Gulf of Alaska Groundfish Harvest & Prohibited Species Catch Use NPFMC, June 2015 Prepared by: NMFS Staff Agenda E-1

Overview

In 2013, NMFS implemented Amendment 93 to the Gulf of Alaska (GOA) Fishery Management Plan (FMP). Amendment 93 established a 25,000 Chinook salmon prohibited species catch (PSC) limit for trawl catcher vessels in the Western and Central GOA pollock fisheries. This PSC limit was split between the Western and Central GOA, with a 6,686 and 18,316 Chinook salmon PSC limit, respectively. In 2015, NMFS implemented Amendment 97 to the FMP that established a 7,500 Chinook salmon PSC limit for non-pollock trawl fisheries in the Western and Central GOA. This limit is split among three sectors: the catcher/processor (3,600); Rockfish Program catcher vessel (1,200); and the non-Rockfish Program catcher vessel (2,700) sectors. On May 2, 2015, the non-Rockfish Program catcher vessel sector reached its Chinook salmon PSC limit and the fishery was closed.

During the B-2 Report, the Council indicated its interest in pursuing regulatory changes that could allow for the reallocation of unused Chinook salmon PSC among the pollock and non-pollock sectors. To help guide its discussions at this meeting, the Council requested data on groundfish harvest and Chinook and halibut PSC use by the pollock and non-pollock fisheries. The Council requested data on harvest and PSC use prior to and after the May 1 to determine likely harvest and PSC use before and after the date of the closure of the non-pollock/non-Rockfish Program sector. The following sections summarize and provide tables showing groundfish harvests and PSC use since 2010. We provide data on the harvest and use of PSC by the non-pollock/non-Rockfish Program catcher vessel sector, the Western and Central GOA pollock fisheries, and the non-pollock catcher/processor sector. We did not provide data on the Rockfish catcher vessel sector because Amendment 97 already provides a mechanism for reallocating Chinook salmon PSC from this sector to the non-Rockfish Program sector.

Non-Pollock/Non-Rockfish Program Sector

On an average annual basis since 2010, approximately 32 vessels participate in the non-pollock/non-Rockfish Program sector after May 1. After May 1, vessels in this sector participate almost exclusively in Central GOA Pacific cod and flatfish fisheries. More vessels participate prior to May 1 -- primarily in the Western GOA Pacific cod fishery, and in the Central GOA Pacific cod and flatfish fisheries.

Tables 1 and 2 show harvests and PSC use prior to, and after, May 1 in each year since 2010. Data are aggregated by species groups and in two-month increments to ensure that confidential data are not released. Several important points are clear from these data. First, approximately 40 percent of groundfish catch and more than 50 percent of the PSC use occurs after May 1. Second, in 3 out of the 5 years examined (2010, 2011, and 2013) Chinook salmon catch by this sector exceeded 2,700 salmon. Had the Chinook salmon PSC limit been in place during those years, it would have resulted in a fishery closure. It is likely that in 2 out of those 3 years (2011 and 2013), the closure would have occurred before the end of May. We note that PSC use by

this sector in 2013 and 2014 were not available to be considered by the Council when it established the Chinook salmon PSC limit under Amendment 97. Third, Tables 1 and 2 show that approximately 1,600 Chinook salmon and 500 mt of halibut PSC is needed to support the non-pollock/non-Rockfish Program groundfish fisheries after May 1.

Pollock Fisheries

Table 3 shows the average amount of groundfish harvest and Chinook salmon PSC use in the directed pollock fisheries in the Western and Central GOA from 2012 through 2014 by quarter (the first and second quarters are January through June 1 and provide an indication of use pre-May and the third and fourth quarters begins onare June through December and provides an indication of use post-May). A three-year average was used because Chinook salmon PSC was significantly higher in 2010 and those data skew the calculation of average use.

Over the time periods analyzed, a substantial amount of Chinook salmon PSC remained unused in both the Western and Central GOA. On average, approximately 3,000 Chinook salmon PSC remained unused in the Western GOA, and 8,000 Chinook salmon PSC remained unused in the Central GOA.

Caution is warranted in using only past Chinook salmon PSC use to calculate future PSC use in the fall pollock fishery. Pollock TACs have increased in recent years and if the average rate of Chinook salmon PSC use is applied to anticipated TACs, this indicates a need of 10,000 Chinook salmon PSC in the fall fisheries. This estimate is contingent on the fleet participating in voluntary catch share programs as they have done in the past. If a voluntary agreement is not reached, then the rate will likely be higher as vessels engage in a race for fish. This could further limit the amount of Chinook salmon PSC available for reallocation to other fishery sectors.

However, even with these caveats, it is likely that Chinook salmon PSC would be available from the pollock directed fisheries to accommodate the amount of Chinook salmon PSC needed to support non-pollock/non-Rockfish Program summer and fall groundfish fisheries. Again, these estimates assume the recent average use of Chinook salmon PSC, or slightly higher average use of Chinook salmon PSC in both of these sectors.

Trawl Catcher/Processors

Tables 4 and 5 show harvests and PSC use prior to, and after, May 1 in each year since 2010. Data are aggregated by species groups and pre- and post-May to ensure that confidential data are not released. On average over the past 3 and 5-year period, approximately 300 Chinook salmon PSC of the 3,600 Chinook salmon PSC limit remained unused in this sector. In two years, 2010 and 2013, more than 3,600 Chinook salmon were caught and the PSC limit would have been reached had it been in place. Given the limited amount of Chinook salmon PSC remaining in this sector on average, and the fact that catcher/processors can and do fish until December, Chinook salmon PSC may not be available for reallocation in most years.

Tables 1 & 2: Groundfish catch and PSC by non-pollock/non-Rockfish Program trawl catcher vessels (2010 through 2014).

3-year Average 2012-2104								
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total	May-Dec	%
Arrowtooth/Deep Flats	6,985	1,598	743	1,011	916	11,254	4,268	38%
Shallow Flats	1,576	536	1,070	1,188	400	4,769	3,193	67%
Pacific Cod	14,318	390	920	2,179	364	18,171	3,853	21%
Pollock (non-pollock target)	1,037	262	355	413	113	2,180	1,143	52%
Other Species	1,359	248	230	232	238	2,307	948	41%
Total Groundfish	25,275	3,033	3,318	5,024	2,031	38,681	13,406	40%
Halibut PSC (mt)	454	122	146	103	57	882	428	49%
Chinook PSC (# of fish)	940	583	399	274	100	2,297	1,357	59%
		5-ye	ar Average	2010-2104			•	
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total	May-Dec	%
Arrowtooth/Deep Flats	7,253	1,108	882	2,284	771	12,298	5,045	41%
Shallow Flats	1,772	705	1,082	1,333	285	5,176	3,404	66%
Pacific Cod	12,187	441	773	3,483	240	17,124	4,937	29%
Pollock (non-pollock target)	862	198	325	493	91	1,968	1,107	56%
Other Species	1,313	248	284	461	175	2,481	1,168	47%
Total Groundfish	23,386	2,699	3,346	8,054	1,561	39,047	15,661	40%
Halibut PSC (mt)	425	121	135	248	48	976	552	56%
Chinook PSC (# of fish)	1,376	410	248	757	112	2,904	1,528	53%

		2010		vl Catcher Ve		
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total
Arrowtooth/Deep Flats	7,764	408	892	2,775	670	12,509
Shallow Flats	2,340	1,190	1,471	1,801	162	6,964
Pacific Cod	10,264	823	565	6,438	74	18,163
Pollock (non-pollock target)	582	106	428	441	64	1,622
Other Species	1,360	285	422	700	65	2,831
Total Groundfish	22,310	2,812	3,779	12,155	1,033	42,089
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Halibut PSC (mt)	352	186	105	372	34	1,049
Chinook PSC (# of fish)	1,540	299 2011	33	2,031	223	4,126
	Pre-May May/June Jul/Aug Sep/Oct			Nov/Dec	Total	
Arrowtooth/Deep Flats	7,544	340	1,288	5,612	435	15,218
Shallow Flats	1,792	725	729	1,301	62	4,609
Pacific Cod	7,715	213	541	4,438	36	12,942
Pollock (non-pollock target)	615	97	128	786	53	1,680
Other Species	1,130	210	309	909	95	2,652
Total Groundfish	18,796	1,584	2,995	13,045	681	37,102
Halibut DCC ()	444	F.4	424	FFC	26	1 100
Halibut PSC (mt) Chinook PSC (# of fish)	2,520	54	131	556 933	36 37	1,188 3,501
CHIHOOK F3C (# 01 HSH)	2,520	2012		933	3/	3,301
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total
Arrowtooth/Deep Flats	5,878	277	872	994	2,039	10,061
Shallow Flats	1,765	106	793	1,210	573	4,448
Pacific Cod	14,796	70	491	1,255	141	16,753
Pollock (non-pollock target)	1,360	216	301	344	190	2,411
Other Species	1,409	25	293	341	320	2,387
Total Groundfish	25,208	694	2,751	4,145	3,263	36,061
Halibut PSC (mt)	718	28	245	115	101	1,207
Chinook PSC (# of fish)	408	-	-	396	123	926
	.00	2013	<u> </u>	550	123	320
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total
Arrowtooth/Deep Flats	9,158	861	135	1,293	260	11,707
Shallow Flats	1,860	634	852	1,598	245	5,189
Pacific Cod	13,805	220	430	2,898	846	18,200
Pollock (non-pollock target)	711	173	511	525	80	2,000
Other Species	1,898	117	50	201	340	2,606
Total Groundfish	27,432	2,004	1,978	6,516	1,772	39,703
Halibut PSC (mt)	424	63	25	139	20	670
Chinook PSC (# of fish)	2,088	1,724	163	427	132	4,534
		2014				
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total
Arrowtooth/Deep Flats	5,920	3,655	1,222	746	449	11,993
Shallow Flats	1,102	869	1,563	754	382	4,670
Pacific Cod	14,353	879	1,840	2,385	104	19,561
Pollock (non-pollock target)	1,040	397	255	371	68	2,130
Other Species	770	602	346	155	55	1,927
Total Groundfish	23,185	6,402	5,225	4,410	1,058	40,280
Halibut PSC (mt)	219	275	169	56	50	769

Table 3: Harvest and Chinook salmon PSC use in Western and Central GOA directed pollock fisheries (2012 through 2014).

Chinook Salmon PSC in Pollock Fisheries in the Central GOA						
	First Quarter Second Quarter Third Quarter Fourth Quarter Total Remaining of 18,316 cap					
3-Year Average	2,287	1,087	2,104	4,316	9,794	8,522
Chinook Salmon PSC in Pollock Fisheries in the Western GOA						
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total	Remaining of 6,684 cap
3-Year Average	157	202	809	2,443	3,610	3,074

2012-2014 average. 2012 did not have chinook Salmon PSC limit

Tables 4 & 5: Groundfish catch and PSC by trawl catcher/processor vessels (2010 through 2014).

3 year Average (2012-2014)					
	Pre-May	Post-May	Total		
Arrowtooth/Deep Flats	5,332	10,258	15,590		
Shallow Flats	456	1,354	1,810		
Rockfish	541	12,046	12,588		
Pacific Cod	379	1,537	1,916		
Pollock (non-pollock target)	280	1,791	2,070		
Other Species	293	1,928	2,222		
Total Groundfish	7,280	28,915	36,195		
Halibut PSC (mt)	168	253	422		
Chinook PSC (# of fish)	1,776	1,347	3,123		
5 year <i>i</i>	Average (2010-	2014)			
Pre-May Post-May Tota					
	Pre-May	Post-May	Total		
Arrowtooth/Deep Flats	Pre-May 5,719	Post-May 9,456	Total 15,176		
Arrowtooth/Deep Flats Shallow Flats		-			
	5,719	9,456	15,176		
Shallow Flats	5,719 509	9,456 1,231	15,176 1,740		
Shallow Flats Rockfish	5,719 509 477	9,456 1,231 11,920	15,176 1,740 12,396		
Shallow Flats Rockfish Pacific Cod	5,719 509 477 377	9,456 1,231 11,920 1,286	15,176 1,740 12,396 1,664		
Shallow Flats Rockfish Pacific Cod Pollock (non-pollock target)	5,719 509 477 377 260	9,456 1,231 11,920 1,286 1,615	15,176 1,740 12,396 1,664 1,875		
Shallow Flats Rockfish Pacific Cod Pollock (non-pollock target) Other Species	5,719 509 477 377 260 325	9,456 1,231 11,920 1,286 1,615 2,197	15,176 1,740 12,396 1,664 1,875 2,521		

Groundfish catch and PSC by trawl catcher/processors

2010					
	Pre-May	Post-May	Total		
Arrowtooth/Deep Flats	7,064	5,914	12,978		
Shallow Flats	564	1,168	1,732		
Rockfish	398	12,543	12,941		
Pacific Cod	352	931	1,283		
Pollock (non-pollock target)	255	969	1,224		
Other Species	409	2,798	3,207		
Total Groundfish	9,042	24,323	33,365		
Halibut PSC (mt)	259	233	492		
Chinook PSC (# of fish)	3,506	1,125	4,631		
	2011				
	Pre-May	Post-May	Total		
Arrowtooth/Deep Flats	5,537	10,593	16,130		
Shallow Flats	614	924	1,537		
Rockfish	362	10,917	11,279		
Pacific Cod	399	890	1,288		
Pollock (non-pollock target)	207	1,733	1,940		
Other Species	334	2,401	2,734		
Total Groundfish	7,452	27,457	34,909		
Halibut PSC (mt)	242	263	505		
Chinook PSC (# of fish)	2,075	910	2,985		
	2012				
	Pre-May	Post-May	Total		
Arrowtooth/Deep Flats	4,374	6,605	10,980		
Shallow Flats	372	879	1,251		
Rockfish	223	13,147	13,370		
Pacific Cod	501	848	1,349		
Pollock (non-pollock target)	399	1,178	1,577		
Other Species	266	1,932	2,198		
Total Groundfish	6,135	24,590	30,725		
Halibut PSC (mt)	220	166	386		
Chinook PSC (# of fish)	940	950	1,890		

2013						
	Pre-May	Post-May	Total			
Arrowtooth/Deep Flats	3,433	7,598	11,031			
Shallow Flats	721	1,732	2,453			
Rockfish	667	10,573	11,239			
Pacific Cod	277	1,551	1,828			
Pollock (non-pollock target)	278	2,193	2,471			
Other Species	226	1,961	2,187			
Total Groundfish	5,601	25,608	31,209			
Halibut PSC (mt)	135	242	377			
Chinook PSC (# of fish)	3,312	1,322	4,634			
	2014					
	Pre-May	Post-May	Total			
Arrowtooth/Deep Flats	8,189	16,572	24,760			
Shallow Flats	274	1,452	1,726			
Rockfish	734	12,420	13,153			
Pacific Cod	359	2,212	2,570			
Pollock (non-pollock target)	162	2,000	2,162			
Other Species	387	1,892	2,280			
Total Groundfish	10,105	36,547	46,652			
Halibut PSC (mt)	150	352	502			
Chinook PSC (# of fish)	1,075	1,769	2,844			