# ALASKA DEPARTMENT OF FISH AND GAME DIVISION OF COMMERCIAL FISHERIES

# **NEWS RELEASE**



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### 2010 UPPER COOK INLET COMMERCIAL SALMON FISHERY

The 2010 Upper Cook Inlet (UCI) commercial harvest of 3.5 million salmon was about equal to the last 10 years average harvest in UCI (Table 1). The 2010 UCI commercial exvessel value of approximately \$32.4 million was 70% above the recent 10 year average of \$18.6 million. While all 5 species of Pacific salmon are present in UCI, sockeye salmon are the most valuable, accounting for approximately 77% of the exvessel value in the commercial fishery since 1960 and more than 92% of the total value during the past 20 years. Sockeye salmon escapement goals have historically been monitored in 6 systems in UCI. Prior to the 2009 season, the Yentna River sonar goal was discontinued because of its unreliability and replaced with weir goals (SEGs) monitored on three lake systems within the Susitna River, Judd and Chelatna Lakes in the Yentna River drainage, and Larson Lake in the mainstem Susitna River drainage. The video monitor on Packers Creek failed in 2010 so there is no estimate for that system. For the 2010 season, 2 of 7 sockeye salmon goals were met, falling within the established goal range, while 4 exceeded and 1 fell below the goal objective (see table below and Table 2).

System	2010 In-river Estimate	Lower Goal	Upper Goal
Crescent River	86,280	30,000	70,000
Fish Creek	126,829	20,000	70,000
Kasilof River	266,717	150,000	250,000 <sup>a</sup>
Kenai River	962,241	750,000	950,000
Packers Creek	Not monitored	15,000	25,000
Larson Lake	20,324	15,000	50,000
Chelatna Lake	37,784	20,000	65,000
Judd Lake	18,361	25,000	55,000

The Kasilof River BEG is 150,000 to 250,000; an OEG was established in 2002 of 150,000 to 300,000 to aid in achieving the lower end of the Kenai River goal.

#### SOCKEYE SALMON

The preseason forecast for the 2010 season projected a run of 3.6 million sockeye salmon, with a harvest estimate (sport, personal use and commercial) of 2.3 million fish. The total run to the Kenai River, generally the largest producer in UCI, was forecast to be 1.7 million sockeye salmon. This resulted in managing for an inriver sonar goal range in the Kenai River of 650,000 to 850,000 sockeye salmon. Two regularly scheduled 12-hour fishing periods per week, plus up to 24 hours of additional fishing time in the Upper Subdistrict set gillnet fishery were allowed under this run size.

While the fishing season opens in most of UCI in mid to late June, participation and harvests remain fairly low until early July. In 2010, sockeye salmon harvests in the Central District were relatively low until the July 5 regular fishing period when the drift fleet harvest began to rise sharply. Unlike other years however, the set gillnet harvest in the Kasilof Section remained relatively poor by recent standards despite fairly liberal fishing time. A smaller Kasilof run and strong north east winds, which blew for a 10 day period in early July, likely contributed to this harvest disparity, preventing Kasilof stocks from moving to the east side as they normally do in early July. The drift CPUE for the July 8, regular period was 750 which is very good and by July 12 the drift gillnet CPUE was over 1,240 which was the highest CPUE ever for the drift fishery. Although the drift gillnet CPUE was high, the harvest by the drift fleet on July 12 was much smaller than normal during this period as nearly half of the drift fleet did not fish during this period because it was a religious holiday. The Commercial harvest up to July 13 was 993,000 fish, which was becoming a little disconcerting for a forecast run of 3.6 million, however to date the escapement to all rivers were not remarkably different than expected. On July 15 and 19 the drift CPUE returned to more normal levels of 831 and 530 respectively. Beginning July 20, indications from the Offshore Test Fish Program (OTF), coupled with commercial harvest data and escapements to date, began to indicate the sockeye return was stronger than forecast. After harvest figures from the regular fishing period on July 22 and OTF data were evaluated, the total run estimate continued to indicate a return more than the preseason forecast and a Kenai run of over 2 million. The total return to the Kenai River of over 2 million sockeye salmon triggered a higher inriver goal of 750,000–950,000 fish. Management parameters also changed with this new assessment to 51-hours of additional fishing time but also 2 windows were now required each week, including a 36-hour"Friday"window.

The total sockeye salmon run to UCI in 2010 was estimated to be 5.7 million fish, which was 58.5% more than forecast (see table below). Based on OTF data, the run was 1 day early. Runs to Fish Creek, the Kenai River and minor systems were better than forecast, while sockeye salmon runs to the Susitna River, Kasilof River and Crescent River were below forecast. The UCI commercial harvest of 2.78 million sockeye salmon was 64% above the preseason forecast harvest estimate of 1.7 million and 100,000 fish below the long-term average harvest in UCI. Since 1999, only 1 of the 12 years was managed in the correct tier for the entire season.

System	Forecast	Actual	Difference
Crescent River	148,000	128,000	-13.5%
Fish Creek	142,000	180,000	26.8%
Kasilof River	901,000	858,000	-4.8%
Kenai River	1,672,000	3,434,000	105.4%
Susitna River	542,000	500,000	-7.8%
Minor Systems	170,000	567,000	233.5%
Overall Total	3,575,000	5,667,000	58.5%

Sockeye salmon prices during the season were in the range of \$1.75 per pound. The total exvessel value in UCI for sockeye salmon was approximately \$29.9 million, which was 92.4% of the total UCI exvessel value.

#### COHO SALMON

The 2010 coho salmon harvest estimate of 205,268 was approximately 10% above the recent 10-year average harvest of 185,500 and 35 percent below the 1966–2009 long term average coho salmon harvest of 309,000. Reduced commercial harvests of coho salmon in 2010 were likely due to restrictions in fishing area put in regulation by the Board of Fisheries to reduce the drift fleet coho salmon harvest, as well as several regular fishing period restrictions in the Northern District set gillnet fishery in compliance with the Susitna River Action Plan. The coho salmon run in 2010 was judged to be average. The only significant coho salmon return to UCI that is monitored with an escapement goal is the Little Susitna River. In 2010, the final escapement count of 9,200 was slightly below the 2009 escapement and also below the lower end of the escapement goal range of 10,000. The exvessel value of coho salmon to the commercial fishery was approximately \$ 1 million or 3.2 % of the total exvessel value in Upper Cook Inlet.

#### PINK SALMON

The estimated 2010 commercial harvest of pink salmon in UCI was 288,980 fish, slightly below the recent even year pink salmon harvest since 2000 of 302,000. Pink salmon escapements are not monitored in Upper Cook Inlet to an appreciable degree. Anecdotal information does indicate that escapements to most river systems were not as good as in recent years. Prices paid for pink salmon were approximately \$0.25 per pound, resulting in an exvessel value for this species of \$290,000, approximately 1% of the total exvessel value.

#### CHUM SALMON

The 2010 harvest of 235,256 chum salmon was about twice the average harvest since 2000 of 112,000 but half of long-term average harvest of approximately 451,000 chum salmon. There is only one chum salmon escapement goal in UCI, which is an SEG in Chinitna Bay on Clearwater Creek, and the upper range of that goal was exceeded in 2010. The exvessel value of chum salmon to the commercial fishery was approximately \$875,200, or 2.7% of the total exvessel value.

## CHINOOK SALMON

Approximately 9,631 Chinook salmon were harvested in 2010, which was about 70% of the long-term average harvest of 15,900. The two fisheries where Chinook salmon are harvested in appreciable numbers in UCI are the Northern District and Upper Subdistrict set gillnet fisheries. The Deshka River is the only system in northern Cook Inlet (NCI) where Chinook salmon escapement is monitored inseason with a weir. In 2008 and 2009, the Deshka River Chinook salmon run, which is the generally the largest run in the region, was below average, failing to meet its escapement goal. The 2010 Deshka River forecast predicted a total run of 31,000 fish, 10,000 more than the 2009 forecast. However on June 12<sup>th</sup> the sport fishery was restricted to no bait so in order to aid in achieving the Deshka River escapement goal. The commercial fishery in the Northern District was then restricted from a 12-hour period to a 6-hour period by emergency order. The no-bait restriction was rescinded on June 19 because restrictions were no longer necessary. The 2010 Deshka River escapement of 18,600 was within the escapement range of 13,000 to 28,000. The first

emergency order of the season closed commercial salmon fishing in that portion of the Northern District of Upper Cook Inlet from an ADF&G regulatory marker located 1 mile south of the Chuitna River to the Susitna River for all of the fishing periods scheduled for the 2010 king salmon fishing season. This was done to aid in achieving the escapement goals to the Chuitna, Theodore, and Lewis rivers. The Northern District harvest of 1,631 Chinook salmon is about half of the long-term average harvest of 3,294 Chinook salmon.

Late run Kenai River Chinook salmon runs have been relatively stable and escapement objectives have been consistently achieved or exceeded. Beginning in 1999, a 24-hour closed period per week was mandated for the set gillnet fishery in the Upper Subdistrict. Since that time, longer closed periods of 48-hours or 2 shorter closed periods each week, a 24- and a 36-hour closed period, have also been adopted into regulation. The stated purpose of these closed periods is to pass fish into the inriver recreational fishery for the weekends. However, when large numbers of sockeye salmon enter the Kenai and Kasilof Rivers during closed windows, additional fishing time is necessary in endeavoring to keep sockeye salmon escapements within their goal ranges. The Upper Subdistrict set gillnet harvest of 6,835 Chinook salmon is approximately 70% of the average. Both early and late run Kenai River escapement goals were achieved. In 2010, the exvessel value for Chinook salmon was \$256,000 which is approximately 0.8% of the total exvessel value.

Table 1. Upper Cook Inlet commercial salmon harvest<sup>a</sup> by species, 1966-2010.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1966	8,544	1,852,114	289,837	2,005,745	532,756	4,688,996
1967	7,859	1,380,062	177,729	32,229	296,837	1,894,716
1968	4,536	1,104,896	468,160	2,276,993	1,107,903	4,962,488
1969	12,386	691,815	100,684	32,499	267,686	1,105,070
1970	8,336	732,572	275,205	814,760	750,774	2,581,647
1971	19,765	636,289	100,362	35,590	323,945	1,115,951
1972	16,086	879,811	80,896	628,566	626,414	2,231,773
1973	5,194	670,098	104,420	326,184	667,573	1,773,469
1974	6,596	497,185	200,125	483,730	396,840	1,584,476
1975	4,787	684,751	227,376	336,330	951,588	2,204,832
1976	10,865	1,664,149	208,663	1,256,728	469,180	3,609,585
1977	14,790	2,052,291	192,593	553,855	1,233,436	4,046,965
1978	17,299	2,621,421	219,193	1,688,442	571,779	5,118,134
1979	13,738	924,406	265,164	72,980	649,758	1,926,046
1980	13,798	1,573,588	271,416	1,786,421	387,815	4,033,038
1981	12,240	1,439,262	484,405	127,143	831,977	2,895,027
1982	20,870	3,259,864	792,224	790,644	1,432,940	6,296,542
1983	20,634	5,049,733	516,322	70,327	1,114,858	6,771,874
1984	10,062	2,106,714	449,993	617,452	680,726	3,864,947
1985	24,088	4,060,429	667,213	87,828	772,849	5,612,407
1986	39,254	4,792,072	757,319	1,300,939	1,134,817	8,024,401
1987	39,449	9,469,248	449,479	109,389	348,937	10,416,502
1988	29,080	6,843,833	560,948	471,076	710,615	8,615,552
1989	26,737	5,011,121	339,818	67,441	122,051	5,567,168
1990	16,105	3,604,259	501,643	603,434	351,123	5,076,564
1991	13,542	2,178,331	426,487	14,663	280,223	2,913,246
1992	17,171	9,108,353	468,930	695,861	274,303	10,564,618
1993	18,871	4,755,329	306,882	100,934	122,770	5,304,786
1994	19,962	3,565,586	583,793	523,434	303,177	4,995,952

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1995	17,893	2,951,827	446,954	133,575	529,422	4,079,671
1996	14,306	3,888,922	321,668	242,911	156,501	4,624,308
1997	13,292	4,176,738	152,404	70,933	103,036	4,516,403
1998	8,124	1,219,242	160,660	551,260	95,654	2,034,940
1999	14,383	2,680,510	125,908	16,174	174,541	3,011,516
2000	7,350	1,322,482	236,871	146,482	127,069	1,840,254
2001	9,295	1,826,833	113,311	72,559	84,494	2,106,492
2002	12,714	2,773,118	246,281	446,960	237,949	3,717,022
2003	18,490	3,476,159	101,756	48,789	120,767	3,765,961
2004	27,476	4,926,220	311,056	357,939	146,164	5,768,855
2005	28,171	5,238,168	224,657	48,419	69,740	5,609,155
2006	18,029	2,192,730	177,853	404,111	64,033	2,856,756
2007	17,625	3,316,779	177,339	147,020	77,240	3,736,003
2008	13,333	2,380,135	171,869	169,368	50,315	2,785,020
2009	8,750	2,045,794	153,210	214,321	82,811	2,504,886
2010	9,631	2,786,402	205,268	288,980	235,256	3,525,537
1966-2009 Avg	15,952	2,900,574	309,297	476,874	450,804	4,153,500
2000-2009 Avg	15,965	2,925,357	185,465	188,377	112,284	3,427,447

<sup>&</sup>lt;sup>a</sup> Catch statistics prior to 2010 reflect minor adjustments to harvest database.

Table 2.–Sockeye salmon enumeration by river and date, 2010.

	Kenai l	River	Kasilof River		Fish Creek Crescent		nt River Chelatna		Lake	Judd L	ake	Larson	Lake	
Date	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum
15-Jun			2,536	2,536										
16-Jun			1,124	3,660										
17-Jun			646	4,306										
18-Jun			570	4,876										
19-Jun			672	5,548										
20-Jun			888	6,436										
21-Jun			2,061	8,497										
22-Jun			4,493	12,990										
23-Jun			9,993	22,983										
24-Jun			9,481	32,464			3216	3216						
25-Jun			5,757	38,221			1144	4360						
26-Jun			7,165	45,386			4092	8452						
27-Jun			8,073	53,459			2698	11150						
28-Jun			1,991	55,450			4011	15161						
29-Jun			3,017	58,467			2672	17833						
30-Jun			6,758	65,225			2571	20404						
1-Jul	4,300	4,300	2,293	67,518			2393	22797						
2-Jul	4,573	8,873	2,129	69,647			2314	25111						
3-Jul	3,240	12,113	3,864	73,511			1,799	26,910						
4-Jul	6,092	18,205	3,289	76,800			2,678	29,588						
5-Jul	10,209	28,414	6,044	82,844			2,254	31,842						
6-Jul	11,252	39,666	1,097	83,941			2,971	34,813						
7-Jul	5,013	44,679	2,475	86,416			2,491	37,304						
8-Jul	8,097	52,776	2,671	89,087			1,077	38,381						

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	Kena	i River	Kasilo	f River	Fish	Fish Creek C		Crescent River		Chelatna Lake		Judd Lake		Larson Lake	
Date	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum	
9-Jul	5,978	58,754	1,541	90,628			3,032	41,413							
10-Jul	5,544	64,298	3,230	93,858			2,738	44,151							
11-Jul	8,548	72,846	2,457	96,315			3,952	48,103							
12-Jul	14,434	87,280	7,298	103,613			2,892	50,995							
13-Jul	24,412	111,692	4,098	107,711	323	323	2,167	53,162							
14-Jul	16,904	128,596	6,729	114,440	367	690	2,476	55,638							
15-Jul	22,652	151,248	7,485	121,925	1,795	2,485	1,731	57,369					3	3	
16-Jul	45,979	197,227	12,513	134,438	660	3,145	2,615	59,984					11	14	
17-Jul	62,316	259,543	22,509	156,947	1,896	5,041	2,149	62,133					0	14	
18-Jul	68,577	328,120	16,532	173,479	6,453	11,494	2,588	64,721					10	24	
19-Jul	82,819	410,939	7,722	181,201	7,002	18,496	1,985	66,706					0	24	
20-Jul	55,878	466,817	8,371	189,572	11,194	29,690	2,652	69,358					21	45	
21-Jul	48,840	515,657	7,247	196,819	20,128	49,818	1,616	70,974	221	221			9	54	
22-Jul	38,757	554,414	6,177	202,996	18,187	68,005	1,619	72,593	1,447	1,668			25	79	
23-Jul	35,123	589,537	5,453	208,449	19,495	87,500	1,953	74,546	1,946	3,614			1,073	1,152	
24-Jul	16,973	606,510	7,115	215,564	3,565	91,065	2,066	76,612	2,309	5,923	164	164	318	1,470	
25-Jul	41,089	647,599	2,513	218,077	155	91,220	1,280	77,892	1,396	7,319	10	174	1,368	2,838	
26-Jul	19,031	666,630	1,427	219,504	262	91,482	1,542	79,434	1,333	8,652	0	174	1,610	4,448	
27-Jul	16,316	682,946	3,409	222,913	1,052	92,534	909	80,343	1,815	10,467	50	224	1,218	5,666	
28-Jul	19,323	702,269	5,741	228,654	1,780	94,314	605	80,948	1,655	12,122	614	838	723	6,389	
29-Jul	14,228	716,497	2,849	231,503	3,852	98,166	658	81,606	1,456	13,578	560	1,398	1,776	8,165	
30-Jul	13,699	730,196	2,363	233,866	2,693	100,859	829	82,435	1,487	15,065	1,571	2,969	1,233	9,398	
31-Jul	11,525	741,721	3,615	237,481	1,871	102,730	638	83,073	2,042	17,107	784	3,753	1,348	10,746	

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	Kena	i River	Kasilo	f River	Fish	Creek	Crescer	t River	Chelatn	a Lake	Judd	Lake	Larson	Lake
Date	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum
1-Aug	14,314	756,035	2,684	240,165	8,858	111,588	774	83,847	3,193	20,300	1,325	5,078	909	11,655
2-Aug	17,987	774,022	5,603	245,768	6,547	118,135	901	84,748	3,602	23,902	2,347	7,425	992	12,647
3-Aug	33,435	807,457	1,784	247,552	2,701	120,836	588	85,336	2,207	26,109	1,408	8,833	742	13,389
4-Aug	14,140	821,597	1,278	248,830	927	121,763	383	85,719	1,768	27,877	1,221	10,054	492	13,881
5-Aug	10,171	831,768	2,068	250,898	1,440	123,203	561	86,280	1,007	28,884	482	10,536	522	14,403
6-Aug	10,951	842,719	2,970	253,868	475	123,678			1,316	30,200	943	11,479	153	14,556
7-Aug	12,468	855,187	2,091	255,959	481	124,159			1,162	31,362	866	12,345	37	14,593
8-Aug	12,310	867,497	2,063	258,022	115	124,274			853	32,215	806	13,151	707	15,300
9-Aug	12,061	879,558	1,294	259,316	617	124,891			1,272	33,487	523	13,674	647	15,947
10-Aug	10,571	890,129	705	260,021	462	125,353			849	34,336	446	14,120	509	16,456
11-Aug	6,653	896,782	1,013	261,034	402	125,755			328	34,664	657	14,777	530	16,986
12-Aug	6,151	902,933	1,285	262,319	136	125,891			50	34,714	485	15,262	287	17,273
13-Aug	8,860	911,793	1,437	263,756	85	125,976			530	35,244	320	15,582	455	17,728
14-Aug	9,588	921,381	1,468	265,224	461	126,437			611	35,855	505	16,087	481	18,209
15-Aug	13,378	934,759	1,493	266,717	23	126,460			481	36,336	404	16,491	246	18,455
16-Aug	12,816	947,575			59	126,519			262	36,598	480	16,971	208	18,663
17-Aug	5,599	953,174			72	126,591			4	36,602	191	17,162	262	18,925
18-Aug	4,951	958,125			40	126,631			174	36,776	347	17,509	99	19,024
19-Aug	4,116	962,241			34	126,665			220	36,996	81	17,590	9	19,033
20-Aug					77	126,742			346	37,342	13	17,603	164	19,197
21-Aug					26	126,768			137	37,479	64	17,667	104	19,301
22-Aug					15	126,783			74	37,553	9	17,676	151	19,452
23-Aug					12	126,795			132	37,685	45	17,721	153	19,605
24-Aug					0	126,795			87	37,772	148	17,869	135	19,740

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	Kenai River		Kasilof	of River Fish		Creek Crescent River		Chelatna Lake		Judd Lake		Larson Lake		
Date	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum
25-Aug					2	126,797			12	37,784	117	17,986	68	19,808
26-Aug					12	126,809					0	17,986	177	19,985
27-Aug					1	126,810					17	18,003	31	20,016
28-Aug					16	126,826					82	18,085	43	20,059
29-Aug					3	126,829					88	18,173	96	20,155
30-Aug					0	126,829					47	18,220	85	20,240
31-Aug					0	126,829					29	18,249	36	20,276
1-Sep					0	126,829					27	18,276	39	20,315
2-Sep					0	126,829					36	18,312	9	20,324
3-Sep					0	126,829					34	18,346		
4-Sep					0	126,829					15	18,361		
5-Sep					0	126,829								