Status of FMP Amendments
April 2, 2010

FMP Amendment Status: Actions Since February 2010	Date of Council Action	Start Regional Review	Transmittal Date of Action to NMFS HQ for Review	Proposed FMP Amendment Notice of Availability Published	Proposed Rule Published in Federal Register	Final Rule or Notice of Approval Published in Federal Register
Amendment 30 (KTC) – Arbitration System Changes	April 2008	PR: 1/28/09				
Amendment 31 (KTC) – C-Share Active Participation	April 2008					
Amendment 34 (KTC) – Adjustments to GOA sideboards for BSAI crab vessels	Oct 2008	PR:3/29/10				
Amendment 86 (GOA) – fixed gear endorsement for Pacific cod	April 2009	PR:12/4/09				
Amendment 91 (BSAI) Chinook Salmon bycatch management or the BS pollock fishery	April 2009	PR: 12/17/09	PR: 2/8/10	February 18, 2020 75 FR 7228 End of comment period April 19, 2010	March 23, 2010 75 FR 14016 End of comment period May 7, 2010	
Amendment 94 (BSAI)-require modified nonpelagic trawl gear for directed flatfish fishing in the Bering Sea subarea.	October 2009	PR: 4/5/10				
Amendment 95 (BSAI) – separate skates from "other species" complex Note: will be combined with Groundfish ACL amendment rulemaking	October 2009					
Amendments to all FMPS to authorize permit fees	October 2009					
Amendment 83 (GOA) Pacific cod sector splits	December 2009					
Amendment 93 (BSAI)-Modify Amd 80 sector coop formation criteria	February 2010					

Status of Regulatory Amendments
April 2, 2010

Regulatory Amendment Status: Actions Since February 2010	**Date of Council Action**	**Start Regional Review of Rule**	**Transmittal Date of Rule to NMFS Headquarters**	**Proposed Rule in *Federal Register***	**Final Rule Published in *Federal Register***
Groundfish/Crab Regulatory Amendments					
CDQ regulation of harvest	MSA requirement Council - June 2007	PR: 12/17/08			
Observer Program regulation revisions	April 2008	PR: 2/25/09	PR: 9/8/ 2009	September 30, 2009 74 FR 50155 Comment period ended October 30, 2009	
BSAI fixed gear parallel fishery management measures	June 2009				
BSAI groundfish harvest specifications for 2010 and 2011	October 2009	PR:10/29/09 FR: 1/4/10	PR:11/13/09 FR: 2/5/10	December 2, 2009 74 FR 63100 Comment period ends January 4, 2010	**March 12, 2010** **75 FR 11778**
GOA groundfish harvest specifications for 2010 and 2011	October 2009	PR:10/20/09 FR: 1/6/10	PR:11/13/09 FR: 2/5/10	November 30, 2009 74 FR 62533 Comment period ends December 30, 2009	**March 12, 2010** **75 FR 11749**
Data collection program to assess effectiveness of Bering Sea Chinook salmon IPA to minimize bycatch	December 2009				
Emergency rule to suspend regional delivery requirements for Western Aleutians Golden king crab	December 2009	ER: 1/8/10	ER: 2/2/10	N/A	**February 18, 2010** **75 FR 7205**

Status of Regulatory Amendments
April 2, 2010

Regulatory Amendment Status: Actions Since February 2010	**Date of Council Action**	**Start Regional Review of Rule**	**Transmittal Date of Rule to NMFS Headquarters**	**Proposed Rule in *Federal Register***	**Final Rule Published in *Federal Register***
Groundfish/Crab Regulatory Amendments					
Remove weighing req. for crab landings & rept. for processed product	NMFS	**PR: 3/16/10**			
eLandings changes to improve and update methods and procedures	NMFS				
Permits requirements-improve efficiency, flexibility and clarify regulatory text	NMFS				
Halibut Regulations					
Remove halibut/sablefish quota from initial recipients who never have fished or transferred quota	June 2006	PR: 8/12/09			
Clarify charter logbook submission requirements	NMFS	PR:1/12/10	**PR: 4/2/10**		
Establish new minimum vessel ownership criteria for using hired skipper of 12 months and 20% interest	December 2007				
Halibut catch share plan	October 2008				
Annual IPHC regulations for 2010	IPHC/NMFS				**75 FR 13024 March 18, 2010**
Notice of 2010 GHL for charter fishery in 2C and 3A	NMFS				**75 FR 17131 April 5, 2010**

Regulatory Actions Completed in 2010
April 2, 2010

- Allow online transfers for CDQ , crab IPQ, and cooperatives: October 7, 2009 (74 FR 51515) , effective November 6, 2009
- Subsistence Halibut – Include Certain Rural Residents: November 4, 2009 (74 FR 57105), effective December 4, 2009
- Withdraw proposed rule to revise MRA accounting period for non-AFA C/Ps for selected groundfish species in the BSAI December 10, 2009 (74 FR 65503)
- Limited entry system for owners of halibut charter businesses January 5, 2010 (75 FR 554), effective February 4, 2010
- Notice of 2009 standard prices and fee percentage for the IFQ cost recovery program in the halibut and sablefish fisheries December 11, 2009 (74 FR 65741)

National Marine Fisheries Service April 2, 2010
Alaska Region, Inseason Management Highlights

2010 catch is through March 27 and 2009 through March 28 unless otherwise stated

Bering Sea and Aleutian Islands

Bering Sea Pollock

In 2010, the A season started slowly with half of the vessels fishing yellowfin sole until the 4th week for C/Ps and the 5th week for catcher vessels. The catcher/processor (C/Ps) and inshore pollock fisheries will continue into April 2010 compared to recent years when the A season is mostly finished by April. Effort in 2010 is similar to 2009 for C/Ps with 13 (12 in 2009) and inshore catcher vessels with 73 (74 in 2009), but lower for motherships with 13 (17 in 2009) catcher vessels delivering to two (three in 2009) motherships.

Through	C/P	Mothership	Inshore	CDQ	Total
3/27/10	98,850	28,027	111,634	31,526	270,037
3/28/09	112,308	28,162	135,665	32,479	308,614

Salmon in pollock fishery

In 2010, the A season pollock fishery has caught 6,708 non-CDQ and 335 CDQ Chinook salmon compared to the 2009 A season catch of 9,282 non-CDQ and 414 CDQ Chinook salmon. In 2010 the Chinook Salmon Savings Area (CSSA) remains open. In 2009 the CSSA remained open all year.

Trawl halibut mortality

Halibut mortality for trawl gear is allocated to BSAI trawl limited access, Amendment 80 limited access, and Amendment 80 cooperatives. Through March 27, 2010 the total trawl halibut mortality is 84% of the 2009 total. Compared to 2009 there is a decrease for pollock and yellowfin sole targets and an increase in Pacific cod and rock sole targets. In 2010, the trawl halibut mortality is split by catcher vessels, 308 mt, and C/Ps, 639 mt.

The halibut mortality through March 27, 2010, compared to March 28, 2009 is:
All trawl gear by target (Other includes Flathead sole, Atka mackerel, and Rockfish)
2010 Total – 948 mt
Pacific cod 259 mt, Pollock 138 mt, Rock sole 424 mt, Yellowfin 104 mt, Other 23 mt

2009 Total – 1,122 mt
Pacific cod 202 mt, Pollock 319 mt, Rock sole 346 mt, Yellowfin 223 mt, Other 32 mt

Atka mackerel

As in 2009, seven C/Ps and one catcher vessel registered for the 2010 A season HLA fisheries in 542 and 543: three C/Ps in the Amendment 80 cooperative, four C/Ps in the Amendment 80 limited access sector, and one catcher vessel in the BSAI trawl limited access sector.

Pacific cod

Hook-and-line catcher/processors

In 2010, 36 hook-and-line C/Ps caught 37,538 mt of the 37,230 mt A season allocation, and the fishery closed February 9. In 2009, 37 hook-and-line C/Ps caught 39,527 mt of the 38,951 mt A season allocation, and the fishery closed February 6.

Hook-and-line catcher vessels >= 60 feet length overall (LOA)

The fishery for hook-and-line catcher vessels >= 60 feet LOA remains open with no participation. In 2009, the fishery remained open with no participation until November 2 when NMFS closed the fishery and reallocated 312 mt to hook-and-line C/Ps.

Hook-and-line and pot catcher vessels < 60 feet LOA

In March 2010, NMFS reallocated 1,200 mt from jig gear to the < 60 ft category. In 2010, five hook-and-line caught 7% and 13 pot vessels caught 93% of the 4,209 mt total catch, and the directed fishery closed March 25, 2010. In 2009, 10 hook-and-line caught 14% and 16 pot vessels caught 86% of the 4,153 mt total catch, and the fishery closed March 16, 2009. NMFS plans to reallocate another 400 mt from jig gear and reopen the directed fishery April 30, 2010.

Jig

In 2010, no effort has occurred in this fishery. In 2009, three vessels targeted Pacific cod during the summer and reported 22 mt.

Pot >= 60 ft LOA

The 2010 fishery closed January 28 with 24 vessels catching 7,168 mt of the 6,422 mt A season TAC. The 2009 fishery closed February 1 with 20 vessels catching 5,673 mt of the 6,718 mt A season TAC. In 2009 the fishery reopened March 1 through June 10 with a few vessels participating.

Pot catcher/processors

The 2010 fishery closed January 23 with three pot C/Ps catching 1,243 mt of the 1,147 mt A season TAC. The 2009 fishery closed January 28 with three pot C/Ps catching 1,288 mt of the 1,200 mt A season TAC.

Trawl

The 2010 A season for catcher vessels closed March 12 catching 26,874 mt of the 24,649 mt A season TAC. The B season will not open since the overage from the A season does not leave enough to support a directed fishery. The 2009 A season for catcher vessels closed March 21 catching 24,384 mt of the 25,782 mt A season TAC. In 2009, the B season opened April 1 to 5 and a total of 3,363 mt was taken.

The Amendment 80 cooperative is controlling their catch. The 2010 Amendment 80 limited access directed fishery is closed for the year. The 2010 AFA C/P sector's A season directed fishery closed on February 18. The A season TAC of 2,600 mt was exceeded by 336 mt, so the B season will remain closed because the 531 mt of remaining Pacific cod is needed for incidental catch in the pollock and yellowfin sole fisheries.

Flatfish
For the first time AFA C/P's (seven) targeted yellowfin sole for the first three weeks of 2010 before targeting pollock. For all sectors, the 2010 yellowfin sole total catch of 29,987 mt is higher than the 2009 total catch of 26,261 mt. For rock sole the 2010 total catch of 30,114 mt is lower than the 2009 total catch of 32,868 mt.

Gulf of Alaska
Western GOA Pacific cod
The 2010 A season allocations are 11,212 mt for the inshore component and 1,246 mt for the offshore component. The 2010 inshore component closed February 19 catching 11,873 mt compared to the 2009 fishery closure February 25 catching 9,209 mt. The 2010 inshore catch by gear is pot 59%, hook-and-line gear 23%, and trawl gear 18% compared to the 2009 catch by gear of pot 43%, hook-and-line 38%, and trawl 19%. The A season offshore component Pacific cod was mostly caught by hook-and-line C/Ps and closed March 3 in 2010 compared to June 10 in 2009.

Central GOA Pacific cod
The 2010 A season allocations are 19,862 mt for the inshore and 2,207 mt for the offshore components. The 2010 inshore component had the highest weekly catch rate of the last 8 years of 7,000 mt. This is 1,500 mt higher than the previous high weekly rate from January 24, 2004. The 2010 fishery closed January 31 catching 19,581 mt compared to the 2009 fishery closure January 27 catching 11,228 mt. The 2010 inshore catch by gear is pot 38%, hook-and-line 24%, and trawl 38% compared to the 2009 catch by gear of pot 37%, hook-and-line gear 31%, and trawl gear 32%. The A season offshore component Pacific cod is mostly caught by hook-and-line C/Ps and closed February 24 in 2010 compared to February 19 in 2009.

Pollock
Area 610 closed February 27 for the A season. For the B season, 3,935 mt remains and the catch rates are low. The 610 catch dropped to 213 mt for the week ending March 27, from 1,000 mt for the previous two weeks. In area 620 directed fishing started during the week of February 13 and the A season closed February 25. The B season opened March 10 and closed March 16. Area 630 closed February 5 and reopened February 28 through March 2 for the A season. NMFS initially closed the B season because the effort exceeded the pollock available for the B season. NMFS reopened area 630 for the B season from March 22 to 25 after the fleet agreed to limit their catch to the remaining amount. In area 640, 17 vessels reported 1,200 mt for week ending March 20. NMFS reopened the fishery March 26 for the remaining 800 mt after the fleet agreed to limit their catch to the remaining amount. Area 640 remains open.

Deep and Shallow Water Complex Trawl Fisheries
Both the deep and shallow water complexes remain open. The winter pollock and Pacific cod fisheries are finished, and the fleet will switch to flatfish. The 2nd season allowance of becomes available April 1. For deep-water, 67 mt has accrued out of the current 400 mt limit. For shallow water, 158 mt has accrued out of the current 550 mt limit.

Halibut mortality for the hook-and-line fleet is at 137 mt of the 250 mt first season allowance. In 2009 for the same time period the halibut mortality was 192 mt.

Rockfish pilot program (RPP)
License limitation permit holders with rockfish quota share choose to join a cooperative, limited access fishery, or opt-out (C/Ps only) sectors of the RPP with their catch history. The 2010 participants and allocations are at:
http://alaskafisheries.noaa.gov/sustainablefisheries/goarat/default.htm.

Halibut mortality in the State waters Guideline Harvest Level (GHL) fisheries
The NMFS Catch Accounting System (CAS) estimates the amount of halibut PSC in the State waters parallel and GHL fisheries using the same procedures used for the federal fisheries. PSC estimates in the State waters GHL fisheries accrue to the federal PSC limit because of the complexities of separating the fishery by time and space. In the GOA, halibut PSC started accruing in 2009 when the State allowed longline gear to fish its Prince William Sound (PWS) Pacific cod fishery. Before 2009, no halibut mortality accrued to the federal PSC limits from the GOA State GHL Pacific cod fishery since the allowed gears, pot and jig, are exempt from halibut mortality limits. PSC is estimated on unobserved trips by matching observer-based rates with the groundfish catch based on year, week ending date, trip target, gear, and FMP area. In 2009 and 2010, the halibut mortality rates were derived from observer data on hook-and-line catcher/processors in the Western and Central GOA Pacific cod fisheries, since no observer coverage is required in the State's PWS fishery. In 2009 and 2010, the estimate of halibut PSC was 3 mt (per year) out of the 290 mt limit for the GOA hook-and-line groundfish fisheries. The PWS pollock fishery uses pelagic trawl gear and for this fishery the halibut mortality is < 1 mt. In the Aleutian Islands, halibut PSC has accrued since 2006 from hook-and-line and trawl gear effort in the State waters GHL fishery.

Halibut mortality (mt) from State GHL fisheries

State GHL fishery	2006	2007	2008	2009	2010
PWS H&L Pacific cod	-	-	-	3	3
PWS Pelagic Pollock	0	0	0	0	0
H&L AI Pacific cod	8	19	2	7	0
Trawl AI Pacific cod	12	20	6	1	3

Bering Sea Aleutian Islands Catch Report (includes CDQ)

Through: 27-MAR-10

National Marine Fisheries Service
Alaska Region, Sustainable Fisheries
Catch Accounting

Bering Sea

Sea-sons	Account	Total Catch	Quota	Remaining Quota	% Taken	Last Wk Catch
	Other Rockfish (includes CDQ)	11	412	401	3%	0
	Pacific Ocean Perch (includes CDQ)	23	3,256	3,233	1%	0
	Sablefish (Hook-and-Line and Pot)	80	1,116	1,036	7%	26
	Sablefish CDQ (Hook-and-Line and Pot)	0	279	279	0%	0
	Sablefish (Trawl)	0	1,186	1,186	0%	0
	Sablefish CDQ (Trawl)	0	105	105	0%	0
	Greenland Turbot	16	3,587	3,571	0%	1
	Greenland Turbot CDQ	2	452	450	0%	0
X	Pollock, AFA Inshore	111,634	351,216	239,582	32%	20,412
X	Pollock, AFA Catcher Processor	98,850	257,090	158,240	38%	9,378
X	Pollock, AFA Mothership	28,027	70,243	42,216	40%	4,548
X	Pollock CDQ	31,526	81,300	49,774	39%	2,876
	Pollock, Incidental Catch, non-Bogoslof (includes CDQ)	9,258	29,268	20,010	32%	866
	Pollock, Incidental Catch, Bogoslof (includes CDQ)	0	50	50	0%	0

Note: All weights are in metric tons.

Report run on: April 1, 2010 5:15 AM

Bering Sea Aleutian Islands Catch Report (includes CDQ) **Through:** 27-MAR-10	**National Marine Fisheries Service** **Alaska Region, Sustainable Fisheries** **Catch Accounting**

Aleutian Islands

Sea-sons	Account	Total Catch	Quota	Remaining Quota	% Taken	Last Wk Catch
	Other Rockfish (includes CDQ)	80	472	392	17%	8
	Pacific Ocean Perch, Eastern	736	3,768	3,032	20%	211
	Pacific Ocean Perch, Eastern CDQ	24	452	428	5%	0
	Pacific Ocean Perch, Central	871	3,813	2,942	23%	260
	Pacific Ocean Perch, Central CDQ	9	457	448	2%	1
	Pacific Ocean Perch, Western	964	5,840	4,876	17%	259
	Pacific Ocean Perch, Western CDQ	0	700	700	0%	0
	Atka Mackerel, Eastern ICA	3	75	72	5%	0
	Atka Mackerel, Eastern (Jig)	0	106	106	0%	0
	Atka Mackerel, Eastern CDQ	1,141	2,547	1,406	45%	0
X	Atka Mackerel, Eastern (Trawl)	7,939	21,072	13,133	38%	711
	Atka Mackerel, Central ICA	0	75	75	0%	0
X	Atka Mackerel, Central (Trawl)	10,998	26,357	15,359	42%	410
	Atka Mackerel, Central CDQ	647	3,167	2,520	20%	38
X	Atka Mackerel, Western (Trawl)	6,408	18,346	11,938	35%	162
	Atka Mackerel, Western ICA	0	50	50	0%	0
	Atka Mackerel, Western CDQ	4	2,204	2,200	0%	3
	Sablefish (Hook-and-Line and Pot)	61	1,242	1,181	5%	17
	Sablefish CDQ (Hook-and-Line and Pot)	0	310	310	0%	0
	Sablefish (Trawl)	3	440	437	1%	0
	Sablefish CDQ (Trawl)	0	39	39	0%	0
	Greenland Turbot (includes CDQ)	8	1,615	1,607	1%	2
X	Pollock	50	15,500	15,450	0%	0
X	Pollock CDQ	0	1,900	1,900	0%	0
X	Pollock, Incidental Catch (includes CDQ)	295	1,600	1,305	18%	215

Note: All weights are in metric tons.

Report run on: April 1, 2010 5:15 AM

Bering Sea Aleutian Islands Catch Report (includes CDQ)
Through: 27-MAR-10

National Marine Fisheries Service
Alaska Region, Sustainable Fisheries
Catch Accounting

Bering Sea Aleutian Islands

Sea-sons	Account	Total Catch	Quota	Remaining Quota	% Taken	Last Wk Catch
	Alaska Plaice (includes CDQ)	3,977	42,500	38,523	9%	231
	Arrowtooth Flounder	1,910	63,750	61,840	3%	140
	Arrowtooth Flounder CDQ	63	8,025	7,962	1%	2
	Flathead Sole	5,056	53,580	48,524	9%	371
	Flathead Sole CDQ	313	6,420	6,107	5%	34
	Northern Rockfish (includes CDQ)	698	6,154	5,456	11%	103
	Other Flatfish (includes CDQ)	633	14,705	14,072	4%	58
	Other Species (includes CDQ)	10,336	42,500	32,164	24%	353
X	Pacific Cod, Catcher Processor (Amendment 80)	6,708	20,197	13,489	33%	930
X	Pacific Cod, Catcher Processor (AFA)	2,936	3,467	531	85%	152
X	Pacific Cod, Catcher Vessel (Trawl)	27,167	33,309	6,142	82%	278
X	Pacific Cod, Catcher Processor (Hook-and-Line)	37,627	73,000	35,373	52%	3
X	Pacific Cod, Catcher Vessel (Hook-and-Line >= 60 ft)	0	300	300	0%	0
X	Pacific Cod, Catcher Processor (Pot)	1,416	2,248	832	63%	129
X	Pacific Cod, Catcher Vessel (Pot >= 60 ft)	7,168	12,591	5,423	57%	0
	Pacific Cod (Jig)	0	910	910	0%	0
	Pacific Cod (Hook-and-Line and Pot < 60 ft)	4,209	4,198	-11	100%	384
	Pacific Cod, Incidental Catch (Hook-and-Line and Pot)	16	500	484	3%	0
X	Pacific Cod CDQ	8,049	18,059	10,010	45%	479
	Rock Sole	29,359	80,370	51,011	37%	1,963
	Rock Sole CDQ	755	9,630	8,875	8%	6
	Rougheye Rockfish (includes CDQ)	22	465	443	5%	7
	Shortraker Rockfish (includes CDQ)	10	329	319	3%	2
	Squid (includes CDQ)	22	1,675	1,653	1%	0
	Yellowfin Sole	29,945	195,567	165,622	15%	2,347
	Yellowfin Sole CDQ	42	23,433	23,391	0%	9
Total:		**488,111**	**1,629,589**	**1,141,478**	**30%**	**48,385**

Other flatfish: all flatfish species, except for Pacific halibut, flathead sole, Greenland turbot, rock sole, yellowfin sole, arrowtooth flounder, and Alaska plaice.

Other rockfish: all Sebastes and Sebastolobus species except for Pacific ocean perch, northern, shortraker, and rougheye rockfish.

Other species: sculpins, sharks, skates, and octopus.

For changes to the harvest specifications refer to http://alaskafisheries.noaa.gov/2010/hschanges.htm

Note: All weights are in metric tons.

Report run on: April 1, 2010 5:15 AM

Bering Sea Aleutian Islands Prohibited Species Report (includes CDQ fisheries)

Through: 27-MAR-10

National Marine Fisheries Service
Alaska Region, Sustainable Fisheries
Catch Accounting

Chinook Salmon

Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	BS Pollock (Pelagic)	Count	6,707	26,825	20,118	25%	146
	BS Chinook Salmon PSQ	Count	335	2,175	1,840	15%	17
	AI Pollock (Pelagic)	Count	1	647	646	0%	0
	AI Chinook Salmon PSQ	Count	0	53	53	0%	0
Total:			**7,043**	**29,700**	**22,657**	**24%**	**163**

Halibut Mortality

Non-Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	Halibut Mortality (Non-Trawl)	MT	233	832	599	28%	1
Total:			**233**	**832**	**599**	**28%**	**1**

Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	Halibut Mortality (Trawl)	MT	947	3,300	2,353	29%	61
Total:			**947**	**3,300**	**2,353**	**29%**	**61**

Trawl and Hook-and-Line Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	Halibut Mortality PSQ	MT	45	393	348	11%	2
Total:			**45**	**393**	**348**	**11%**	**2**

Herring (includes CDQ fisheries)

Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	Pacific Cod	MT	0	29	29	0%	0
	Rockfish	MT	0	10	10	0%	0
	Rock Sole, Flathead Sole, Other Flatfish	MT	0	29	29	0%	0
	Pollock, Atka Mackerel, Other Species	MT	162	214	52	76%	0
	Pollock Pelagic	MT	184	1,508	1,324	12%	0
	Yellowfin Sole	MT	0	169	169	0%	0
	Greenland Turbot, Arrowtooth, Sablefish	MT	0	14	14	0%	0
Total:			**346**	**1,973**	**1,627**	**18%**	**0**

Report run on: April 1, 2010 5:15 AM

Opilio (Tanner) Crab - COBLZ

Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	Opilio Crab	Count	1,409,761	3,884,550	2,474,789	36%	212
	Opilio Crab PSQ	Count	259	465,450	465,191	0%	3
Total:			**1,410,020**	**4,350,000**	**2,939,980**	**32%**	**215**

Bairdi Crab, Zone 1

Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	Bairdi Crab	Count	71,245	741,190	669,945	10%	1,355
	Bairdi Crab PSQ	Count	2,573	88,810	86,237	3%	0
Total:			**73,818**	**830,000**	**756,182**	**9%**	**1,355**

Bairdi Crab, Zone 2

Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	Bairdi Crab	Count	86,653	2,250,360	2,163,707	4%	10,968
	Bairdi Crab PSQ	Count	12	269,640	269,628	0%	0
Total:			**86,665**	**2,520,000**	**2,433,335**	**3%**	**10,968**

Red King Crab, Zone 1

Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	Red King Crab	Count	29,213	175,921	146,708	17%	1,991
	Red King Crab PSQ	Count	156	21,079	20,923	1%	0
Total:			**29,369**	**197,000**	**167,631**	**15%**	**1,991**

"Other flatfish" for PSC monitoring: all flatfish species, except for Pacific halibut (a prohibited species), flathead sole, Greenland turbot, rock sole, yellowfin sole, arrowtooth flounder.

COBLZ: C. Opilio Crab Bycatch Limitation Zone. 50 CFR 679.21(e) and Figure 13.

Zone 1: Federal Reporting Areas 508, 509, 512, 516.

Zone 2: Federal Reporting Areas 513, 517, 521.

Data is based on observer reports extrapolated to total groundfish harvest. Estimates for all weeks may change due to incorporation of late or corrected data.

Gulf of Alaska Catch Report

Through: 27-MAR-10

National Marine Fisheries Service
Alaska Region, Sustainable Fisheries
Catch Accounting

Western, Central Pollock

Sea-sons	Account	Total Catch	Quota	Remaining Quota	% Taken	Last Wk Catch
X	Pollock, 610 Shumagin	7,167	26,256	19,089	27%	213
X	Pollock, 620 Chirikof	19,188	28,095	8,907	68%	14
X	Pollock, 630 Kodiak	7,089	19,118	12,029	37%	2,597

Western Gulf

Sea-sons	Account	Total Catch	Quota	Remaining Quota	% Taken	Last Wk Catch
	Arrowtooth Flounder	352	8,000	7,648	4%	65
	Deep Water Flatfish	0	521	521	0%	0
	Shallow Water Flatfish	35	4,500	4,465	1%	1
	Flathead Sole	162	2,000	1,838	8%	40
	Rex Sole	17	1,543	1,526	1%	9
	Pacific Ocean Perch	19	2,895	2,876	1%	4
	Rougheye Rockfish	9	80	71	11%	2
	Shortraker Rockfish	1	134	133	1%	0
	Thornyhead Rockfish	1	425	424	0%	0
	Pelagic Shelf Rockfish	1	650	649	0%	0
	Northern Rockfish	0	2,703	2,703	0%	0
	Other Rockfish	3	212	209	1%	0
X	Pacific Cod, Inshore	11,955	18,687	6,732	64%	3
X	Pacific Cod, Offshore	1,031	2,077	1,046	50%	18
	Sablefish (Hook-and-Line)	18	1,328	1,310	1%	2
	Sablefish (Trawl)	0	332	332	0%	0
	Big Skate	95	598	503	16%	2
	Longnose Skate	15	81	66	19%	2

Note: All weights are in metric tons.

Report run on: April 1, 2010 5:15 AM

Gulf of Alaska Catch Report **Through:** 27-MAR-10	**National Marine Fisheries Service** **Alaska Region, Sustainable Fisheries** **Catch Accounting**

Central Gulf

Sea-sons	Account	Total Catch	Quota	Remaining Quota	% Taken	Last Wk Catch
	Arrowtooth Flounder	2,883	30,000	27,117	10%	557
	Deep Water Flatfish	40	2,865	2,825	1%	1
	Shallow Water Flatfish	495	13,000	12,505	4%	25
	Flathead Sole	591	5,000	4,409	12%	65
	Rex Sole	607	6,403	5,796	9%	171
	Pacific Ocean Perch	24	10,737	10,713	0%	22
	Rougheye Rockfish	30	862	832	4%	11
	Shortraker Rockfish	9	325	316	3%	2
	Pelagic Shelf Rockfish	14	3,249	3,235	0%	1
	Northern Rockfish	21	2,395	2,374	1%	2
	Thornyhead Rockfish	16	637	621	3%	7
	Other Rockfish	12	507	495	2%	2
	Pacific Cod, Rockfish Program	0	0	0	0%	0
X	Pacific Cod, Inshore	20,325	33,104	12,779	61%	51
X	Pacific Cod, Offshore	2,116	3,678	1,562	58%	7
	Sablefish (Hook-and-Line)	225	3,608	3,383	6%	109
	Sablefish (Trawl)	6	902	896	1%	1
	Big Skate	666	2,049	1,383	33%	35
	Longnose Skate	210	2,009	1,799	10%	13

Eastern Gulf

Sea-sons	Account	Total Catch	Quota	Remaining Quota	% Taken	Last Wk Catch
	Rougheye Rockfish	39	360	321	11%	4
	Shortraker Rockfish	24	455	431	5%	4
	Thornyhead Rockfish	14	708	694	2%	6
	Pacific Cod, Inshore	404	1,816	1,412	22%	97
	Pacific Cod, Offshore	0	201	201	0%	0
	Big Skate	71	681	610	10%	8
	Longnose Skate	51	762	711	7%	13

Note: All weights are in metric tons.

Report run on: April 1, 2010 5:15 AM

Gulf of Alaska Catch Report **Through:** 27-MAR-10	**National Marine Fisheries Service** **Alaska Region, Sustainable Fisheries** **Catch Accounting**

West Yakutat

Seasons	Account	Total Catch	Quota	Remaining Quota	% Taken	Last Wk Catch
	Arrowtooth Flounder	7	2,500	2,493	0%	1
	Deep Water Flatfish	1	2,044	2,043	0%	0
	Shallow Water Flatfish	1	1,228	1,227	0%	0
	Flathead Sole	0	1,990	1,990	0%	0
	Rex Sole	0	883	883	0%	0
	Pacific Ocean Perch	63	2,004	1,941	3%	4
	Pelagic Shelf Rockfish	0	434	434	0%	0
	Other Rockfish	1	273	272	1%	0
	Pollock	1,428	2,031	603	70%	229
	Sablefish (Hook-and-Line)	340	1,410	1,070	24%	161
	Sablefish (Trawl)	0	210	210	0%	0

Southeast

Seasons	Account	Total Catch	Quota	Remaining Quota	% Taken	Last Wk Catch
	Arrowtooth Flounder	3	2,500	2,497	0%	1
	Deep Water Flatfish	0	760	760	0%	0
	Shallow Water Flatfish	0	1,334	1,334	0%	0
	Flathead Sole	0	1,451	1,451	0%	0
	Rex Sole	0	900	900	0%	0
	Pacific Ocean Perch	0	1,948	1,948	0%	0
	Pelagic Shelf Rockfish	0	726	726	0%	0
	Other Rockfish	1	200	199	1%	0
	Pollock	0	9,245	9,245	0%	0
	Demersal Shelf Rockfish	6	295	289	2%	1
	Sablefish (Hook-and-Line)	492	2,580	2,088	19%	127

Entire Gulf

Seasons	Account	Total Catch	Quota	Remaining Quota	% Taken	Last Wk Catch
	Atka Mackerel	4	2,000	1,996	0%	0
	Other Skates	723	2,093	1,370	35%	14
	Other Species	788	4,500	3,712	18%	22
Total:		**79,910**	**292,087**	**212,177**	**27%**	**4,747**

Deep water flatfish: Dover sole, Greenland turbot, and deepsea sole.

Shallow water flatfish: flatfish not including deep water flatfish, flathead sole, rex sole, or arrowtooth flounder.

Note: All weights are in metric tons.

Report run on: April 1, 2010 5:15 AM

Gulf of Alaska Halibut Mortality Report

Through: 27-MAR-10

National Marine Fisheries Service
Alaska Region, Sustainable Fisheries
Catch Accounting

Trawl Fisheries

Deep Water Species Complex

Season	Begin	End	Total Catch	Limit	Limit Remaining	% Taken
1st Season	20-JAN-10	01-APR-10	67	100	33	67%
2nd Season	01-APR-10	01-JUL-10	0	300	300	0%
3rd Season	01-JUL-10	01-SEP-10	0	400	400	0%
4th Season	01-SEP-10	01-OCT-10	0	0	0	0%
Total:			**67**	**800**	**733**	**8%**

Shallow Water Species Complex

Season	Begin	End	Total Catch	Limit	Limit Remaining	% Taken
1st Season	20-JAN-10	01-APR-10	158	450	292	35%
2nd Season	01-APR-10	01-JUL-10	0	100	100	0%
3rd Season	01-JUL-10	01-SEP-10	0	200	200	0%
4th Season	01-SEP-10	01-OCT-10	0	150	150	0%
Total:			**158**	**900**	**742**	**18%**

Year-To-Date

Account	Total Catch	Limit	Limit Remaining	% Taken	Last Wk Catch
Trawl Fishery	227	2,000	1,773	11%	25

Other Hook-and-Line Fisheries

Season	Begin	End	Total Catch	Limit	Limit Remaining	% Taken
1st Season	01-JAN-10	10-JUN-10	137	250	113	55%
2nd Season	10-JUN-10	01-SEP-10	0	5	5	0%
3rd Season	01-SEP-10	31-DEC-10	0	35	35	0%
			137	**290**	**153**	**47%**

Deep-water species complex: sablefish, rockfish, deep-water flatfish, rex sole and arrowtooth flounder. Shallow-water species complex: pollock, Pacific cod, shallow-water flatfish, flathead sole, Atka mackerel, and 'other species'.

No apportionment between shallow-water and deep-water fishery complexes during October 1 to December 31 (300 mt allocated).

Other hook-and-line fisheries means all hook-and-line fisheries except sablefish and demersal shelf rockfish in the Southeast District.

Halibut mortality for the demersal shelf rockfish fishery. Southeast District is not listed due to insufficient observer coverage.

Note: All weights are in metric tons.

Report run on: April 1, 2010 5:16 AM

Gulf of Alaska Prohibited Species Report

Through: 27-MAR-10

National Marine Fisheries Service
Alaska Region, Sustainable Fisheries
Catch Accounting

Non-Chinook Salmon

Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	Non Chinook Salmon	Count	305	0			7
Total:			**305**	**0**			**7**

Chinook Salmon

Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	Chinook Salmon	Count	8,920	0			2,049
Total:			**8,920**	**0**			**2,049**

Halibut Mortality

Non-Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
X	Other Hook-and-Line Fisheries	MT	137	290	153	47%	1
Total:			**137**	**290**	**153**	**47%**	**1**

Trawl Gear

Seasons	Account	Units	Total Catch	Limit	Remaining	% Taken	Last Wk Catch
	Trawl Fishery	MT	227	2,000	1,773	11%	25
Total:			**227**	**2,000**	**1,773**	**11%**	**25**

No PSC Limits apply to salmon in the GOA.

Other hook-and-line fisheries means all hook-and-line fisheries except sablefish and demersal shelf rockfish in the Southeast District. The hook-and-line sablefish fishery is exempt from halibut PSC limits.

Halibut mortality for the demersal shelf rockfish fishery. Southeast District is not listed due to insufficient observer coverage.

Data is based on observer reports extrapolated to total groundfish harvest. Estimates for all weeks may change due to incorporation of late or corrected data.

Trawl halibut PSC limit data include catch from Rockfish Pilot Program cooperatives.

Report run on: April 1, 2010 5:15 AM

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

AGENDA B-2
Supplemental
APRIL 2010

March 26, 2010

RECEIVED
MAR 29 2010

Eric Olson, Chairman
North Pacific Fishery Management Council
605 W. 4th Avenue, Suite 306
Anchorage, Alaska 99501-2252

Dear Chairman Olson:

In our review of annual reporting requirements under the American Fisheries Act (AFA), we have identified the possibility that the preliminary AFA annual cooperative report required under 50 CFR 679.61(f) may no longer be necessary. Therefore, we request input from the North Pacific Fishery Management Council (Council) about whether we should develop a proposed rule to remove the requirement for the preliminary report and continue to require a single final annual report from the AFA cooperatives.

Currently, all AFA cooperatives are required to submit preliminary and final annual written reports on directed pollock fishing activity to the Council. These reports provide information about how the cooperative allocated pollock, other groundfish species, and prohibited species catch among the vessels in the cooperative; the catch and discard of these species by area for each vessel in the cooperative; information about how the cooperative monitored fishing by its members; and a description of any actions taken by the cooperative to penalize any vessel that exceeded the allocations made to the vessel by the cooperative.

The AFA annual reporting requirements were implemented under a final rule (67 FR 79692; December 30, 2002) implementing Amendment 61 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area. The purpose of the annual reports, as described in the final rule, is "to assist the Council and NMFS in meeting the requirements of section 210(a)(1) of the AFA, which requires that NMFS make such information available to the public in a manner that NMFS and the Council decide is appropriate."

In more recent years, we have observed that the Council may not be relying on the preliminary cooperative annual report as much as it originally thought it would. Therefore, we recommend the Council assess whether the existing final annual report submitted after the fishing year is completed is sufficient for the Council's and public's needs for information under section 210(a)(1) of the AFA.

If the Council agrees that it would be worthwhile to examine the usefulness of the preliminary AFA annual cooperative report, we would prepare a brief analysis and bring the issue to the

Council at a subsequent meeting for final action. NOAA General Counsel advised that removal of the preliminary annual report requires Council action because the reporting requirement was originally implemented to comply with a specific requirement of the AFA that the Council and the Secretary of Commerce determine appropriate reporting requirements for the cooperatives.

Sincerely,

for James W. Balsiger, Ph. D.
Administrator, Alaska Region

North Pacific Fishery Management Council
605 West 4th Street Ste 306
Anchorage, AK 99501

B Reports: Observer Program Restructuring

March 29, 2010

Dear Chairman Olson and Members of the Council,

The undersigned organizations have reviewed available information on the Council's proposed restructuring of the North Pacific Observer Program. Representatives from many of our organizations also participated in the observer outreach meetings and have discussed the restructuring effort with Martin Loefflad and Patti Nelson. **We greatly appreciate ASFC and NMFS staff efforts to meet with members of the fishing industry.** We also recognize that under the current observer program: *"The quality and utility of observer data suffer because coverage levels and deployment patterns cannot be effectively tailored to respond to current and future management needs"* (from the Council's problem statement, Dec 2009). That said, we have continued concerns about the lack of explicit alternatives to address the specifics of gathering data from the more than 1,000 halibut/sablefish vessels that have never carried a ride-along observer and, under the current suite of alternatives, would be required to do so if selected by NMFS. In response to comments and concerns raised during the recent outreach meetings, we respectfully suggest that the Council identify an additional alternative in April that addresses the specific monitoring needs and capabilities of the halibut/sablefish quota share (QS) fleet.

Concerns voiced during the outreach meetings centered on two topics: 1) cost; and, 2) accommodating an observer aboard a small vessel.

Cost

As the Council is aware, halibut/sablefish QS holders pay a tax of up to 3% of the ex-vessel value to NMFS for the *monitoring/enforcement* of the QS fisheries and the QS loan program. Many QS holders believe NMFS should use these funds that are already collected to pay for the observer program instead of adding an additional tax. Outreach participants suggested NMFS could also review data collected in the mandatory logbook program (which was discontinued when fishermen learned the logbook data was never reviewed or used) before collecting additional data. In Southeast, where both sablefish and halibut quotas have been reduced to less than half from when the QS program was initiated, the Council should be aware that an additional tax will drive small QS holders out of the longline business and increase QS consolidation, jeopardizing the founding goals of the halibut/sablefish QS program. Most QS holders in the halibut/sablefish fisheries have purchased some or all of their IFQs. Since losing over half of their QS, many individuals are not able to cover their loan payments with the income they derive from halibut/sablefish fishing. These QS holders have been supplementing their loan payments with income from other fisheries. As a result, any additional tax or fee on this sector (regardless of how small or large) can have devastating impacts to QS holders. There is general consensus among the halibut/sablefish fleet that trawl bycatch of halibut is a problem that needs to be addressed, but the bill for addressing that problem should not be paid by the fixed gear fleet.

Observer Accommodations

All of the alternatives identified by the Council to date give NMFS the authority to require a halibut or sablefish vessel to carry a ride-along observer if selected. This is in conflict with past actions related to the observer program which have noted that a significant percentage of the small boat fleet cannot physically accommodate an observer on their vessels. Many vessels do not have an extra bunk, or do not have space on deck for an observer to work safely. During outreach meetings, concerned fishermen were assured that NMFS did not intend to be overly disruptive to the small boat fleet, and that the capability of vessels to carry an observer would be decided on a case by case basis. Although such comments are encouraging, they do not appear in the current analysis. We look forward to Initial Review in June where those concerns will be addressed.

The halibut/sablefish fleet is supportive of restructuring the observer program to allow NMFS greater flexibility in placing observers and more options for gathering the data necessary for effective fisheries management. However, the current analysis and existing alternatives do not yet address the needs of this fleet. The sablefish/halibut fleet is being swept into a system that is needed to address trawl bycatch issues, will be designed to address trawl bycatch issues, will cost the QS holders 2% on top of the 3% ex-vessel fee already assessed to pay for trawl bycatch problems, and may assign observers to vessels that simply cannot accommodate an observer. This is an unworkable situation at best.

Requested Action

Because the Council is scheduled to conduct initial review of the analysis in June and take final action in October, we respectfully request that that Council add an alternative at the April Council meeting that allows a workable monitoring program for the halibut/sablefish fleet to be designed either as part of this restructuring action or subsequent to Council action on the current amendment package. **The halibut/sablefish monitoring analysis should explore electronic monitoring options, the "chaser boat" approach that has been suggested, as well as a pilot program for placing observers on the larger vessels.** Analysis of this alternative should explicitly define objectives for coverage and the sampling design for gathering data, including the distribution of observers, cameras and/or chaser boat observations. It should identify how NMFS will determine which vessels are capable of carrying an observer and which vessels could be assigned to carry a camera or be randomly observed from a chaser boat. If this alternative can be effectively designed, evaluated and implemented as part of this restructuring effort, then the Council should take action on the alternative in October, as intended. If an appropriate program cannot be designed on that timeline, then the Council should take action to address the identified problems with the current observer service delivery system for the trawl fleet in October and exempt the halibut/sablefish fleet until an appropriate and effective program is developed.

In closing, the undersigned organizations recognize that the current observer program does not provide NMFS with sufficient flexibility in deploying observers, which has allowed observer coverage to be manipulated. We also recognize that under the existing program some vessel owners are paying a disproportionate share of the observer program costs. Finally, we agree that some level of coverage of the halibut fleet and fleet of vessels under sixty feet will improve management of fisheries in which these vessels engage. However, we do not believe the alternatives contained in the observer restructuring amendment provide the Council with a reasonable suite of alternatives for increasing coverage of the halibut/sablefish fishery. We respectfully request that the Council add such an alternative during the April Council meeting. We believe the failure to add an alternative identified and requested during the outreach meetings would be contrary to the requirements of NEPA and destined to delay Council action on the observer restructuring amendment, which would be a disservice to the resource and the industry.

Thank you for your time and attention.

Linda Behnken
Alaska Longline Fishermen's Association

Tom McLaughlin
Seafood Producers Cooperative

Kathy Hansen
Southeast Alaska Fishermen's Alliance

Julianne Curry
Petersburg Vessel Owners Association

Approaches for Catch Accounting in the BSAI and GOA Pacific Cod Catcher/Processor Hook and Line Fishery

Discussion Paper
April 2010

Background

The freezer longline fleet in Alaska consists of 36 catcher/processor vessels between 110 and 196 feet in length that fish in federal waters. These vessels primarily fish for Pacific cod and, for those vessels with Individual Fishing Quota (IFQ), sablefish. In 2007 Amendment 67 to the Bering Sea/Aleutian Islands (BSAI) Fishery Management Plan limited the number of participants in the BSAI Pacific cod freezer longline fishery to 39 vessels, which was further reduced to the current 36 vessels under the BSAI catcher/processor capacity reduction program. While beyond the scope of this paper, there are also several smaller catcher/processors that fish only in state waters.

In the BSAI, Pacific cod is allocated specifically to the freezer longline sector, and in December 2009, the North Pacific Fishery Management Council (Council) took final action to implement sector allocations (including allocations to the freezer longline fleet) in the Western and Central Gulf of Alaska (GOA). The combination of a closed-class of vessels and a sector-specific allocation of Pacific cod has created the opportunity for these vessels to form a voluntary cooperative that would potentially create a de facto quota program. Draft legislation has also been introduced in the House of Representatives (HR 3910, currently in committee) and the Senate (S1609, reported to the Senate without amendment) that would authorize the Secretary of Commerce to approve a single fishery cooperative for the freezer longline sector in the BSAI.

Programs that allocate catch or bycatch to individual entities, or to an organized closed class of entities, impose new demands on NMFS to provide defensible and precise estimates of catch for quota management. Therefore, the general management approach changes with such allocations since entities that receive allocations are generally prohibited from exceeding those allocations, and if an allocation is exceeded, NMFS may initiate enforcement actions against the entity. These programs also impose additional burdens on industry to monitor their own allocations of catch and to cease fishing when those allocations are reached, which requires that program participants have quick access to catch accounting data so that they can monitor their quotas. Participants are also very concerned that the data used for management and quota accounting precisely reflect catch at small scales such as the individual set, haul, or delivery. These demands have led to the development of a method of quota accounting where all quota species are weighed or counted. Such approaches are very precise in their estimates of catch and are highly defensible.

Industry members of the freezer longline fleet have indicated to NMFS that they believe NMFS's estimates of Pacific cod catch are too high. Their observations are based on the amount of product produced and the use of published product recovery rates (PRRs) to back calculate the round weight of retained catch. The crew adds an estimate of the amount of fish that was discarded prior to processing to their estimate of retained catch to get an estimate of the total catch. Based on these concerns, NMFS

initiated a Pacific cod catch accounting research project in 2003. However, because of issues with data quality and the loss of a portion of the raw data, NMFS was not able to verify the research results and the issue was not resolved.

The industry recognizes the catch monitoring and catch accounting demands under a quota program. During the late summer of 2009, NMFS and the Freezer Longline Coalition (FLC) held several informal meetings to discuss a proposal by the FLC concerning revised catch monitoring and catch accounting methodologies for the freezer longline fishery. Following these discussions, NMFS staff and the FLC agreed that the best approach for continuing work on these issues was to bring them forward through the Council process. At the October 2009 meeting of the Council, Kenny Down, representing the FLC, requested that a discussion of improved catch accounting in the Pacific cod longline catcher/processor fishery be prepared. The Council concurred with Mr. Down's request and NMFS staff was tasked with the preparation of the discussion paper. Since it seems very likely that a quota-type program for the Pacific cod freezer longline fishery will develop, the purpose of this paper is to inform the Council of NMFS's perspective on monitoring and catch accounting needs under such a program. A regulatory amendment and associated analysis would be required to implement new monitoring and enforcement requirements for the freezer longline fleet. New monitoring and enforcement provisions could be assessed by the Council and implemented as a provision of regulations governing any legislated or Council initiated cooperative allocation or as standalone provisions in the event a voluntary cooperative was formed without the benefit of further Congressional or Council action.

NMFS staff held a public workshop in Dutch Harbor on December 1, 2009, to better understand the vessels participating in the freezer longline fishery. Following this workshop, NMFS staff visited 21 freezer longline vessels in Dutch Harbor and Seattle and discussed catch handling protocols and factory operations with vessel crew.

Vessel Operations and Current Observer Sampling Methodology

The primary target species in the freezer longline fisheries are Pacific cod, sablefish (black cod), and Greenland turbot. In addition, longline vessels also may retain incidentally caught species such as skates, rockfish, arrowtooth flounder, and pollock. Retention of incidental species depends on fishing regulations, such as Increased Retention/Increased Utilization (IR/IU), as well as market price and the pace of fishing.

Longliners in the North Pacific fish with baited hooks on a line that lies on or near the sea floor. The "backbone" of the gear is the line or "groundline." Hooks are attached to the groundline by another thinner line, called a gangion. The length of the gangion and the distance between gangions is different depending on the target fishery and vessel. To allow handling, gear is divided into smaller segments configured as magazines, rails, skates, coils, or tubs. A mechanized "autobaiter" is used to bait gear and the gear is deployed from this machine.

Longline gear is set by dropping the buoy and anchor from one end of the groundline out the aft of the vessel. The rest of the gear quickly trails out as the anchor sinks. On the last segment of the set, another anchor and buoy are tied to the end of the line and deployed. After soaking, longline gear is retrieved

by pulling in the groundline so that the hooks come aboard one at a time. The line comes into the vessel over a roller, and passes through the crucifier (fish stripper), which is designed to automatically remove fish from the line. The line then is either coiled or hung onto racks by the hooks. Usually longliners set multiple strings, let them soak, and then rotate between hauling and resetting the gear. This cycle may continue for many sets per day.

Processing strategies aboard freezer longliners will vary from vessel to vessel, but a generalized operation is shown in Figure 1. Depending on the vessel configuration, the actual factory layout and the space for each of these operations can vary dramatically as can catch handling procedures.

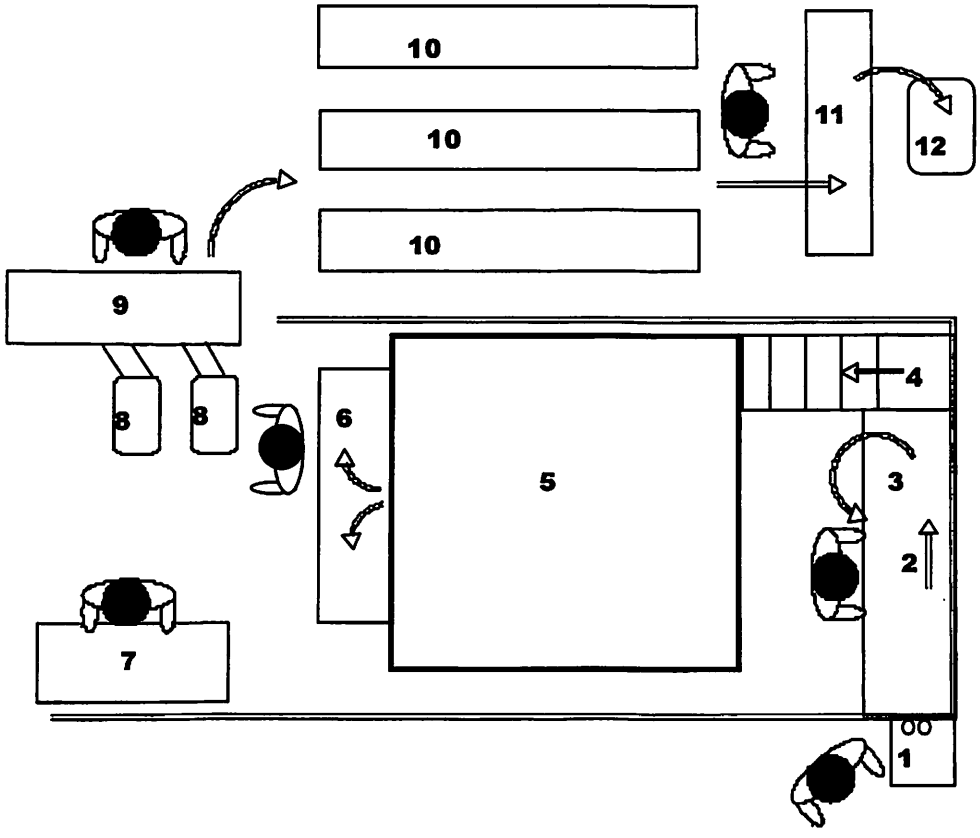

Figure 1. Generic layout of a freezer longline factory. 1-- Fish are removed from longline as they come on board by crucifier or roller man and enter factory. 2-- Fish are bled at bleeding station. This is also generally the location where observer samples catch. 3-- Unretained catch is discarded. Catch is also discarded by the roller man at location number 1 and small amounts are discarded inside the factory at locations 6, 9 and 11. 4-- Fish enter incline belt to bleed tank. 5-- Bleed tank. 6-- Fish flow out of bleed tank into shallow pan. 7-- Observer work area. 8-- Heading machines. 9-- Fish are gutted and panned for freezing. 10-- Plate freezers. 11-- Frozen fish are glazed and bagged. 12-- Bagged fish are stored in freezer hold.

As fish enter the vessel, some fish fall from the hook or are deliberately removed prior to reaching the crucifier. At the bleeding station, additional sorting takes place, undesirable catch is discarded and large species such as skates are removed for separate processing. Because the bleeder is unable to control the speed with which fish enter the vessel, it is not always possible to fully sort catch prior to the bleed tank. Nor is it possible for the bleeder to assess whether fish have parasite or sand flea damage. Thus, following bleeding, an unknown amount of catch is discarded inside the factory either at the heading or panning stations. Finally, after freezing, final quality checks may reveal additional substandard fish that must be discarded. Because discard or fish loss can take place at numerous locations, the composition and quantity of catch changes as that catch moves through the factory.

NMFS considers everything caught on the line to be part of the catch, and the agency uses observer sample data to estimate the weight and/or number of each species caught by freezer longliners. Observer collected data consist of the following components. First, observers periodically count the number of hooks per segment of gear for a random subset of the total gear. The number of segments of gear is verified at least for each sampled set. Then, observers monitor portions of the gear retrieval following a random sampling methodology. Within each sample, observers count everything that is caught by the gear. Finally, observers weigh a random sample of each species caught for an average weight. Each of these components is used by NMFS to estimate the total catch for all sets on the observed vessel.

NMFS utilizes a robust sampling design to minimize the effects of sampling error, and observer sampling methods are based on randomized sampling designs. NMFS has not identified any systematic bias in the existing sampling approach. However, estimates that are derived from samples always have some degree of variance or imprecision.

Possible Approaches for Estimating Pacific Cod Catch under a Quota Program

As other groundfish fisheries off Alaska have been rationalized (BSAI pollock, Amendment 80, and GOA rockfish pilot) NMFS has developed a package of catch accounting and monitoring measures designed to ensure accurate and precise accounting for allocated species. For catcher/processors, this package consists of:

- requirements that all catch be weighed on NMFS-approved scales prior to processing (e.g., weighed in the "round" condition of the fish);
- increased observer coverage to ensure that all hauls or sets are sampled; and
- provisions for an observer sampling station.

While NMFS believes that this package is well suited for the existing groundfish quota programs, there are issues associated with catch accounting in the freezer longline fishery that make this approach problematic. Specifically, the vessels are often smaller, observers does much of their work in parts of the vessel that are not near the area where Pacific cod would be weighed, and the species composition changes as catch enters the vessel and moves through the factory. Thus, this package may be less suitable, or would require significant modification, for use in the freezer longline fishery.

<u>Observer-Sample Based Methodology under a Quota Program</u>

Under this approach, NMFS would enhance the existing status-quo sampling approach using the sampling strategy from the Community Development Quota (CDQ) program as a starting point. The CDQ program places additional requirements on participating vessels. Specifically:

- All sets are generally sampled, which usually requires that two observers be on board at all times;
- An observer sampling station must be provided. The station must meet the requirement for size, location, and construction set forth in regulations;
- A motion compensated platform scale must be provided for the observer's use.

The elimination of unsampled sets, the use of a far more accurate scale for obtaining the average weight of a species, and the provision of sufficient space for observers to store samples increases the accuracy of the estimate of catch and species composition.

The approach using observer information with the enhancements noted has several advantages. It could be implemented with the least start-up cost to industry, because approximately 18 of the 36 vessels in the fishery currently participate in the CDQ program and would have minimal difficulty in providing observer sampling stations throughout the season. Because observers take multiple samples from each set, precision can be estimated. It is not dependent on standard PRRs and thus encourages (or at least does not discourage) improved utilization. Having two observers onboard increases the proportion of the time that drop offs are monitored thereby minimizing the ability of the crew to "high grade." Finally, this approach can easily be integrated into the existing NMFS estimation of overall total catch and the species composition for other species.

There are known limitations with this approach. First, as described earlier, this method is based on sampling theory and the precision of the estimate of Pacific cod catch increases as the number of sets sampled increases. However, the within-set precision would remain unchanged unless additional coverage was allocated to increase the within-set sampling effort. Because this approach was not designed to provide precise data at the level of the individual set, which is the level at which catch accounting in a quota fishery takes place, the imprecision at this scale may be unacceptably high to industry. The imprecision can be alleviated by increasing coverage but that solution is expensive due to the cost of observers. Industry members have expressed their belief that this method provides Pacific cod estimates that are biased high. Increasing the number of sets that are sampled may not alleviate their perception of bias in the method.

Industry-Developed Product Recovery Rate Based Approach

In the freezer longline fishery, virtually all Pacific cod are processed into one of two head and gut products: western (head removed just in front of the collar bone) or eastern cut (head removed just behind the collar bone). Because there are a limited number of products, industry has suggested quota accounting for Pacific cod be accomplished by weighing all of the processed product and using NMFS published PRRs to estimate the round weight of retained Pacific cod. In order to get an estimate of total cod catch under this approach, an observer estimate of drop offs and a vessel or observer estimate of

in-factory discards would be added to the estimated round weight of retained cod. For species other than Pacific cod, the standard observer sampling methodology and resulting estimates would be used.

On most freezer longline vessels, as shown in Figure 1, fish enter a trough below the bleed tank where the operator of the heading machine is able to grab individual fish and pass them through the heading equipment. Depending on the size of the fish, the operator will choose to pass the cod through a machine set up for eastern cut, or a machine set up for western cut. Following heading, the fish are gutted and sent to a panning station. At the panning station, an operator sorts the fish by size, cut, and species and prepares them for freezing. After the individual pans are frozen, the fish are glazed with water and packaged for long-term freezing.

Because different vessels apply different amounts of glaze, the logical place to determine product weight would be after the product is frozen and before it is glazed. Under this approach, vessels would be required to be equipped with a motion compensated scale capable of printing a label and retaining the weight of each pan of fish in memory. Prior to glazing, the operator would weigh each pan of fish and print a label showing the weight of that pan. After glazing and bagging, the label would be affixed to the bag. Each day, the vessel would be required to print the total weight for the day and the number of bags weighed. These data would be used to calculate the weight of retained cod.

This approach has the advantage of producing a record of Pacific cod catch that can be audited comparatively simply. Currently in this fishery, NOAA Enforcement may audit an offload by counting cases offloaded and multiplying the count by a standard case weight which is developed by weighing sample cases from throughout the offload. The total offload weight is compared to amounts reported in corresponding production records. Under the proposed approach, NOAA enforcement could audit the cases during the offload and check for weight labels. If a case did not have a label, it would be clear that the weight had not been recorded. Enforcement could also check the weights of individual cases of product against the label to ensure that product was completely weighed.

There are a number of disadvantages and complications with a PRR based approach. NMFS has published recovery rates for Eastern (0.47) and Western (0.57) cut Pacific cod. However, there has been no recent work done to assess those rates. Nor were these rates developed with the intent of using them for managing a quota program. Finally, one of the advantages of quota based management is that by ending the "race for fish" vessel crew are able to fish and process catch more slowly, thereby potentially improving recovery. If a static rate is used, vessel owners have no incentive to improve recovery since any additional recovery would erroneously be translated into additional round weight that would be debited from the vessel's quota. Industry has suggested that recovery rates could be assessed by observers on an ongoing basis, and NMFS could periodically publish revised rates. On a fleet wide level, this would create an incentive for improving recovery and would also provide NMFS with additional data for determining the precision and accuracy of the published rates. However, NMFS believes that making ongoing revisions to recovery rates would place too much additional burden on observers and is not practical.

The PRR based proposed approach also presents a variety of limitations and complications regarding the estimate of Pacific cod discard. Monitoring the amount of in-factory discard would be difficult. Because observers must spend much of their time watching the line as it comes on board, it would not be possible for an observer to consistently monitor for in-factory discard. NMFS has not independently assessed the amount of in-factory discard, nor do we believe that the amount of that discard would necessarily remain the same under any form of quota based management. Based on conversations with industry, they indicate that the amount of in-factory discard is fairly small, but this unknown represents a significant accounting difficulty associated with this approach. To the extent that the amount of in-factory discard is comparatively small, it may be possible to require that factories be designed to prevent discard of fish except at specified times when the discard can be observed.

Observers currently estimate drop-offs as part of the regular sampling routine. The basis for the observer sample, and for the current catch accounting system, is the individual set. Unfortunately, Pacific cod are not currently kept segregated by set once they enter the factory and designing a system that ensured fish from individual sets stayed together until they were weighed and packaged could be problematic. Unless such a system could be designed, the weight of cod under this approach would be based on the production day, whereas the weight of the Pacific cod drop offs would be based on the individual set. To further complicate matters, the observer would still be required to estimate Pacific cod catch for each set in order to generate an estimate of total catch for the set. Because of variance in the observer and recovery rate estimates, and the inability to attribute the estimated Pacific cod weight from product to an individual haul, the two separate estimates of Pacific cod catch would not be expected to agree closely.

NMFS has not determined what level of observer coverage would be required under this approach. Without multiple observers, it would be impossible to ensure that discard and drop off rates were not higher when an observer was not on duty. Nor would it be possible to monitor in-factory discard.

On some vessels, there is very limited space between the freezers and the area where casing occurs and it would be necessary to modify the factory to create sufficient space for a weighing station. It might be possible for vessels that already have a label printing scale on board to reprogram the scale to meet the new printout requirements; however, in most cases vessels would be required to purchase a new scale system. Based on informal discussions with vendors, such a system, including spare parts, wiring, and training would probably cost approximately $75,000.

While this approach, based on weighed product and the standard PRRs, could be implemented at comparatively low cost and is popular with industry, NMFS does not believe that it is suitable for accounting in a quota based fishery. We lack sufficient data to assess the accuracy and precision of existing recovery rates and believe that this approach could inhibit vessels from improving recovery rates. We also do not believe that an approach has been developed yet to effectively monitor and account for in-factory discard or to effectively merge observer discard data collected at the set level with production data collected at the production day level.

Bled-Weight Approach

Trawl catcher/processors participating in a quota program are required to weigh all catch prior to processing. After the catch is weighed, the observer takes species composition samples which allow NMFS to estimate what percentage of the round weight consists of each species. The estimated catch composition coupled with the total catch weight is used to calculate the total amount of quota species.

This approach would have to be modified for freezer longliners, because species composition is estimated upstream from where catch can be weighed. Clearly, it would not be possible to weigh drop offs, fish discarded at the bleeding station, or large skates that are hand processed. Weighing total catch may be impractical so an alternative would be to weigh the total cod catch. In order to obtain an accurate weight of Pacific cod, retained catch of other species would have to be sorted prior to weighing and only Pacific cod would be weighed.

For catch to be weighed round, it would have to be weighed upstream from the bleeder. This is not practical for several reasons. First, Pacific cod are still alive at that point and it is unlikely that the weights for large, still vigorous, fish would be accurate. Second, on most vessels there is very little room between the crucifier and the bleeding table, and it is frequently exposed to wind and weather. NMFS staff has found that total catch weighing scales do not weigh accurately when exposed to wind, and the electronics are not designed for use in highly exposed locations. Finally, freezer longliners seek to produce a high grade product and early bleeding and soaking is critical to producing a product free of defects. Weighing fish upstream of the bleeder would inevitably result in delayed bleeding and could adversely affect product quality.

Because of these issues, it would be necessary to weigh Pacific cod after bleeding, which would necessitate the use of a PRR for bled fish. Application of a bled weight PRR should not significantly affect the accuracy of the round weight estimate. The current bled PRR is 0.98, or a two percent loss from round fish. As an extreme example, if the bled PRR is accurate within plus or minus 25%, the actual recovery rate would lie between 97.5% and 98.5%, or a maximum 0.5% error in the round weight estimate. On the other hand, if the accuracy of the Eastern cut recovery rate (0.47) is accurate within plus or minus 25%, the actual recovery would range from 34% to 60%, or a maximum error of 13% in the round weight estimate.

Similar to the PRR approach, the scale weight would not account for drop offs or discard upstream from the bleed tank. An estimate of this catch would need to be added back into the scale weight to generate the total estimated cod catch for the set.

There are two types of scale systems that could be considered for weighing bled Pacific cod on a freezer longliner. The first is a flow scale where fish are weighed in-line as they are moved on a belt over the scale. This is the type of scale used on all other groundfish catcher/processors and motherships. The second is a hopper scale, where fish automatically enter a bin and are weighed a batch at a time; hopper scales are used in the rationalized crab fishery. Depending on the factory layout for a given vessel, either a flow scale or a hopper scale system may be more appropriate, and NMFS anticipates that either system could be approved for this application.

After over ten years of use, at-sea weighing has proven to be an accurate and reliable estimator of catch. This approach would be the most direct way of accounting for Pacific cod quota, and would be similar to what is required for all other at-sea processing quota programs. The method is defensible, and does not tend to result in conflict between vessel crew and NMFS or observers. It also would not discourage vessels from improving recovery rates. Finally, observers or vessel crew would not be required to accurately account for in-factory discard.

Whether a hopper scale or a flow scale is used, vessels would be required to extensively modify the area after the bleed tank. To assess the difficulties associated with this approach, NMFS staff toured 21 of the 36 vessels authorized to participate in the BSAI freezer longline Pacific cod fishery and discussed where and how scales could be installed downstream from the bleeder. Unlike pollock catcher/processors, which have fairly similar layouts from vessel to vessel, the layout of freezer longliners, and the amount of room available in different locations, varies dramatically. The cost to install scale systems would vary dramatically as well. Based on our examination of the 21 vessels, NMFS estimated that approximately four vessels could install a scale fairly inexpensively. Minor factory alterations would be required but it would not be necessary to move heading machines; redesign, move or replace tanks; or make other major factory modifications. Based on discussions with scale vendors, scale installation costs (not including the cost of the scale itself) would probably be approximately $30,000. On the other end of the scale, five vessels would need to make extensive alterations to the factory such as replacing bleed tanks, moving plate freezers, or installing complex infeed and outfeed belt systems. In worst case scenarios, the smallest of the vessels could potentially need to move bulkheads. Installation costs for these vessels are far more difficult to estimate but would probably range upwards from $60,000 and would often be part of a larger, full scale factory redesign. For the remainder of the vessels, installation costs would probably range from $30,000 to $60,000. Most vessel owners that we spoke to indicated a preference for a flow scale system as opposed to a hopper scale system, because fish would enter the factory more evenly and there would be less chance of fish bruising. Including training and spare parts, these systems cost approximately $90,000.

Freezer longliners participating in the Pacific cod fishery also often retain other species, principally Greenland turbot, pollock, sablefish (for those vessels with an IFQ holder onboard), skates, and arrowtooth flounder. This catch would need to be sorted prior to weighing and diverted around the scale and into the factory, which would add complexity to the catch weighing system. Based on a review of data from 2003 through 2009, all vessels retained some non-Pacific cod species for processing. IR/IU requirements also sometimes require the retention of non-Pacific cod bycatch. The amount of non-cod species processed ranged from a low of 2 percent to a high of 20 percent of total catch. If skates are not considered, because they are generally removed prior to the bleed tank and would not create a new handling issue, the amount of non-cod or skate processed ranged from 1 to 17 percent. Because this was a preliminary analysis, some sets where the intended target was Greenland turbot or sablefish were probably included, which would inflate the apparent quantity of other species that enter the factory. Irrespective of this, it is clear that for most vessels a significant amount of sorting would have to take place prior to the scale, which would require additional space and potentially additional crew.

Scales would also need to be monitored in order to assure that all catch was being weighed. In other fisheries where scales are required, an observer completes all of their sampling in a location near the scale. The industry is expected to ensure that fish are not being passed across the scale when it is in a fault mode that would prevent weighing, or that the scale is not being bypassed. Observers are instructed to report deviations from these requirements. In the case of freezer longliners, the observers would not be working in proximity to the scale and additional controls may be necessary to ensure compliance with scale requirements. For example, it may be possible to use video monitoring systems to mitigate against scale fraud when the observer is not on duty. It may also be possible to use video technology to estimate or verify the species composition from unsampled sets.

Halibut Catch Accounting

While the focus of this discussion paper has been on accounting for catch of Pacific cod, accounting for quotas of other species may be important to the extent that those species are allocated to program participants. Because a quota program has not yet been designed, it is difficult to assess which, if any, other species would require quota level accounting. However, it is quite probable that halibut prohibited species quota (PSQ) would be allocated to program participants. Because halibut is a prohibited species, it may not be retained and must be discarded as quickly as possible. Unlike groundfish, halibut is managed and allocated using mortality rates which are periodically recalculated. In order to minimize mortality and maximize available halibut, vessels use safe handling practices that necessitate returning the halibut to the water as quickly as possible. This creates additional challenges for estimating halibut bycatch.

In other quota programs where halibut is allocated as PSQ, the standard observer sampling method is used to determine halibut bycatch. In the rockfish pilot program, this method has been problematic for cooperative managers because of the highly variable nature of the estimates at the level of the individual haul. NMFS and the participants in the rockfish pilot program have undertaken several research studies to investigate the use of electronic monitoring for more precisely estimating halibut bycatch at the haul level. While the results of this research have been promising, electronic monitoring for the purposes of estimating bycatch would require additional research before it could be implemented in a longline fishery.

Irrespective of which approach is chosen for Pacific cod catch accounting, NMFS anticipates that halibut accounting would be based on observer sampling using the current methodology. To the extent that program participants may be limited by the amount of available halibut PSQ, accounting for halibut bycatch may be as problematic as accounting for Pacific cod. NMFS has not determined the amount of observer coverage that would be required for each approach, although it is likely to be higher than current levels. This high level of observer coverage would enable virtually all sets to be sampled. However, under the PRR or bled weight approaches, it may be possible to keep observer coverage at current levels, provided that the weighing and processing of Pacific cod can be adequately monitored in some manner. In this event, there would be a significant number of unsampled sets, which would further increase the imprecision of the estimate of halibut bycatch.

Conclusion

Because not all catch in the freezer longline fishery is, or even can be, retained, any estimate of Pacific cod catch will ultimately be based on the observer's estimate of species composition and therefore dependent on a well designed observer sampling program. NMFS believes that the current methodology is well designed and produces an accurate estimate of Pacific cod catch in the fishery. We believe the industry perception of problems with Pacific cod estimates are not due to inaccuracy, but rather with imprecision at the level of the individual set. None of the approaches considered totally replaces the existing observer sampling approach to catch accounting. Using scales to weigh all retained Pacific cod, or increasing observer coverage, are approaches that supplement the status quo methodology in an attempt to increase precision, reduce the possibility of fraud, and produce a defensible record of harvest. On the other hand, the PRR approach, though reliant on observer sampling to obtain an estimate of the catch of other species and to estimate the quantity of Pacific cod that does not enter the vessel, produces an alternate estimate of Pacific cod catch. While the PRR based approach is the industry's preferred option, NMFS does not believe that it is suitable for accounting in a quota based fishery.

NMFS believes that any suitable catch accounting methodology for the Pacific cod freezer longline fishery will continue to be based on observer sampling augmented with various tools to increase the precision and defensibility of the catch estimate. The bled-weight approach, weighing all retained Pacific cod in its bled form, would do this as would increasing observer coverage and providing observers with additional tools (such as motion compensated platform scales).

There are also other tools, especially electronic monitoring (EM) that may be appropriate for augmenting observer sampling. While NMFS has not investigated the use of EM in freezer longline fisheries off Alaska, it is currently used to audit logbook catch reports in the British Columbia longline fisheries. It may be an appropriate tool for estimating the number of fish caught, and perhaps for estimating the composition of that catch. A lack of research into the applicability of EM in this fishery prevented us from examining this approach. However, we believe that it offers promise, and NMFS would be interested in working with the industry to further investigate its merits.