

Table 2a. Chum Salmon Release and Survival Data for Hidden Falls Hatchery and Remote Release Sites.

Brood Year	Egg Source ¹	Release Site	Number Fry Released ²	Size (g)	Size (g) Weighted Avg.	Release Dates	% Marine Survival	Total Return
KASNYKU BAY & TAKATZ BAY & EAST CHATHAM								
1977	K,C (unknown)	KAS	212,551	0.84	0.85	5/18/78	1.57%	3,340
1978	K,C	KAS	1,889,184	1.01-1.65	1.13	5/20,22,23/79	2.36%	44,540
1979	K,C	KAS	3,599,384	1.5-2.7	1.76	4/18,5/16,18,20/80 4/15,5/8,9,10,11,12,1	4.50%	161,884
1980	K,S	KAS	9,013,938	1.6-2.4	1.54	5,16,17,18/81	8.19%	738,628
1981	K,S,HF(K)	KAS	10,291,351	1.1-1.2	1.34	4/21,5/21/82	4.33%	445,910
1982	HF	KAS	18,909,761	0.4-1.0	0.94	4/27/1983	3.27%	618,539
1983	HF	KAS	20,100,000	0.4-1.0	1.01	5/2/1984	3.34%	671,469
1984	HF	KAS	21,530,000	0.4-0.75	0.82	5/19/1985	1.27%	273,967
1985	HF	KAS	19,680,000	0.4-0.7	0.63	5/12/1986	1.03%	201,730
1986	HF	KAS, TAK	40,390,000	1.1-1.5	1.23	5/14,20/87	1.54%	620,857
1987	HF	KAS, TAK	50,755,717	1.68	1.61	5/18,20,21/88	1.78%	901,881
1988	HF	KAS, TAK	60,300,600	1.5	1.57	5/15,16/89	2.48%	1,494,332
1989	HF	KAS, TAK	62,506,791	1.6-1.9	1.75	5/12,19/90	4.70%	2,940,331
1990	HF	KAS, TAK	64,275,400	1.4-1.6	1.55	5/23,24/91	4.38%	2,812,054
1991	HF	KAS, TAK	56,129,200	1.4-1.5	1.50	5/13,15/92	5.13%	2,879,438
1992	HF	KAS, TAK	62,442,900	1.7	1.70	5/19/93	7.36%	4,596,885
1993	HF	KAS, TAK	60,222,973	1.3-1.7	1.53	5/20,21/94	0.95%	574,853
1994	HF	KAS, TAK	70,889,750	1.5-1.9	1.71	5/21,22/95	4.41%	3,125,145
1995	HF	KAS, TAK	76,671,678	1.4-1.9	1.59	5/21,22/96	2.87%	2,198,109
1996	HF	KAS, TAK	62,565,996	1.5-2.0	1.72	5/21,22/97	6.04%	3,777,135
1997	HF	KAS, TAK	63,691,981	1.8-2.5	2.10	05/18/98	1.36%	867,533
1998	HF	KAS, TAK	74,650,314	1.5-1.9	1.66	5/17,19/99	1.71%	1,276,322
1999	HF	KAS, TAK	74,949,068	1.5-2.1	1.86	5/19,21/00	3.83%	2,873,891
2000	HF	KAS, TAK	80,844,732	1.7-2.3	1.99	5/19,22/01	1.65%	1,337,415
2001	HF	KAS, TAK	72,820,877	1.4-1.6	1.50	5/21,22/02	1.53%	1,116,972
2002	HF	KAS, TAK	75,415,683	1.8-2.3	1.94	5/6,10,21/03	2.39%	1,803,004
2003	HF	KAS, TAK	88,598,169	2.0-3.5	2.26	5/18,21,6/5/04 5/16,19,20,22,24,6/3/05	1.65%	1,458,159
2004	HF	KAS, TAK	88,800,300	2.0-3.3	2.16	5/17,21,22,26,28,30/06	2.94%	2,614,584
2005	HF	KAS, TAK	86,198,298	2.0-3.3	2.18	5/31,6/1,3,6,15/07	2.12%	1,830,789
2006	HF	KAS, TAK	88,301,824	2.1-3.9	2.38	6/4,6,7,11,24/08	0.81%	714,090
2007	HF	KAS, TAK	84,482,754	2.2-3.6	2.44	6/1,5,8/09	0.44%	368,385
2008	HF	KAS, TAK	81,597,511	2.1-2.4	2.27	(KAS) 5/13-17,20-22 (TAK) 5/24-30/10 ⁴	2.38%	1,938,582
2009	HF	KAS, TAK	79,307,655	2.0-2.1	2.05	(KAS) 5/20-27 (TAK) 5/29-6/13/11 ⁴	1.19%	945,057
2010	HF	KAS, TAK	76,438,022	2.1-3.8	2.32	(KAS) 5/18-23, 6/1, 2/12 (TAK) 5/24-26, 30, 31,	0.14%	109,796
2011	HF	KAS, TAK	80,990,646	1.9-3.7	2.39	6/2,9,10/12 ⁴ (KAS) 5/24, 6/3 (TAK) 5/23-26/13 ⁴	0.36%	295,485
2012	HF	KAS, TAK	74,521,716	2.1-4.2	2.55	(KAS) 5/21-27, 6/6-7 (TAK) 5/23-27,6/5-7/14 ⁴	0.39%	286,913
2013	HF	KAS, TAK	74,815,037	2.1-4.3	2.59	29/15 (TAK) 5/17-21,27-28/15 ⁴	0.73%	547,098
2014	HF	KAS, TAK	73,605,540	2.1-4.3	2.63	(KAS) 4/27,28,5/2,3,4,5/12-16/16 (TAK) 4/30, 5/2, 5/12-16/16	0.21%	157,047
2015	HF	KAS, TAK	84,397,127	2.2-4.5	2.68	(KAS) 5/10-14, 5/30-6/1/17 (E CHAT) 5/10-13, 5/30-31/17	0.33%	277,267
2016	HF	KAS/ EAST CHATHAM	64,602,663	1.7-3.7	2.11	(KAS) 5/20, 22, 6/2-3/18 (E CHAT) 5/17-20, 6/2/18	0.21%	132,835
2017	HF	KAS/ EAST CHATHAM	43,725,791	2.2-4.5	2.88	(KAS) 5/6, 9, 27/19 (E CHAT) 5/6-7, 9, 22-24/19	0.69%	302,782
2018	HF	KAS/ EAST CHATHAM	47,623,744	1.82-3.81	2.53	(KAS) 5/5-8, 6/2-3/20 (ECHAT) 5/5-7, 5/30-6/1/20	1.15%	549,404 ³
2019	HF	KAS/ EAST CHATHAM	48,589,947	1.72-4.96	3.23	(KAS) 5/19,21,22/21, 6/2/21 (ECHAT) 5/17-18/21, 5/30-31/21 (KAS) 5/15-16/22, 6/2,4/22 (ECHAT) 5/12-14/22, 5/31 6/1-2/22 (Kas earlies) 4/20/23 (Kas regs) 5/20/23 (Kas LL) 6/5,6/6/23	2.13%	1,037,190 ³
2020	HF	KAS/ EAST CHATHAM	48,895,105	1.55-3.08	2.32	(KAS) 5/15-16/22, 6/2,4/22 (ECHAT) 5/12-14/22, 5/31 6/1-2/22 (Kas earlies) 4/20/23 (Kas regs) 5/20/23 (Kas LL) 6/5,6/6/23	0.26%	126,304 ³
2021	HF	KAS/ EAST CHATHAM	50,982,098	1.97-3.97	2.96	(KAS) 5/15-16/22, 6/2,4/22 (ECHAT) 5/12-14/22, 5/31 6/1-2/22 (Kas earlies) 4/20/23 (Kas regs) 5/20/23 (Kas LL) 6/5,6/6/23	0.26%	126,304 ³
2022	HF	KAS	45,592,387	2.16-4.17	3.18	(KAS) 5/15-16/22, 6/2,4/22 (ECHAT) 5/12-14/22, 5/31 6/1-2/22 (Kas earlies) 4/20/23 (Kas regs) 5/20/23 (Kas LL) 6/5,6/6/23	0.26%	126,304 ³
SOUTHEAST COVE								
2012	HF	SE COVE	8,712,136	4.01	4.01	6/8/2013	2.16%	188,430
2013	HF	SE COVE	9,142,373	3.89	3.89	6/7/2014	0.35%	32,412
2014	HF	SE COVE	17,478,583	4.15	4.15	5/30/2015	0.45%	79,444
2015	HF	SE COVE	42,758,270	2.3-4.1	2.87	5/8-13, 5/23-27/16 ⁴	2.59%	1,107,287

Table 2a. Chum Salmon Release and Survival Data for Hidden Falls Hatchery and Remote Release Sites (cont.)

Brood Year	Egg Source ¹	Release Site	Number Fry Released ²	Size (g)	Size (g) Weighted Avg.	Release Dates	% Marine Survival	Total Return
2016	HF	SE COVE	46,749,525	2.0-4.2	2.87	5/8, 10, 11, 14, 15, 17, 19, 21, 29-31, 6/1, 3, 4/17	0.20%	92,400
2017	HF	SE COVE	43,109,082	2.1-4.1	2.83	5/18, 19, 20, 21, 23, 24, 26, 6/8, 9 10/18	0.17%	72,426
2018	HF	SE COVE	36,644,291	2.3-4.3	0.00	5/19, 21, 22, 23, 25-30/19	0.40%	147,841 ³
2019	HF	SE COVE	40,951,776	2.12-4.09	3.10	5/19/20, 5/25, 26, 27, 28, 30, 31, 6/2/20	1.01%	413,714 ³
2020	HF	SE COVE	35,357,207	2.01-3.44	3.06	5/27-29/21, 6/8-10/21	0.05%	16,606 ³
2021	HF	SE COVE	36,087,907	2.0-4.12	3.08	5/6-18/22, 5/29-6/5/22		
2022	HF	SE COVE	41,895,230	2.06-4.19	3.14	5/22/23, 6/6/23		
THOMAS BAY								
2016	HF	THOMAS BAY	21,899,063	2.2-4.2	2.85	5/4, 8, 23, 26/17	0.23%	50,555
2017	HF	THOMAS BAY	22,255,897	2.2-4.8	3.32	5/22, 23, 24, 6/7, 8, 9/18	0.53%	116,935
2018	MC	THOMAS BAY	15,350,544	2.1-4.7	3.50	5/10-11, 27-29/19	0.50%	77,012 ³
2019	HF	THOMAS BAY	21,398,311	2.11-4.91	3.51	5/12-14/20, 5/30, 31, 6/1, 2/20	0.28%	60,706 ³
2020	HF	THOMAS BAY	11,691,221	4.34	4.34	5/31/21-6/3/21	0.48%	56,622 ³
2021	HF	THOMAS BAY	14,846,799	2.31-4.15	3.23	5/19, 31/22, 6/2/22		
2022	HF	THOMAS BAY	19,918,363	2.34-4.05	3.36	5/22, 5/31/23		
GUNNUK CREEK								
2017	HF	GUNNUK GREEK	8,866,586	4.39	4.39	5/30, 31, 6/1, 2/18	0.57%	50,932
2018	HF	GUNNUK GREEK	15,857,078	2.5-4.2	1.11	5/17, 25, 29-30/19	0.15%	24,353 ³
2019	HF	GUNNUK GREEK	16,142,492	2.3-4.24	3.27	5/7-9, 6/3/20	0.08%	13,561 ³
2020	HF	GUNNUK GREEK	17,566,539	2.3-4.44	3.33	5/10/2021, 6/1/21	0.12%	21,059 ³
2021	GCH+HF	GUNNUK GREEK	16,747,099	1.98-4.84	3.27	5/6-20/22, 5/29-6/5/22		
2022	GCH+HF	GUNNUK GREEK	12,799,791	2.18-4.21	3.17	5/22, 6/6/23		

¹ MC= Macaulay Returns, K= Kadashan River, C= Clear River, S= Seal Bay, HF= Hidden Falls Returns
 BY77 (unknown) and BY81 (K) are entries in ADF&G database (M. McNair 5/98)

² This table contains data for fed fry only.

³ Incomplete Returns.

⁴ Daily releases for periods shown; staggered to reduce potential of whale predation

Table 2b. Chum Salmon Release Data for Hidden Falls Hatchery.

Release Site/ Fed or Unfed Status / Late-Large										
BY	Kasnyku Fed Fry Regular	Kasnyku Fed Fry Late - Large	Takatz Fed Fry	Takatz Fed Fry Late - Large	Total Fed Fry	Release Biomass (kg)	Kasnyku Unfed Fry	Baranof Unfed Fry	Total Unfed Fry	Grand Totals Fed+Unfed
1977	212,551				212,551	180				212,551
1978	1,889,184				1,889,184	2,141				1,889,184
1979	3,599,384				3,599,384	6,341				3,599,384
1980	9,013,938				9,013,938	13,907				9,013,938
1981	10,291,351				10,291,351	13,769				10,291,351
1982	18,909,761				18,909,761	17,775	2,726,310		2,726,310	21,636,071
1983	20,100,000				20,100,000	20,301	8,400,000		8,400,000	28,500,000
1984	21,530,000				21,530,000	17,661	8,550,000		8,550,000	30,080,000
1985	19,680,000				19,680,000	12,406	24,060,000	1,560,000	25,620,000	45,300,000
1986	21,140,000		19,250,000		40,390,000	49,841				40,390,000
1987	29,181,000		21,574,717		50,755,717	81,894				50,755,717
1988	34,249,000		26,051,600		60,300,600	94,793				60,300,600
1989	36,371,500		26,135,291		62,506,791	109,412				62,506,791
1990	37,686,000		26,589,400		64,275,400	99,453				64,275,400
1991	36,479,100		19,650,100		56,129,200	83,913				56,129,200
1992	36,530,800		25,912,100		62,442,900	106,153				62,442,900
1993	33,155,175		27,067,798		60,222,973	92,388				60,222,973
1994	37,035,400		33,854,350		70,889,750	121,009				70,889,750
1995	49,715,678		26,956,000		76,671,678	121,732				76,671,678
1996	37,544,876		25,021,120		62,565,996	107,782				62,565,996
1997	37,809,253		25,882,728		63,691,981	133,753				63,691,981
1998	48,905,343		25,744,971		74,650,314	123,920				74,650,314
1999	38,689,735		36,259,333		74,949,068	139,405				74,949,068
2000	41,925,974		38,918,758		80,844,732	160,881				80,844,732
2001	36,503,940		36,316,937		72,820,877	109,231				72,820,877
2002	38,788,889		36,626,794		75,415,683	146,306				75,415,683
2003	29,881,079	13,662,435	45,054,655		88,598,169	200,232				88,598,169
2004	33,897,948	9,917,604	44,984,748		88,800,300	191,809				88,800,300
2005	34,971,120	9,300,684	41,926,494		86,198,298	187,912				86,198,298
2006	34,654,534	9,252,243	44,395,047		88,301,824	209,904				88,301,824
2007	31,966,262	9,688,433	42,828,059		84,482,754	206,138				84,482,754
2008	41,302,992		40,294,519		81,597,511	185,095				81,597,511
2009	40,268,478		39,039,177		79,307,655	164,923				79,307,655
2010	37,630,694		30,212,170	8,595,158	76,438,022	177,508				76,438,022
2011	31,283,930	7,048,558	29,204,857	13,453,301	80,990,646	193,392				80,990,646
2012	28,358,647	6,508,719	29,681,749	9,972,601	74,521,716	190,030				74,521,716
2013	25,970,400	6,395,064	32,028,756	10,420,817	74,815,037	194,117				74,815,037
2014	23,868,519	6,513,515	31,396,973	11,826,533	73,605,540	193,460				73,605,540
2015	35,599,703	10,419,637	31,032,302	7,345,485	84,397,127	226,391				84,397,127
2016	53,311,753	11,290,910			64,602,663	136,503				64,602,663
2017	30,183,284	13,542,507			43,725,791	126,114				43,725,791
2018	32,092,646	15,531,098			47,623,744	120,575				47,623,744
2019	23,537,892	25,052,055			48,589,947	159,427				48,589,947
2020	23,922,415	24,972,690			48,895,105	113,816				48,895,105
2021	25,030,977	25,951,121			50,982,098	150,979				50,982,098
2022	22,759,617	22,832,770			45,592,387	144,917				45,592,387
BY	Southeast Cove Fed Fry Regular	Southeast Cove Fed Fry Late - Large	Total Fed Fry		Release Biomass (kg)					
2012		8,712,136	8,712,136		34,936					
2013		9,142,373	9,142,373		35,564					
2014		17,478,583	17,478,583		72,536					
2015	29,441,527	13,316,743	42,758,270		122,826					
2016	29,183,809	17,565,716	46,749,525		134,014					
2017	27,367,140	15,741,942	43,109,082		121,897					
2018	17,074,771	19,569,520	36,644,291		122,567					
2019	20,068,712	20,883,064	40,951,776		127,958					
2020	9,198,802	26,158,405	35,357,207		107,441					
2021	17,710,505	18,377,402	36,087,907		111,151					
2022	20,727,576	21,167,654	41,895,230		131,272					
BY	Thomas Bay Fed Fry Regular	Thomas Bay Fed Fry Late - Large	Total Fed Fry		Release Biomass (kg)					
2016	14,749,497	7,149,566	21,899,063		62,334					
2017	12,952,470	9,303,427	22,255,897		73,820					
2018	6,881,163	8,469,381	15,350,544		53,780					
2019	10,835,469	10,562,842	21,398,311		74,727					
2020		11,691,221	11,691,221		50,741					
2021	7,443,023	7,403,776	14,846,799		47,919					
2022	7,963,718	11,954,645	19,918,363		67,015					
BY	Gunnuk Creek Fed Fry Regular	Gunnuk Creek Fed Fry Late - Large	Total Fed Fry		Release Biomass (kg)					
2017		8,866,586	8,866,586		38,924					
2018	7,071,823	8,785,255	15,857,078		53,943					
2019	6,475,719	9,666,773	16,142,492		55,881					
2020	8,344,163	9,222,376	17,566,539		59,554					
2021	8,484,195	8,262,904	16,747,099		54,763					
2022	6,378,447	6,421,344	12,799,791		40,927					

Table 2c. Annual Chum Salmon Returns to Hidden Falls Hatchery.

Return Utilization									
Return Year	Commercial	Percent	Broodstock	Percent	Surplus/ Egg Sales	Percent	Cost Recovery	Percent	Total Return
1980	0		0		5				5
1981	ND		ND						3,431
1982	ND		ND						58,030
1983	73,334	62%	45,253	38%					118,587
1984	561,793	91%	32,000	5%	22,400	4%			616,193
1985	380,567	84%	65,000	14%	5,020	1%			450,587
1986	594,819	89%	55,000	8%	15,000	2%			664,819
1987	434,453	80%	85,095	16%	2,000	0%	22,091	4%	543,639
1988	205,594	49%	75,149	18%	2,200	1%	139,028	33%	421,971
1989	50,184	32%	72,576	47%	1,500	1%	30,703	20%	154,963
1990	257,587	54%	81,373	17%	8,500	2%	132,258	28%	479,718
1991	579,329	67%	71,985	8%	16,067	2%	202,522	23%	869,903
1992	738,121	72%	83,932	8%	18,894	2%	186,037	18%	1,026,984
1993	1,437,282	80%	112,153	6%	49,759	3%	192,011	11%	1,791,205
1994	2,855,275	89%	88,290	3%	60,264	2%	204,043	6%	3,207,872
1995	3,216,855	90%	82,729	2%	45,526	1%	212,643	6%	3,557,753
1996	3,370,728	83%	72,636	2%	130,499	3%	481,479	12%	4,055,342
1997	1,377,400	81%	71,247	4%	41,153	2%	220,064	13%	1,709,864
1998	1,837,515	82%	80,582	4%	31,390	1%	302,981	13%	2,252,468
1999	2,336,207	86%	79,599	3%	19,655	1%	279,238	10%	2,714,699
2000	2,737,324	88%	75,377	2%	20,845	1%	266,903	9%	3,100,449
2001	1,177,019	74%	93,256	6%	32,806	2%	278,466	18%	1,581,547
2002	1,230,535	76%	88,569	5%	23,824	1%	277,562	17%	1,620,490
2003	1,351,523	63%	123,833	6%	69,260	3%	604,325	28%	2,148,941
2004	1,154,761	60%	118,420	6%	17,148	1%	622,887	33%	1,913,216
2005	342,258	42%	110,904	14%	27,414	3%	325,985	40%	806,561
2006	1,761,483	81%	104,562	5%	34,231	2%	284,803	13%	2,185,079
2007	500,931	41%	99,137	8%	32,334	3%	594,692	48%	1,227,094
2008	1,747,811	78%	79,510	4%	52,515	2%	371,721	17%	2,251,557
2009	1,889,975	82%	88,283	4%	23,326	1%	303,385	13%	2,304,969
2010	659,437	66%	91,180	9%	25,131	3%	217,808	22%	993,556
2011	132,228	36%	95,113	26%	48,062	13%	96,538	26%	371,941
2012	1,084,357	87%	104,102	8%	43,680	4%	7,948	1%	1,240,087
2013	1,239,914	89%	113,334	8%	33,376	2%	27	0%	1,386,651
2014	252,007	54%	106,974	23%	60,248	13%	51,117	11%	470,346
2015	49,417	17%	149,132	52%	90,385	31%	0	0%	288,934
2016	15,936	6%	146,932	54%	75,515	28%	33,218	12%	271,601
2017	199,804	46%	148,125	34%	65,353	15%	20,415	5%	433,697
2018	245,738	70%	86,557	25%	19,760	6%	95	0%	352,150
2019	25,707	11%	151,170	63%	62,899	26%	1,189	0%	240,965
2020	11,613	6%	115,792	59%	67,502	35%	0	0%	194,907
2021	15,267	7%	113,026	50%	67,114	30%	28,918	13%	224,325
2022	194,669	41%	140,590	29%	63,396	13%	80,282	17%	478,937
2023	922,314	75%	165,220	13%	125,618	10%	24,165	2%	1,237,317

1977-1988 = Hidden Falls Returns. 1989 and later = Hidden Falls & Takatz Bay.

1996 Cost Recovery includes 200,873 regular cost recovery and 280,606 Joint Venture Roe fish.

1998 Cost Recovery includes 239,227 regular cost recovery and 63,754 surplus fish harvested in August.

2009 Broodstock included 5.0M eggs for Gunnuk Creek Hatchery

2010 Broodstock included 5.1M eggs for Gunnuk Creek Hatchery

2012 Broodstock included 5.0M eggs for Gunnuk Creek Hatchery

Table 2d. Annual Chum Salmon Returns to Southeast Cove.

Return Utilization									
Return Year	Commercial	Percent	Broodstock	Percent	Surplus/ Egg Sales	Percent	Cost Recovery	Percent	Total Return
2015	0		0		0		13,428	100%	13,428
2016	0		0		0		149,520	100%	149,520
2017	0		0		0		49,502	100%	49,502
2018	1,865	1%	0		277	0%	184,539	99%	186,681
2019	100,626	11%	0		1,395	0%	851,349	89%	953,370
2020	125,688	93%	0		5,284	4%	4,481	3%	135,453
2021	53,294	97%	0		1,004	2%	365	1%	54,679
2022	218,055	99%	0		1,302	1%	1,210	1%	220,567
2023	19,679	5%	0		1,592	0%	362,305	94%	383,576