000 are exempt from the sideboards. No sideboards were specified under the halibut and sablefish IFQ program, as the potential for spillover effects from these fisheries was considered to be limited.

The proposed GOA Pacific cod sector allocations would limit effort by each sector in the fisheries by capping the percentage of the Western and Central GOA TACs available to each sector. Increased effort in one sector, via the re-entry of latent effort into the fisheries, would reduce catch (and revenues) for other participants in that sector. The adverse impacts of the entry of latent effort are often exacerbated for sectors with substantial latent capacity. For example, the majority of fixed gear catcher vessel licenses with Western or Central GOA endorsements do not have any recent (2000-2006) landings in the Federal groundfish fisheries in the GOA. Re-entry of these licenses into the fisheries has the potential to intensify competition for the TACs. If Pacific cod sector allocations are accompanied by provisions that limit entry

⁹ Since allocations in the program are based on catch history associated with a license, the sideboard is constructed to limit catch using the license. This is done by sideboarding any vessel the catch of which led to a share allocation and any vessel named on the license that arose from the catch history of the vessel that led to that allocation.

into the directed Pacific cod fisheries, for example by adding Pacific cod endorsements to fixed gear licenses, the fixed gear sectors would be protected from potential re-entry of latent fixed gear licenses into the directed Pacific cod fisheries. However, new provisions that limit access to the GOA Pacific cod fisheries would also reduce the number of open access fisheries. The remaining open access fisheries would be even more vulnerable to increased competition as displaced participants enter these fisheries.

3.6.7 Net benefits to the Nation

Overall, this action is likely to have a limited effect on net benefits realized by the Nation. Under the status quo (Alternative 1), all existing licenses (and qualifying endorsements) would be retained. Licenses not currently active in the fisheries would have the potential to enter the fisheries at some future time, increasing overall effort in the fisheries. This increase in effort could contribute to losses of production efficiency. Costs could rise slightly if participants perceive a need to increase effort to secure their historic catch shares. The increase in effort could contribute to more aggressive fishing and processing practices, both of which contribute to lower quality and less value added production. The extent of these potential effects is very difficult to predict and depends on several factors, including future TAC levels, market conditions, and operating costs.

Under the proposed action (Alternative 2), area endorsements would be removed from licenses that do not have recent catch history in the GOA groundfish fisheries. As a result, these licenses would not be eligible to enter the GOA groundfish fisheries in the future, removing the potential for an influx of effort into the fisheries. Preventing these licenses from entering the fisheries in the future could contribute to production efficiency if a substantial increase in effort by latent licenses were to occur in the absence of this action. Limiting effort in the fisheries could contribute to slowing down the fisheries, although if TACs continue to decline and market conditions for Pacific cod continue to improve, the pace of the fisheries is unlikely to slow down.

Minor changes in consumer surplus could accompany any change in production outputs. Specifically, changes in product outputs and quality could have effects on consumers. The difference in consumer surplus across the alternatives is likely to be quite small. The status quo, which would maintain all existing licenses, would have the lowest consumer surplus, as it would not change the conditions for entry into the fisheries. In addition, the change in U.S. consumer surplus is likely to be diluted, since much of the production from these fisheries is exported for overseas secondary processing and consumption. As a result, some portion of any consumer surplus benefit resulting from the proposed action is unlikely to be realized as a U.S. benefit.

Implementation of the action alternative would require NOAA fisheries to process and adjudicate the qualifying and non-qualifying licenses. The license limitation file administered by NOAA fisheries will need to be updated to reflect the changes to existing licenses. Also, NOAA fisheries will need to update and made changes to databases used to store license information in order to separately track area endorsements by gear type. These costs would not be incurred under the no action alternative. The addition of new Pacific cod endorsements on fixed gear licenses will introduce new administrative costs for NOAA fisheries, and possibly create new enforcement costs.

The main economic benefit from the proposed action is that it will prevent the future entry of latent fixed gear LLP licenses into the GOA groundfish fisheries, and will primarily benefit LLP license owners who are economically dependent on the GOA fisheries. The action may have modest distributional effects among persons eligible to enter licenses into the fixed gear groundfish fisheries that are subject to the LLP.

4.0 INITIAL REGULATORY FLEXIBILITY ANALYSIS (IRFA)

4.1 Introduction

The Regulatory Flexibility Act (RFA), first enacted in 1980, and codified at 5 U.S.C. 600-611, was designed to place the burden on the government to review all regulations to ensure that, while accomplishing their intended purposes, they do not unduly inhibit the ability of small entities to compete. The RFA recognizes that the size of a business, unit of government, or nonprofit organization frequently has a bearing on its ability to comply with a Federal regulation. Major goals of the RFA are: 1) to increase agency awareness and understanding of the impact of their regulations on small business; 2) to require that agencies communicate and explain their findings to the public; and 3) to encourage agencies to use flexibility and to provide regulatory relief to small entities.

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

Based upon a preliminary evaluation of the proposed program alternatives, it appears that “certification” would not be appropriate. Therefore, this IRFA has been prepared. Analytical requirements for the IRFA are described below in more detail.

The IRFA must contain:

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

The “universe” of entities to be considered in an IRFA generally includes only those small entities that can reasonably be expected to be directly regulated by the proposed action. If the effects of the rule fall

primarily on a distinct segment of the industry, or portion thereof (e.g., user group, gear type, geographic area), that segment would be considered the universe for purposes of this analysis.

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

4.2 Definition of a Small Entity

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

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

The SBA has established size criteria for all major industry sectors in the U.S., including fish harvesting and fish processing businesses. A business “involved in fish harvesting” is a small business if it is independently owned and operated and not dominant in its field of operation (including its affiliates), and if it has combined annual receipts not in excess of \$4.0 million for all its affiliated operations worldwide. A seafood processor is a small business if it is independently owned and operated, not dominant in its field of operation (including its affiliates) and employs 500 or fewer persons, on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. A business involved in both the harvesting and processing of seafood products is a small business if it meets the \$4.0 million criterion for fish harvesting operations. A wholesale business servicing the fishing industry is a small business if it employs 100 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide.

The SBA has established “principles of affiliation” to determine whether a business concern is “independently owned and operated.” In general, business concerns are affiliates of each other when one concern controls or has the power to control the other or a third party controls or has the power to control both. The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists. Individuals or firms that have identical or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, are treated as one party, with such interests aggregated when measuring the size of the concern in question. The SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining the concern’s size. However, business concerns owned and controlled by Indian Tribes, Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601), Native Hawaiian Organizations, or Community Development

Corporations authorized by 42 U.S.C. 9805 are not considered affiliates of such entities, or with other concerns owned by these entities, solely because of their common ownership.

Affiliation may be based on stock ownership when: (1) A person is an affiliate of a concern if the person owns or controls, or has the power to control 50% 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 have the power to control less than 50% of the voting stock of a concern, with minority holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern.

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

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

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

4.3 Reason for considering the proposed action

The Council developed a purpose and need Statement defining the reasons for considering the proposed action (see Chapter 1). The Western and Central GOA fixed gear groundfish fisheries subject to the Limited License Program are currently managed as a limited access race for fish. There are substantial numbers of latent fixed gear licenses with Western and Central GOA endorsements. Participants who have made significant long-term investments, have extensive catch histories, and are highly dependent on the GOA groundfish fisheries subject to the LLP need protection from the re-entry of latent effort into the fisheries. If latent fixed gear licenses are not extinguished, latent licenses have the potential to re-enter the fisheries and impinge on historic levels of catch by current participants.

4.4 Objectives of, and the legal basis for, the proposed action

The objective of the proposed action is to extinguish latent fixed gear licenses with Western and Central GOA endorsements in order to protect the catch shares of licenses with recent participation in the fisheries. The problem Statement notes that many fixed gear vessel owners have made significant investments, have long catch histories, and are dependent on WGOA and CGOA groundfish resources. The proposed amendment may increase stability in the GOA fixed gear fisheries.

The legal basis for this action is the Magnuson-Stevens Fishery Conservation and Management Act (MSA). One of the Stated purposes of the MSA is to promote domestic commercial fishing under sound conservation and management principles and to achieve and maintain the optimum yield from each fishery.

4.5 Number and description of affected small entities

The proposed action directly regulates persons who hold fixed gear groundfish LLP licenses with Western or Central GOA area endorsements. Licenses without recent participation in the GOA groundfish fisheries will lose their area endorsements and will no longer be eligible to participate in the groundfish fisheries subject to the LLP. In addition, Pacific cod endorsements could be added to licenses that would limit entry into the directed Pacific cod fisheries in the GOA. There are 974 fixed gear catcher vessels licenses subject to the proposed action; 884 of these licenses have Central GOA endorsements and 266 licenses have Western GOA endorsements (176 licenses have both area endorsements). The contact licensee information on each license was used to determine ownership affiliation. Based on this information, there are 909 entities that own these catcher vessel licenses, and 20 of these are large entities based on 2006 gross revenues. There are 53 fixed gear catcher processor licenses subject to the proposed action, including 49 licenses with Central GOA endorsements and 31 licenses with Western GOA endorsements (27 licenses have both area endorsements). These licenses are owned by 47 entities, 28 of which are large entities based on 2006 first wholesale revenues. In sum, the proposed action would directly impact 889 small entities that own fixed gear catcher vessel licenses with Western and/or Central GOA area endorsements, and 19 small entities that own fixed gear catcher processor licenses with Western and/or Central GOA area endorsements. It is likely that additional licenses are affiliated through partnerships with other entities, and would be considered large entities for the purpose of this action, but in the absence of complete ownership information, these affiliations cannot be determined.

4.6 Recordkeeping and reporting

Implementation of the proposed action to remove area endorsements from GOA fixed gear LLP licenses and add Pacific cod endorsements to licenses would not change the overall reporting structure and record keeping requirements for vessels in the GOA groundfish fisheries. Currently, NOAA fisheries does not require vessel owners to report the LLP license used while participating in the groundfish fisheries subject to the LLP. This action would not add any new reporting requirements for vessels.

4.7 Relevant Federal rules that may duplicate, overlap, or conflict with the proposed action

There do not appear to be any Federal rules that duplicate, overlap, or conflict with the proposed action.

4.8 Description of significant alternatives to the proposed action

The Council is currently considering two alternatives for this action. Under **Alternative 1**, no Western or Central GOA fixed gear LLP licenses would be extinguished. Under **Alternative 2**, fixed gear LLP licenses with Western and Central GOA endorsements that do not meet minimum catch thresholds would be extinguished, and Pacific cod endorsements limiting entry into the directed Pacific cod fisheries in the GOA could be added to licenses. The proposed action could potentially apply different catch thresholds to licenses, depending on the operation type or size of the vessel. Options to exclude jig vessels from the LLP requirement or from the Pacific cod endorsement requirement would be advantageous to jig vessels, which are among the smallest entities participating in the fisheries.

5.0 CONSISTENCY WITH OTHER APPLICABLE LAWS

5.1 Consistency with National Standards

Below are the ten National Standards in the Magnuson-Stevens Act (Act), and a brief discussion of the consistency of the proposed alternatives with those National Standards.

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

In terms of achieving ‘optimum yield’ from the fishery, the Act defines ‘optimum’, with respect to yield from the fishery, as the amount of fish which:

- (A) Will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems;
- (B) Is prescribed as such on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factor; and,
- (C) In the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

The GOA groundfish fisheries will continue to be managed under the current harvest specifications process. Groundfish stocks in the GOA are not currently in danger of being overfished and are considered stable. Overall levels of groundfish catch by the fixed gear sectors in the GOA are not likely to be affected by the proposed action. The proposed action would extinguish fixed gear licenses with Western or Central GOA endorsements only if the licenses do not have recent landings or do not meet minimum catch thresholds during recent years. Recent participants in the fisheries would continue to have access to the groundfish fisheries subject to the LLP. The distribution of catch among sectors or participants and the overall net benefits to the Nation are not expected to change to an identifiable degree.

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

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

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

The Western and Central GOA groundfish TACs are established on an annual basis during the harvest specifications process. NOAA fisheries conducts annual GOA stock assessments for the groundfish species and makes acceptable biological catch recommendations to the Council. The Council sets the groundfish TACs based on the most recent stock assessment and survey information. Separate quotas for each groundfish species in the GOA would continue to be monitored inseason by NMFS.

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

Residency is not a criterion for extinguishing latent fixed gear licenses. Licenses which meet minimum groundfish landings thresholds will remain eligible to participate in GOA fixed gear groundfish fisheries, and exceptions to these eligibility standards will not be made for individual persons or entities.

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 wording of this standard was changed in the 1996 Magnuson-Stevens Act authorization, to ‘consider’ rather than ‘promote’ efficiency. Efficiency in this context refers to economic efficiency, and the reason for the change is to de-emphasize the importance of economics relative to other considerations (Senate Report of the Committee on Commerce, Science, and Transportation on S. 39, the Sustainable Fisheries Act, 1996). The analysis presents information on economic considerations, but does not emphasize this standard over other considerations.

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

Removing latent fixed gear licenses from the Western and Central GOA groundfish fisheries is unlikely to reduce the ability of current participants to increase effort in response to changes in fishing and market conditions. Overall harvest levels by the fixed gear sectors would not be constrained by the proposed action. In the event of lower Pacific cod quotas in the BSAI or changes in other fisheries, this action would protect the relative harvest levels of license holders that have long-term participation and are dependent on the GOA Pacific cod resource. In addition, provisions to exclude the jig sector from this action may increase future opportunities for participation and total catch by this sector.

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

The alternatives under consideration appear to be consistent with this standard.

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

The RIR presents information on the impact of the proposed action on licenses held by residents of Alaska and other states, and provides detailed information on the number of qualifying licenses from Alaska communities. This action does not appear to have a disproportionate effect on residents of a particular state or on specific fishing communities. The RIR discusses the number of licenses held by CQE communities that could qualify to retain their area endorsements, and discusses the relative importance of groundfish in comparison to other commercial fisheries to these communities.

Major ports in Alaska that process groundfish catch from the Western and Central GOA include Kodiak, Sand Point, King Cove, Homer, and Dutch Harbor, and the proposed action would not directly impact communities with processing facilities. Additionally, the greater Seattle, Washington metropolitan area is home to many catcher and catcher processor vessels operating in the fixed gear fisheries, as well as cold storage, transshipping, and secondary processing facilities. Information on these communities is available in the Steller Sea Lion SEIS (NMFS 2001b), the Draft Programmatic SEIS (NMFS 2001a), and the crab

rationalization EIS (NPFMC 2004). Detailed information on Kodiak, Akutan, Dutch Harbor, and King Cove is available in the Comprehensive Baseline Commercial Fishing Community Profiles Final Report (EDAW 2005).

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.

The EA (Chapter 2) presents information on incidental catch rates in the GOA Pacific cod fishery by sector. Bycatch rates are low in the GOA Pacific cod fixed gear sectors. Halibut PSC limits will not be changed as a result of this action. This action, in combination with the proposed Pacific cod sector allocations, is not expected to change the overall proportion of catch by the fixed gear sectors. Consequently, incidental and PSC catch levels are not expected to change under the proposed action.

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

This action, in combination with the proposed Pacific cod sector allocations, may reduce the ‘race for fish’ by limiting entry to the fixed gear sectors.

5.2 MSA Section 303(a)(9) – Fisheries Impact Statement

The Magnuson Stevens Act requires that any management measure submitted by the Council take into account potential impacts on participants in the fisheries subject to the proposed action, as well as participants in other fisheries. The impacts of alternatives on participants in the harvesting and processing sectors are discussed in Chapter 3. The proposed fixed gear recency action is unlikely to affect the historic distribution of catch among sectors. License holders with minimal levels of catch during recent years will continue to have access to the fisheries. As a result, this action is unlikely to have a substantial effect on the number of participants or overall level of effort in the GOA Pacific cod fishery or other GOA groundfish fisheries prosecuted by the fixed gear sectors. Pacific cod seasons will likely continue to be short, particularly during the A season, and any new participants will need to forgo participation in other fisheries. Consequently, no impacts to participants in other fisheries are anticipated.

5.3 Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) of 1992 (16 U.S.C. 1361 *et seq.*) vests the Department of Commerce with authority to manage marine mammal populations. The Department of the Interior, USFWS, has management authority for all other marine mammal species in Alaska, including sea otter, walrus, and polar bear. The MMPA recognizes that certain species and populations of marine mammals are or may be in danger of depletion due to human activities, and that marine mammals are resources of international significance and should be protected using best management practices.

The primary management objectives of the MMPA are to maintain the health and stability of the marine ecosystem and to maintain sustainable populations of marine mammals within the carrying capacity of the habitat. The MMPA is intended to work in concert with the provisions of the Endangered Species Act. The Secretary of Commerce is required to give full consideration to all factors regarding regulations applicable to the take of marine mammals, including the conservation, development, and utilization of marine resources, and the economic and technological feasibility of implementing the regulations. Impacts of commercial fishing activities on marine mammal populations must be analyzed in an EA or EIS, and the Council or NMFS may be requested to consider measures to mitigate adverse impacts.

Under the proposed GOA fixed gear recency action, no changes in the temporal or spatial distribution of harvests or overall level of fishing effort are anticipated. Consequently, no additional impacts to marine mammal populations are expected to result from the proposed action.

5.4 Coastal Zone Management Act

Implementation of either of the alternatives would be conducted in a manner consistent with the Alaska Coastal Management Program and Section 30(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

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APPENDIX A. COMMUNITIES

Table A-1. Number of vessels using fixed gear participating in the Western GOA, Central GOA, and West Yakutat Pacific cod fisheries, gross revenues, and percent of total gross revenues from all Alaska fisheries comprised by GOA Pacific cod during 1995-2000 and 2001-2006, reported by vessel owner residency.

Community	CQE	Fishery	1995-2000				2001-2006			
			Num vessels	Total revenues	Catch (mt)	Percent of total revenues	Num vessels	Total revenues	Catch (mt)	Percent of total revenues
Anchor Point		Fed/parallel	24	1,681,284	2,716	12.3%	13	972,385	1,365	5.3%
Anchor Point		Fed/parallel/State	26	1,830,766	2,913	13.4%	14	1,241,131	1,704	6.8%
Chenega Bay	Y	Fed/parallel	1	*	*	*	0	0	0	0.0%
Chenega Bay	Y	Fed/parallel/State	1	*	*	*	0	0	0	0.0%
Chignik	Y	Fed/parallel	1	*	*	*	2	*	*	*
Chignik	Y	Fed/parallel/State	6	515,449	977	6.3%	8	1,194,015	1,936	17.2%
Chig. Lagoon	Y	Fed/parallel	3	*	*	*	2	*	*	*
Chig. Lagoon	Y	Fed/parallel/State	16	2,149,698	4,130	8.1%	15	4,230,835	7,479	22.4%
Chignik Lake	Y	Fed/parallel/State	2	*	*	*	0	0	0	0
Cordova		Fed/parallel	32	1,649,114	2,836	1.3%	6	52,365	81	0.0%
Cordova		Fed/parallel/State	34	1,671,046	2,867	1.3%	7	177,406	262	0.1%
Delta Junction		Fed/parallel	9	1,767,803	2,832	31.7%	7	1,957,306	2,649	27.1%
Delta Junction		Fed/parallel/State	9	1,781,583	2,851	31.9%	7	1,963,466	2,656	27.2%
Dutch Harbor		Fed/parallel	7	380,448	564	1.8%	6	110,093	177	1.1%
Dutch Harbor		Fed/parallel/State	10	487,991	786	2.3%	8	196,914	344	1.9%
False Pass		Fed/parallel	1	*	*	*	6	818,891	1,434	20.7%
False Pass		Fed/parallel/State	2	*	*	*	7	1,399,191	2,390	35.3%
Homer		Fed/parallel	111	7,846,627	12,476	4.2%	76	10,216,567	14,067	5.0%
Homer		Fed/parallel/State	130	8,922,949	13,987	4.8%	95	12,518,216	17,257	6.1%
Kenai		Fed/parallel	11	67,288	108	0.3%	2	*	*	*
Kenai		Fed/parallel/State	17	258,502	395	1.1%	7	58,733	99	0.3%
King Cove	Y	Fed/parallel	25	2,045,841	4,573	5.6%	20	3,805,941	6,658	13.0%
King Cove	Y	Fed/parallel/State	28	4,893,548	10,391	13.4%	26	9,094,674	15,683	31.2%
Kodiak		Fed/parallel	162	27,486,080	47,145	6.2%	150	25,249,675	36,002	5.3%
Kodiak		Fed/parallel/State	255	34,588,046	58,785	7.8%	240	38,817,734	56,256	8.1%
Larsen Bay	Y	Fed/parallel	4	116,288	208	6.3%	4	33,879	49	3.7%
Larsen Bay	Y	Fed/parallel/State	4	121,341	216	6.5%	6	137,070	194	15.2%
Nikolaevsk		Fed/parallel	11	533,757	763	6.8%	6	678,863	946	7.7%
Nikolaevsk		Fed/parallel/State	11	533,757	763	6.8%	6	678,863	946	7.7%
Old Harbor	Y	Fed/parallel	15	1,529,369	2,690	14.2%	8	752,900	1,045	9.1%
Old Harbor	Y	Fed/parallel/State	17	1,800,276	3,100	16.7%	9	1,198,157	1,688	14.4%
Ouzinkie	Y	Fed/parallel	6	168,034	302	6.1%	0	0	0	0.0%
Ouzinkie	Y	Fed/parallel/State	7	218,664	392	8.0%	6	58,524	84	1.9%
Palmer		Fed/parallel	5	277,233	430	1.8%	2	*	*	*
Palmer		Fed/parallel/State	7	498,363	804	3.2%	4	663,121	1,199	7.1%
Perryville	Y	Fed/parallel/State	5	83,867	129	1.6%	4	212,587	411	5.8%
Petersburg		Fed/parallel	2	*	*	*	4	96,696	120	0.0%
Petersburg		Fed/parallel/State	4	241,297	366	0.1%	7	580,784	930	0.2%
Port Lions	Y	Fed/parallel	5	29,271	56	0.8%	3	*	*	*
Port Lions	Y	Fed/parallel/State	6	75,068	111	2.0%	4	107,725	154	2.5%
Sand Point	Y	Fed/parallel	29	846,079	1,722	1.2%	44	3,581,618	6,350	5.8%
Sand Point	Y	Fed/parallel/State	69	3,761,617	7,455	5.1%	63	9,155,375	16,403	14.8%
Seldovia	Y	Fed/parallel	7	3,252,133	5,558	17.6%	3	*	*	*
Seldovia	Y	Fed/parallel/State	11	3,395,819	5,737	18.3%	5	1,436,581	1,949	10.1%
Seward		Fed/parallel	16	833,744	1,382	2.8%	8	97,388	140	0.3%
Seward		Fed/parallel/State	19	911,257	1,481	3.0%	9	240,982	349	0.6%
Sitka		Fed/parallel	11	939,677	1,659	0.6%	4	61,907	103	0.0%
Sitka		Fed/parallel/State	12	1,259,622	2,226	0.8%	9	235,911	348	0.1%
Tatitlek	Y	Fed/parallel	2	*	*	*	0	0	0	0.0%
Tatitlek	Y	Fed/parallel/State	2	*	*	*	0	0	0	0.0%
Unalaska		Fed/parallel	5	39,928	68	0.5%	4	341,777	422	4.0%
Unalaska		Fed/parallel/State	7	40,436	69	0.5%	4	341,777	422	4.0%
Wasilla		Fed/parallel	10	473,429	874	2.3%	9	463,560	760	2.4%
Wasilla		Fed/parallel/State	17	620,583	1,172	3.1%	11	865,876	1,417	4.5%
Willow		Fed/parallel	8	1,253,182	1,747	27.0%	6	1,655,327	2,327	28.3%
Willow		Fed/parallel/State	8	1,301,589	1,822	28.1%	7	1,691,034	2,380	28.9%

Source: ADFG Fish Tickets and CFEC gross revenues data. ¹ Fed/parallel includes fixed gear catch in the Federal and parallel waters fisheries in West Yakutat, Central GOA, and Western GOA. Fed/parallel/State includes fixed gear catch in the Federal, parallel waters, and State waters Pacific cod fisheries in West Yakutat, Central GOA, and Western GOA management areas.