# Pollock Conservation Cooperative and

High Seas Catchers' Cooperative

Joint Annual Report 2016



North Pacific Fishery Management Council

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#### **Pollock Conservation Cooperative Annual Report**

#### Introduction

In 1998, the owners of the catcher-processors and catcher-vessels that deliver to catcher-processors in the Bering Sea and Aleutian Islands (BSAI) pollock fishery formed separate fishing cooperatives to coordinate pollock harvesting under the American Fisheries Act. The Pollock Conservation Cooperative (PCC) is the catcher-processor cooperative, and the High Seas Catchers' Cooperative (HSCC) is the catcher-vessel cooperative. On January 21, 1999, the PCC and HSCC completed an inter-cooperative agreement to facilitate efficient management and accurate accounting between the two cooperatives. The agreement, "Cooperative Agreement Between Offshore Pollock Catchers' Cooperative and Pollock Conservation Cooperative" remains in force, has not been changed, and is available upon request from the NPFMC.

## Purpose of Report

This report is intended to disclose all information required or identified in the American Fisheries Act (AFA), per the North Pacific Fishery Management Council (NPFMC) October 1999 recommendation to the U.S. Secretary of Commerce, and in further guidance provided by the NPFMC in letters dated October 21, 1999 and November 1, 1999. The tables and figures in this report are largely self-explanatory, although some notes have been included to provide detail. The catch data in this report was provided by SeaState, Inc., and was obtained from the National Marine Fisheries Service (NMFS) North Pacific Groundfish Observer Program.<sup>1</sup>

#### Reporting Requirements

Fishing cooperatives formed under the AFA are subject to certain annual reporting requirements. Section 210(a)(1)(B) of the AFA requires the North Pacific Fisheries Management Council and the US Secretary of Commerce to "make available to the public in such a manner as the North Pacific Council and Secretary deem appropriate, catch information for all species (including bycatch) in the directed pollock fishery on a vessel-byvessel basis." In doing so, however, the NPFMC and Secretary must take into account "the interest of the parties to [a fishing cooperative] in protecting the confidentiality of proprietary information."

In October 1999, the NPFMC took action to implement section 210(a)(1)(B) of the AFA by requiring that cooperatives annually prepare a report containing: (1) the allocation of pollock and sideboard species to a cooperative; (2) any sub-allocations of pollock and sideboard species on a vessel-by-vessel basis; (3) retained and discarded catch on an area-by-area and vessel-by-vessel basis; (4) the methods used to monitor fisheries in which cooperative vessels participated; (5) any actions taken by cooperatives to enforce vessel or aggregate catches that exceed allowed catch and bycatch in the pollock and sideboard fisheries; (6) the total weight of pollock landed outside the State of Alaska on a vessel-by-vessel basis; (7) the number of salmon taken by species and season; and (8) the number of times each vessel appears on the weekly 'dirty 20' lists for non-Chinook salmon.

<sup>&</sup>lt;sup>1</sup> The NMFS catch database for the 2016 fishing year is still subject to revision as catch data and other information from the fishery is finalized. To the extent that information in this report is based on NMFS data, it is still subject to revision. At this point, however, neither the PCC nor the HSCC are aware of any data discrepancies that would materially alter the substantive elements of this report.

#### Cooperative Members and Allocations

The Pollock Conservation Cooperative was formed in December 1998 in order to promote the rational and orderly harvest of pollock by the catcher-processor (CP) sector of the BSAI pollock trawl fishery. The PCC is made up of the companies that today operate 19 CPs eligible to harvest and process pollock in the BSAI directed pollock fishery under section 208(e)(1)-(20) of the AFA. In September 2005 the PCC companies adopted an amended and restated membership agreement.

According to the PCC harvest schedule, each member is allocated a percentage of the directed fishery specified under Section 206(b) of the AFA. The percentage of the <u>catcher-processor</u> directed pollock fishery allocated to each PCC member by the amended membership agreement is shown below<sup>2</sup>.

Company	Directed Pollock Fishery Share (%)	PCC Share (%)
C/P Northern Hawk, L.L.C.	1.000	2.73
Starbound, L.L.C.	1.585	4.33
Arctic Fjord, Inc.	1.792	4.90
Arctic Storm, Inc.	1.841	5.03
Glacier Fish Company, L.L.C.	6.222	17.00
Trident Seafoods Corp.	6.824	18.64
American Seafoods, L.L.C.	17.336	47.37
Total:	36.600	100.00

# Inter-Cooperative Agreement Between PCC and HSCC

Under the inter-cooperative agreement, the PCC and HSCC established a joint harvest schedule and agreed to retain the same independent quota monitoring service. The inter-cooperative agreement governs the harvest and processing of the HSCC members' share of the BSAI directed pollock fishery and the transfer of pollock allocations between members of the two cooperatives. Table 1 shows PCC and HSCC pollock allocations and catch for 2016 by company and vessel, and Table 2 shows PCC and HSCC pollock directed fishing catch and prohibited species bycatch (PSC) for 2016.

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<sup>&</sup>lt;sup>2</sup> Under sections 205(4) (definitions) and 206 (allocations) of the AFA, the BSAI directed pollock fishery (DPF) is the amount of the total allowable catch remaining after 10 percent has been deducted for the western Alaska Community Development Quota program and an additional amount has been deducted for the incidental catch of pollock in other groundfish fisheries. Section 206(b)(2) of the American Fisheries Act allocates a total of 40 percent of the DPF to catcher-processors and the catcher vessels that deliver to catcher-processors, and section 210(c) allocates 8.5 percent of this amount (3.4 percent of the DPF) to catcher vessels that deliver to catcher processors. Subsequently, the AFA was amended by the Consolidated Appropriations Act of 2004, which reallocated the AI DPF to the Aleut Corporation for the purpose of economic development of Adak, Alaska.

Table 1. PCC and HSCC Pollock Allocations and Catch.

					( )		<b>Q</b> + <b>1</b> ( )	
				erative Share	\ /		Catch (mt)	
2016		** 1	Harvest	a	Final	Vessel	Company	Amount
2016	Company	Vessel	Schedule	Transfers	Allocation	Harvest	Total	Remaining
PCC	American Seafoods		202,960	2,259	205,219		205,203	16
		American Dynasty				40,713		
		American Triumph				43,143		
		Northern Eagle				43,766		
		Northern Jaeger				39,104		
		Ocean Rover				38,476		
	Arctic Fjord Ltd.	Arctic Fjord	20,978	8,127	29,105	29,098	29,098	7
	Arctic Storm Ltd.	Arctic Storm	21,554	9,691	31,245	31,239	31,239	6
	C/P Northern							
	Hawk Ltd.	Northern Hawk	11,713	10,983	22,696	22,695	22,695	1
	Glacier Fish Co.		72,845	10,803	83,648		83,633	15
		Alaska Ocean				46,205		
		Pacific Glacier				37,428		
	Starbound Ltd.	Starbound	18,552	(7,237)	11,315	10,978	10,978	337
	Trident Seafoods		79,896	5,180	85,076		85,076	0
		Island Enterprise				29,402		
		Kodiak Enterprise				26,903		
		Seattle Enterprise				28,771		
HSCC		Forum Star	8,292	(8,292)	-			
		American Chall.	3,687	(3,687)	-			
		Ocean Harvester	5,064	(5,064)	-			
		Neahkanie	7,819	(7,819)	-			
		Sea Storm	9,631	(9,631)	-			
		Muir Milach	5,313	(5,313)	-			
Totals			468,304		468,304	467,922	467,922	382

Table 2. PCC and HSCC Pollock Directed Fishing Catch and Bycatch.

16	Vessel	Pollock (mt)	Other Groundfish (mt)	Halibut Mortality (mt)	Herring (mt)	Red King Crab (N)	Bairdi Crab (N)	<i>Opilio</i> Crab (N)	Chinook Salmon A (N)	Chinook Salmon B (N)	Other Salmon A (N)	Other Salmon B (N)
CC	Alaska Ocean	46,205	748	4	41	0	36	46	627	128	313	5,633
	American Dynasty	40,713	979	18	4	0	9	22	633	156	264	17,084
	American Triumph	43,143	935	8	2	0	31	20	533	156	300	25,883
	Arctic Fjord	29,098	396	3	76	0	32	4	363	73	30	8,376
	Arctic Storm	31,239	407	2	29	0	29	112	389	64	148	11,585
	Island Enterprise	29,402	319	2	56	0	53	166	437	200	50	7,007
	Kodiak Enterprise	26,903	423	3	51	3	133	224	337	126	45	5,643
	Northern Eagle	43,766	975	5	121	0	19	96	669	99	194	10,452
	Northern Hawk	22,695	286	2	1	0	35	10	278	91	67	2,542
	Northern Jaeger	39,105	521	6	1	0	31	26	611	94	285	16,473
	Ocean Rover	38,476	959	7	4	0	3	13	704	61	275	8,978
	Pacific Glacier	37,428	366	2	16	0	3	19	490	257	100	8,895
	Seattle Enterprise	28,771	446	1	7	0	14	32	384	320	92	5,151
	Starbound	10,978	197	1	0	0	0	0		578		1,079

	Vessel	Pollock (mt)	Other Groundfish (mt)	Halibut Mortality (mt)	Herring (mt)	Red King Crab (N)	Bairdi Crab (N)	Opilio Crab (N)	Chinook Salmon A (N)	Chinook Salmon B (N)	Other Salmon A (N)	Other Salmon B (N)
HSCC												
	Forum Star	0	0	0	0	0	0	0	0	0	0	0
	American Challenger	0	0	0	0	0	0	0	0	0	0	0
	Ocean Harvester	0	0	0	0	0	0	0	0	0	0	0
	Neahkanie	0	0	0	0	0	0	0	0	0	0	0
	Sea Storm	0	0	0	0	0	0	0	0	0	0	0
	Muir Milach	0	0	0	0	0	0	0	0	0	0	0
	Totals*	467,922	7,958	64	409	3	428	790	6,455	2,403	2,163	134,781
(spe	atch Rate ecies catch/ groundfish)	0.983	0.017	0.000	0.001	0.000	0.001	0.002	0.014	0.005	0.005	0.283

<sup>\*</sup>Of the 475,880 tons of total groundfish catch (pollock and other non-pollock groundfish), 1,823 tons were discarded. Thus, over 99.6 percent of all groundfish harvested by PCC vessels in the directed-pollock fishery was retained and used to make a marketable product.

# Yellowfin Sole, Atka Mackerel, and Pacific Cod Fisheries

Five PCC vessels participated in the directed fishery for BSAI yellowfin sole in 2016. Groundfish catch and PSC bycatch for PCC yellowfin sole directed fishing is shown in Table 3. Catch rates are provided to assess target catch and PSC bycatch per ton of total groundfish catch. For example, in 2016, average halibut mortality was 5 kilograms per ton of groundfish in the yellowfin sole directed fishery, and yellowfin sole catches were on average about 68 percent of the total groundfish catch. To interpret catch rates of PSC collected as number of individuals (N): In 2016, 10 *Opilio* crabs were caught per hundred tons of groundfish in the yellowfin sole directed fishery. Table 4 shows similar information for the catch of the F/T Northern Glacier in the 2016 Central Aleutian Islands Atka mackerel fishery and the catch of the F/T Katie Ann in the 2016 directed Pacific cod fishery.

Table 3. PCC Yellowfin Sole Directed Fishing Catch and Bycatch

Vessel	Yellowfin Sole (mt)	Total Groundfish (mt)	Halibut Mortality (mt)	Herring (mt)	Red King Crab (N)	<i>Bairdi</i> Crab (N)	<i>Opilio</i> Crab (N)	Chinook Salmon (N)	Other Salmon (N)
Arctic Storm	1,598	1,916	6	0	86	440	63	70	0
Katie Ann	2,235	3,638	22	1	169	1,083	55	196	89
Northern Eagle	906	1,193	5	0	585	1,031	0	0	0
Northern Glacier	3,122	4,979	33	1	0	917	1,114	118	0
Northern Jaeger	813	953	1	0	24	180	0	0	0
2016 Totals	8,674	12,679	68	1	864	3,651	1,232	384	89
Catch Rate	0.684	1.000	0.005	0.000	0.068	0.288	0.097	0.030	0.007

Table 4. PCC Atka Mackerel and Pacific Cod Directed Fishing Catch and Bycatch.

Vessel	Atka Mackerel CAI (mt)	Total Groundfish (mt)	Halibut Mortality (mt)	Herring (mt)	Red King Crab (N)	Bairdi Crab (N)	<i>Opilio</i> Crab (N)	Chinook Salmon (N)	Other Salmon (N)
Northern Glacier	572	630	0	0	0	0	0	0	0
2016 Totals	572	630	0	0	0	0	0	0	0
Catch Rate	0.908	1.000	0	0	0	0	0	0	0
Vessel	Pacific Cod (mt)	Total Groundfish (mt)	Halibut Mortality (mt)	Herring (mt)	Red King Crab (N)	Bairdi Crab (N)	Opilio Crab (N)	Chinook Salmon (N)	Other Salmon (N)
Katie Ann	618	777	10	0	13	0	15	55	304
2016 Totals	618	777	10	0	13	0	15	55	304
Catch Rate	0.795	1.000	0.013	0	0.017	0	0.019	0.071	0.391

#### AFA Sideboard Limits and Total Groundfish Catch

PCC vessels are all AFA Catcher Processors. The 2016 AFA C/P sideboard limits and catches of sideboard-limited groundfish and PSC species are shown in Table 5. The groundfish sideboard limits control PCC directed fishing for each species listed. For some groundfish species catch is greater than the sideboard limit, but in every case this catch occurred as bycatch in the pollock, yellowfin sole, Atka mackerel and Pacific cod fisheries, and not as directed fishing on these sideboard species. Note yellowfin sole was not sideboard limited in 2016. The PSC limits cap bycatch of these species in the non-pollock fisheries, therefore the PSC bycatch amounts in Table 5 reflect total PCC bycatch of PSC species in the yellowfin sole, Atka mackerel, and Pacific cod fisheries only. Table 6 shows PCC catches of all groundfish and PSC species by vessel from the pollock, yellowfin sole, Atka mackerel, and Pacific cod fisheries combined. Note the difference between the pollock catch given in Table 1 and that in Table 6 is because Table 6 includes all pollock catches from PCC vessels, including incidental pollock catch in the yellowfin sole, Atka mackerel, and Pacific cod fisheries, while Table 1 includes only directed pollock fishing catch.

Table 5. PCC Species Sideboard Limits and Catch.

Groundfish Species	<b>2016 Catch</b>	2016 Limit	Over (Under) Limit*
Alaska plaice - BSAI (mt)	568	12	556
Arrowtooth flounder - BSAI (mt)	127	24	103
Atka mackerel - BS + EAI (mt)	39	0	39
Atka mackerel - CAI (mt)	572	1746	(1,174)
Atka mackerel - WAI (mt)	0	1876	(1,876)
Flathead sole - BSAI (mt)	1,162	675	487
Greenland turbot - BS (mt)	14	17	(3)
Greenland turbot - AI (mt)	0	1	(1)
Kamchatka flounder - BSAI (mt)	43	9	34
Northern rockfish - BSAI (mt)	166	27	139
Octopus - BSAI (mt)	13	3	10
Other flatfish - BSAI (mt)	150	123	27
Other Rockfish - BS (mt)	36	9	27
Other Rockfish - AI (mt)	1	15	(14)
Pacific Ocean perch - BS (mt)	2,449	14	2,435
Pacific Ocean perch - EAI (mt)	0	141	(141)
Pacific Ocean perch - CAI (mt)	6	6	0
Pacific Ocean perch - WAI (mt)	0	32	(32)
Rock sole -BSAI (mt)	1,742	1,887	(145)
Rougheye rockfish - EBS+EAI (mt)	2	2	0
Rougheye rockfish - CAI+WAI (mt)	0	4	(4)
Sablefish - BS (mt)	11	8	3
Sablefish - AI (mt)	0	0	0
Sculpins - BSAI (mt)	139	31	108
Sharks - BSAI (mt)	28	1	27
Shortraker rockfish - BSAI (mt)	5	4	1
Skates - BSAI (mt)	359	177	182
Squid - BSAI (mt)	514	28	486
Prohibited Species	2016 Catch	2016 Limit	Over (Under) Limit
Halibut mortality - BSAI (mt)	142	286	(144)
Red king crab - Zone 1 (N)	698	606	92
C. opilio crab - COBLZ (N)	2,373	643,292	(640,919)
C. bairdi crab - Zone 1 (N)	1,493	103,767	(102,274)
C. bairdi crab - Zone 2 (N)	2,554	112,518	(109,964)

\*For some groundfish species catch is greater than the sideboard limit, but in every case this catch occurred as bycatch in the pollock, yellowfin sole, and Atka mackerel fisheries, and not as directed fishing on these sideboard species.

Table 6. All 2016 PCC Catches by Vessel.

Vessel	Pollock (mt)	Atka Mackerel (mt)	Yellowfin Sole (mt)	Pacific Cod (mt)	Sablefish (mt)	Alaska Plaice (mt)	Arrowtooth Flounder (mt)	Flathead Sole (mt)
Alaska Ocean	46,205	1.5	26	194	0.39	1	8	122
American Dynasty	40,713	13.9	127	225	5.30	3	21	145
American Triumph	43,143	16.1	73	155	0.58	2	13	68
Arctic Fjord	29,098	0.2	28	99	0.08	0	3	61
Arctic Storm	31,302	0.1	1,636	242	0.04	30	4	111
Island Enterprise	29,402	0.1	28	94	0.10	0	3	47
Katie Ann	404	0.0	2,251	933	0.16	174	25	36
Kodiak Enterprise	26,903	0.2	37	123	0.08	1	7	89
Northern Eagle	43,828	2.2	980	263	0.09	34	8	107
Northern Glacier	691	572.3	3,262	675	0.00	310	5	40
Northern Hawk	22,695	0.3	62	78	0.30	1	3	43
Northern Jaeger	39,137	2.2	827	189	1.94	11	5	52
Ocean Rover	38,476	0.3	45	158	1.50	1	11	76
Pacific Glacier	37,428	1.9	39	134	0.53	1	5	70
Seattle Enterprise	28,771	0.1	27	103	0.10	0	6	84
Starbound	10,978	0.0	0	17	0.02	0	1	12
TOTAL	469,175	611.6	9,448	3,682	11.2	568	127	1,162

Table 6. All 2016 PCC Catches by Vessel.

Vessel	Greenland Turbot (mt)	Kamchatka Flounder (mt)	Rock Sole (mt)	Other Flatfishes (mt)	Northern Rockfish (mt)	Rougheye Rockfish (mt)	Shortraker Rockfish (mt)	Pacific Ocean Perch (mt)
Alaska Ocean	1.5	2	89	4	1	0.2	0.2	225
American Dynasty	2.0	9	93	9	17	0.4	0.4	238
American Triumph	0.3	3	65	7	58	0.0	0.6	401
Arctic Fjord	1.2	1	42	3	3	0.1	0.1	95
Arctic Storm	1.1	2	165	2	0	0.0	0.1	1
Island Enterprise	0.8	1	25	6	1	0.1	0.0	44
Katie Ann	0.2	10	488	44	0	0.0	0.0	0
Kodiak Enterprise	0.8	1	61	3	3	0.2	0.0	34
Northern Eagle	1.4	2	92	3	1	0.0	0.5	471
Northern Glacier	0.0	0	435	39	21	0.0	0.0	6
Northern Hawk	0.0	0	20	1	0	0.0	0.3	59
Northern Jaeger	1.3	3	55	7	42	0.1	0.0	199
Ocean Rover	1.7	7	31	9	4	0.6	2.4	437
Pacific Glacier	0.7	1	31	4	2	0.1	0.0	38
Seattle Enterprise	0.8	1	51	5	3	0.1	0.4	79
Starbound	0.2	1	0	4	10	0.2	0.1	126
TOTAL	14.1	43	1,742	150	166	2.1	5.1	2,455

Table 6. All 2016 PCC Catches by Vessel.

Vessel	Other Rockfishes (mt)	All sculpins (mt)	All sharks (mt)	All skates (mt)	All octopi (mt)	All squids (mt)
Alaska Ocean	2.1	9	2	25	1.1	35.5
American Dynasty	4.8	9	2	32	4.1	18.8
American Triumph	7.6	8	3	30	1.2	22.3
Arctic Fjord	0.8	3	2	13	0.1	42.5
Arctic Storm	0.1	15	3	45	0.1	2.5
Island Enterprise	0.6	4	3	11	0.2	50.2
Katie Ann	0.2	17	0	31	0.0	0.1
Kodiak Enterprise	2.2	8	1	24	0.1	28.3
Northern Eagle	3.1	15	4	49	0.8	69.0
Northern Glacier	0.5	30	0	9	0.0	0.1
Northern Hawk	0.0	2	1	10	0.2	5.1
Northern Jaeger	5.4	4	1	12	1.9	21.6
Ocean Rover	2.8	6	3	33	1.9	125.8
Pacific Glacier	1.7	6	1	11	0.9	16.6
Seattle Enterprise	3.8	3	3	19	0.4	54.5
Starbound	0.9	0	0	4	0.1	21.5
TOTAL	36.8	139	28	359	13.1	514.2

Table 6. All 2016 PCC Catches by Vessel.

Vessel	Halibut Mortality (mt)	Pacific Herring (mt)	Red King Crab (N)	Tanner Crab, <i>Bairdi</i> (N)	Snow Crab, <i>Opilio</i> (N)	Chinook Salmon (N)	Other Salmon (N)
Alaska Ocean	4	40.7	0	36	46	755	5,946
American Dynasty	18	3.6	0	9	22	789	17,348
American Triumph	8	1.9	0	31	20	689	26,183
Arctic Fjord	3	76.1	0	32	4	436	8,406
Arctic Storm	9	28.9	86	469	175	523	11,733
Island Enterprise	2	56.0	0	53	166	637	7,057
Katie Ann	32	0.6	182	1,083	70	251	393
Kodiak Enterprise	3	51.2	3	133	224	463	5,688
Northern Eagle	10	121.3	585	1,050	96	768	10,646
Northern Glacier	34	0.8	0	1,265	2,023	177	0
Northern Hawk	2	1.2	0	35	10	369	2,609
Northern Jaeger	6	0.7	24	211	26	705	16,758
Ocean Rover	7	3.5	0	3	13	765	9,253
Pacific Glacier	2	16.0	0	3	19	747	8,995
Seattle Enterprise	1	7.4	0	14	32	704	5,243
Starbound	1	0.0	0	0	0	578	1,079
TOTAL	142	410	880	4,427	2,946	9,356	137,337

## **Pollock Fishery Discards**

Groundfish bycatch amounts and total amounts of other (non-pollock) groundfish<sup>1</sup> in the pollock target fishery are reported in Table 2 by vessel. These groundfish bycatch amounts include catches of all of the species groups listed on the Bering Sea and Aleutian Islands "TAC sheet." In contrast to groundfish bycatch, groundfish discards include all groundfish catches, including pollock, from which no edible, saleable product was produced. An estimate of the total groundfish discard amount is provided as a footnote to Table 2. Table 7 provides additional pollock-fishery bycatch and discards detail, including in particular the bycatch and discard of forage and non-specified species. These discard estimates are made by the North Pacific Groundfish Observer Program. The non-specified category includes species that occur infrequently in the BSAI, or have little or no economic value, and so are neither targeted by the commercial fisheries nor managed by the National Marine Fisheries Service. In 2016, jellyfish accounted for 82 percent of the non-specified species bycatch in the pollock fishery. Table 8 shows pollock discards by vessel in the pollock fishery for 2016.

Table 7. PCC Pollock Fishery Discards.

Species Category	2016 Discard Amount (mt)			
Pollock	55			
Other Roundfish	535			
Flatfish	676			
Skates	138			
Squid and Octopi	394			
Sharks	25			
Total Groundfish	1,823			
Forage	1			
Non-specified	609			
Total discards*	2,433			

Year	Groundfish Bycatch Ratio (mt/mt) **	Groundfish Discard Ratio (mt/mt) ***			
2003	0.010				
2004	0.012	0.005			
2005	0.005	0.004			
2006	0.007	0.004			
2007	0.007	0.005			
2008	0.025	0.008			
2009	0.040	0.010			
2010	0.030	0.009			
2011	0.038	0.010			
2012	0.034	0.014			
2013	0.031	0.007			
2014	0.020	0.006			
2015	0.018	0.005			
2016	0.017	0.004			

<sup>\*</sup> Does not include the prohibited species amounts listed in Table 2. By regulation, all prohibited crab species, halibut, and herring must be discarded, while salmon may be discarded or donated to food banks.

<sup>\*\*</sup> Groundfish bycatch ratio is groundfish bycatch divided by total groundfish catch.

<sup>\*\*\*</sup> Groundfish discard ratio is groundfish discards divided by total groundfish catch.

<sup>&</sup>lt;sup>1</sup> In this report the term "bycatch" includes all non-target groundfish species that are taken incidental to directed fishing for pollock, yellowfin sole, Pacific cod and Atka mackerel, whether such catch is retained and sold or discarded. This is different from the definition of "bycatch" in Section 3(1) of the Magnuson-Stevens Act 16 USC 1802, which defines bycatch as non-retained (discarded) catch.

**Table 8. Pollock Discards by Vessel** 

Vessel	Amount (mt)
Alaska Ocean	0
American Dynasty	0
American Triumph	0
Arctic Fjord	0
Arctic Storm	1
Island Enterprise	0
Kodiak Enterprise	0
Northern Eagle	0
Northern Hawk	0
Northern Jaeger	0
Ocean Rover	4
Pacific Glacier	40
Seattle Enterprise	0
Starbound	9
2016 Total	55

## Pollock Landed Outside of Alaska

No pollock was landed outside the state of Alaska in 2016.

## Chinook and Chum Salmon Bycatch Avoidance

#### Chinook

Amendment 91 to the BSAI FMP limits Chinook salmon bycatch in the Bering Sea pollock fishery. Regulations implementing the Amendment 91 program came into force in 2011. The program is an innovative approach to managing Chinook salmon bycatch that combines overall, sector-specific limits on the amount of Chinook salmon bycatch with a voluntary incentive plan agreement (IPA) and performance standard requirement designed to minimize Chinook bycatch by each individual vessel. These vessel-level incentives are created through contracts among the IPA participants.

The PCC member companies participate in a Chinook Salmon Bycatch Reduction Incentive Plan and Agreement. The agreement was first implemented in 2011 and is designed to provide the incentives necessary to accomplish the goals and objectives of Amendment 91. The plan builds on experience gained in the development and refinement of time-and-area-based salmon "hot-spot" (bycatch avoidance-area) programs. The plan creates incentives to avoid Chinook bycatch by restricting the pollock fishing opportunities of <u>vessels</u> with poor bycatch performance while allowing vessels with good bycatch performance less restricted access to fishing grounds. Losing access to good fishing grounds increases vessel operating costs and reduces product values; avoiding these costs and producing more high-value products increases vessel profitability.

The plan is designed to work in concert with the annual Chinook bycatch limits specified in Amendment 91. Primary plan components include: (1) data gathering, monitoring, reporting, and information sharing; (2) identification of bycatch avoidance areas; and (3) pollock fishing prohibitions for vessels with poor bycatch performance. The plan also includes an A-season closure area (Chinook Salmon Conservation Area). This 735 square-mile area is on the northwestern flank of the Bering Canyon, and remains closed to pollock fishing for the entire A-season. An analysis of A-season data from 1995-2007 showed that in some years nearly 20 percent of the Chinook salmon bycatch occurred in this area along with only 2-3 percent of the pollock catch. Additional program features and performance results are provided in an annual CP IPA report available from the NPFMC.

Table 9. PCC Vessel Weeks on the Chum D-20 List.

Vessel	Weeks on D-20
American Dynasty	5
American Triumph	8
Northern Eagle	3
Northern Jaeger	5
Ocean Rover	3
Arctic Fjord	5
Arctic Storm	4
Northern Hawk	1
Alaska Ocean	3
Pacific Glacier	3
Starbound	0
Island Enterprise	4
Kodiak Enterprise	3
Seattle Enterprise	5
Average all PCC vessels	3.3
Maximum all ICA vessels	8
Average all ICA vessels	1.6
Median all ICA vessels	1

#### Chum

All BSAI pollock cooperatives participated in an inter-cooperative chum salmon bycatch avoidance (hot-spot closure) program. The PCC first began participating in this program in 2001, and since then has worked to improve the program. The program became a regulated component of the Bering Sea pollock fishery in 2006 (Amendment 84 to the BSAI Fishery Management Plan). As with the Chinook bycatch management program, the chum bycatch avoidance program is implemented via contracts among the program participants.

Before the 2012 B-season, in an effort to further reduce bycatch of western-Alaska origin chum salmon, the Amendment 84 inter-cooperative agreement (ICA) was modified to limit the increase in the benchmark used to evaluate chum bycatch performance by the pollock cooperatives to not more than 20 percent per week. This modification made it more difficult for cooperative vessels to fish on grounds with high chum abundance during periods when chum abundance was generally

increasing grounds-wide. In addition, the initial bycatch benchmarks used to determine whether a cooperative is allowed to fish in an area of relatively high chum abundance were adjusted such that only vessels with <u>at least</u> two fishing weeks of very low chum bycatch were allowed to fish for pollock in chum bycatch avoidance areas. These modifications of the Amendment 84 program were renewed for 2016 and remained in effect until the end of August 2016.

The chum bycatch of PCC vessels in the 2016 B-season was 134,746 chum salmon. Table 8 shows the season-weeks that PCC vessels were on the Amendment 84 D-20 list during the pollock B-season. This is a list of vessels that are prohibited from fishing in chum bycatch avoidance areas during any given week due to poor chum bycatch performance. The maximum, average and median are shown to allow comparison of PCC vessels with all ICA vessels. The 2016 ICA report (available from the NPFMC) includes an analysis of the estimated number of chum salmon bycatch avoided by the hot-spot program.

## Monitoring and Enforcement

All data used in monitoring pollock and non-pollock fishing activities was obtained from the North Pacific Groundfish Observer Program. Aboard each vessel, the catch is weighed using motion-compensated flow scales. The species composition of the catch is determined from observer sampling. Since two observers are required on AFA catcher-processors, the number of unsampled hauls is very low. In 2016, virtually 100 percent of pollock hauls were sampled. For the rare hauls that were not sampled, species composition data from the next nearest haul (in time and area) within the same vessel and gear type is applied to the unsampled catch. Priority in this imputation process is given to a sampled haul that occurs on the same day, but prior to the non-sampled haul.

Information concerning the catch and bycatch of individual vessels is available from a NMFS data server 24 hours a day, and is generally accessible 20 minutes after transmission from the vessels. SeaState, Inc., a company that provides catch accounting services, is authorized by the PCC and HSCC companies to receive and process this data and report on the status of the harvest. Observer data are downloaded one or two times per day, processed to generate catch and bycatch information, and then sent to a SeaState web site where company representatives may verify catch and bycatch data for their vessel(s). Typically, either an operations manager or vessel operator checks into the site each day to make sure recorded harvest amounts for his vessel(s) are consistent with vessel tallies.

Companies with several vessels often set initial vessel allocations, and then manage vessel harvests independently until late in the season. Typically, inter- and intra-company transfers of pollock occur near the end of the season to promote quota usage. No enforcement actions were taken by the PCC against any members during 2016.

#### High Seas Catchers' Cooperative Annual Report

#### Introduction

The High Seas Catchers Coop is a fisheries cooperative of all vessels eligible to fish for BSAI pollock under section 208(b) of the American Fisheries Act (AFA). The HSCC is party to an inter-cooperative agreement with the PCC for purposes of pollock harvest management, and a participant in an AFA catcher-vessel inter-cooperative agreement for purposes of sideboard species harvest management.

# Cooperative Members and Allocations

The member vessels of HSCC include the F/Vs American Challenger, Forum Star, Muir Milach, Neahkahnie, Ocean Harvester, and Sea Storm. The HSCC Membership agreement was amended in 2015 to replace the Tracy Anne with the vessel Forum Star and is available from the NPFMC.

Allocations of pollock to members of HSCC were established within the HSCC membership agreement, as well as within the Cooperative Agreement with the PCC. Allocations of the BSAI Pacific cod sideboard amounts available for 2016 in the "Intercoop BSAI Cod Sideboard Allocation Agreement" were made by the HSCC Board of Directors through a roll over of the "Consent of Directors" document included as an appendix to the HSCC 2000 Annual Report. Other sideboard species were allocated by action of the HSCC Board of Directors. Prior to participation in any sideboard fishery, members were required to provide notice to the HSCC Executive Director, and-or the Manager of the Catcher Vessel Inter-Cooperative Agreement (CVICA). There is additional information about the flow of information between the vessels, the HSCC, SeaState, the CVICA Manager, and NMFS in the Catcher Vessel Inter-Cooperative Agreement (available from the NPFMC).

The 2016 distribution in metric tons to the HSCC vessels based on 206(b)(2) allocation of the directed pollock fishery to catcher-processors and catcher vessels, including releases from the pollock incidental catch allowance and rollovers from the Aleutian Islands fishery, is as follows:

Vessel	Allocation (mt)			
Forum Star	8,292			
American Challenger	3,687			
Ocean Harvester	5,064			
Neahkahnie	7,819			
Sea Storm	9,631			
Muir Milach	5,313			
Total	39,806			

## Inter-Cooperative Agreement Between HSCC and PCC

The members of PCC and HSCC are allocated pollock under section 206(b)(2) of the AFA. As noted, HSCC is a party to the "Cooperative Agreement Between Offshore Pollock Catchers' Cooperative and Pollock Conservation Cooperative" for purposes of pollock management, and this agreement is available from the NPFMC.

#### Catcher Vessel Inter-Cooperative Agreement

HSCC is also a party to the Catcher Vessel Inter-Cooperative Agreement (CVICA) for purposes of groundfish sideboard harvest management. Compliance with both agreements is based upon monitoring of catch and bycatch by SeaState, Inc. Information concerning CVICA allocations and rules as well as inter-cooperative transfer arrangements is contained in an annual report submitted to the NPFMC by the CVICA Manager. Among other things, the CVICA contains specific provisions on management of halibut prohibited-species catches (PSC) in the BSAI Pacific cod fishery, in which some HSCC vessels participate (see below). Prohibited species bycatch (PSC) by HSCC vessels is provided in Table 10.

# Bering Sea Pollock Transfers and Directed Pollock Fishing

Based upon the January 1999 "Cooperative Agreement Between Offshore Pollock Catchers' Cooperative and Pollock Conservation Cooperative," individual members of HSCC have made transfers of pollock to individual members of PCC. These transfers are reported in Table 1 while catch and bycatch information for the directed Bering Sea pollock fishery is provided in Table 2.

# Bering Sea and Aleutian Islands Shellfish Fisheries

The BSAI crab rationalization program was implemented in August 2005. As part of that program, the AFA crab sideboard limits were eliminated. The HSCC vessel Forum Star leased all of its scallop catch history and so did not catch any scallops in 2016.

#### AFA Sideboard Limits

The NMFS publishes in the <u>Federal Register</u> the sideboard limits for all AFA catcher vessels as well as a set of information tables which provide historic catches of sideboard species by cooperative for those species for which directed fishing is allowed. The regulations allow two or more cooperatives to enter into an intercooperative agreement where vessel catches are limited by the combined cooperative sideboard limits.

# Bering Sea and Aleutian Islands Sideboard Fisheries

Three non-sideboard-exempt vessels participated in the Pacific cod fishery in 2016 and caught 3,082 metric tons of cod. Table 10 shows target, bycatch, and prohibited species catch by vessel for this fishery. Catch rates are provided to assess target catch and PSC use. Total groundfish catch by species is shown in Table 11.

Table 10. HSCC BSAI Directed Pacific Cod Catch and Bycatch by Vessel.

Vessel	Total Groundfish (mt)	Cod (mt)	Halibut mortality (mt)	King crab (N)	Bairdi (N)	Opilio (N)	Herring (mt)	Chinook (N)	Other salmon (N)
Muir Milach	1,034	986	8.2	0	0	0	0	0	0
Ocean Harvester	881	850	1.76	0	0	0	0	0	0
Sea Storm	1,291	1,247	6.75	0	0	1	0	12	0
2016 Totals	3,206	3,082	16.71	0	0	1	0	12	0
Catch Rate	1.000	0.980	0.005	0	0	0.000	0	0.004	0.000

Table 11. HSCC Catch of BSAI Groundfish.

Species	Catch (mt)
Pacific Cod	3,082
Pollock BS	46
Alaska Plaice	0.31
Arrowtooth Flounder	2.58
Flathead Sole	6.93
Kamchatka Flounder	0.07
Rock Sole	26.80
Yellowfin Sole	0.30
Other Flatfish	3.78
Other Rockfish BS	0.26
Sculpins	23.28
Skates	13.64
2016 Total	3,206

# Gulf of Alaska Sideboard Fisheries

One HSCC vessel participated in the Western GOA pollock sideboard fishery in 2016 and caught 901 metric tons of pollock. Table 12 shows target, bycatch, and prohibited species catch by vessel for this fishery. Catch rates are provided to assess target catch and PSC use.

Table 12. HSCC Western GOA Directed Pollock Catch and Bycatch by Vessel.

Vessel	Total Groundfish (mt)	Pollock (mt)	Halibut mortality (mt)	King crab (N)	Bairdi (N)	Opilio (N)	Herring (mt)	Chinook (N)	Other salmon (N)
Sea Storm	915	901	0	0	0	0	0.06	33	8
2016 Totals	915	901	0	0	0	0	0.06	33	8
Catch Rate	1.000	0.985	0	0	0	0	0.000	0.036	0.009

## Monitoring and Enforcement

All data used in monitoring HSCC pollock and non-pollock fishing for delivery to <u>offshore</u> processors was obtained from the NMFS North Pacific Groundfish Observer Program. Information is available on the NMFS password-protected web site 24 hours a day, and is generally accessible 20 minutes after transmission from the vessel. Sea State, Inc. is authorized by the HSCC and its members to receive and process this observer data and report back to the members on the status of the harvest. The methods are the same as those described above under PCC Monitoring and Enforcement.

For deliveries to <u>shore-side</u> processors, each company submitted copies of its Alaska Department of Fish and Game (ADFG) fish tickets to SeaState, Inc. for tabulation through the NMFS Electronic Fish Ticket Program. In addition, HSCC member companies provided confidentiality waiver requests to ADFG for release of the data directly to SeaState to verify the completeness and accuracy of data submitted by HSCC members. This information was then made available to all HSCC members on the SeaState web site.

#### Penalty Structures within the HSCC and Between Cooperatives

The Cooperative Agreement between HSCC and PCC provides for inter-cooperative enforcement of penalties in the event of over-harvest of pollock. The CVICA also contains penalty provisions for over-harvest of sideboard species. No enforcement actions were taken by HSCC members in either its pollock or sideboard fisheries in 2016; members complied with the provisions of the membership agreement.