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State of Alaska
Department of Fish and Game
Division of Sport Fish

Nomination Form
Anadromous Waters Catalog

Region: Southcentral

USGS Quad(s): Seward A-3 SE

Anadromous Waters Catalog Number of Waterway: 226-40-16760

Name of Waterway: Horseshoe Creek ☑ USGS Name ☐ Local Name

☐ Addition ☐ Deletion ☐ Correction ☑ Backup Information

For Office Use

Nomination #	100181	Fisheries Scientist	7/14/10 Date
Revision Year:	2011	Habitat Operations Manager	7/14/10 Date
Revision to:	Atlas ____ Catalog ____ Both X	AWC Project Biologist	19 Feb 10 Date
Revision Code:	B-1	Cartographer	11/9/10 Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Pink	1979-2006			X	☑
Chum	1979-2006			X	☑
					☐
					☐
					☐

IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments: Aerial surveys have been conducted on this system since 1979 and observers have documented the presence of chum and pink salmon. See the attached aerial survey spreadsheets for substantiation.

Iccn # 676

Add chum salmon present to stream

Name of Observer (please print): Cordova CF Staff

Signature: Alaska Department of Fish & Game

Agency: PO Box 669

Address: Cordova, AK 99574

Date: 11/2/2009

Date: _____

This certifies that in my best professional judgment and belief the above information is evidence that this waterbody should be included in or deleted from the Anadromous Waters Catalog.

Signature of Area Biologist: _____ Date: _____

Name of Area Biologist (please print):

Revision 05/08

C:\working\awr\2010 submissions\cordova\Symposium Group 11\Historical Chum AUC 1979-2006.xls]Pivot Chum subrow

NOTES:

Area under the curve totals by District, Subdistrict, and Stream, 1979-2006. These totals are NOT adjusted for stream life or observer efficiency

Index Stream?	1

1 = index Stream and 0 = non index stream

Sum of C_AUC			Year							
District	SubDis	Stream	1979	1980	1981	1982	1983	1984	1985	1986
221	10	2	0	0	5,989	36,450	16,415	15,320	9,479	22,998
		3	NA	0	0	0	0	0	1,000	0
		11	0	103	0	0	0	0	0	140
	20	19	0	0	0	0	0	0	0	0
		20	0	0	0	0	0	0	0	0
		21	0	140	1,050	150	14,050	0	0	210
		23	350	2,741	33,980	70,104	74,416	101,197	54,738	165,225
		35	40,300	1,300	88,150	43,250	137,918	32,500	17,825	139,564
		36	0	1,450	8,550	12,550	10,100	1,300	350	11,575
		37	0	0	0	0	0	0	0	0
	30	41	0	0	0	0	0	0	0	0
		45	0	0	0	0	0	0	0	0
		46	0	0	0	0	2,400	0	0	3,740
		48	8,330	50,778	99,023	178,670	227,158	111,746	38,400	580,714
		49	0	0	0	0	0	0	0	0
		51	0	23,125	118,987	101,800	166,624	133,582	30,040	150,707
		52	0	1,350	0	650	31,720	0	0	7,860
		54	0	350	0	0	0	0	0	0
		56	0	2,800	0	0	2,500	0	0	3,255
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PINK SALMON

Area under the curve totals by District, Subdistrict, and Stream, 1979-2006. These totals are NOT adjusted for stream life or observer efficiency

Index Stream? 1

1= index Stream and 0 = non index stream

Sum of P AUC			Year																												
Distict	SubDist	Stream	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
226	40	676	6,280	19,200	4,550	7,005	12,100	47,575	20,195	640	20,570	24,470	76,100	38,395	14,220	1,465	30,190	19,675	26,190	8,970	44,860	64,950	14,500	24,025	174,250	8,040	43,630	24,700	34,000	24,380
		677	22,728	4,950	14,475	8,200	26,550	43,625	32,975	2,100	18,170	22,300	34,800	49,290	49,953	6,238	28,780	4,460	12,700	13,425	27,890	32,760	13,175	16,925	240,400	1,650	33,125	22,775	25,100	18,000
	50	653	15,705	3,290	141,680	8,903	106,990	201,350	101,800	50,295	19,186	33,955	118,077	36,218	153,230	16,143	232,906	67,368	43,973	89,418	125,380	163,700	470,000	103,780	144,035	50,710	131,960	131,900	314,100	97,483
227	10	702	50,550	5,165	5,100	3,380	43,410	52,950	75,363	5,060	48,420	7,940	15,030	22,550	31,992	67,413	23,306	5,961	6,918	1,525	28,485	44,600	12,260	25,450	145,800	19,635	263,673	28,990	132,765	72,520
		703	258	2,045	0	6,180	14,850	13,750	46,650	7,575	21,150	6,455	4,656	13,028	52,797	91,175	56,040	4,246	6,637	6,290	5,705	45,000	12,770	41,100	275,700	22,965	119,875	74,650	97,278	20,880
		707	137,550	29,700	313,500	37,715	229,560	187,588	196,210	43,900	262,895	37,800	98,130	98,017	137,116	50,115	244,846	49,433	106,630	38,575	215,354	90,413	44,240	147,600	788,544	101,519	906,800	213,663	862,280	200,615
		710	58,250	11,075	106,500	17,250	93,660	29,303	100,580	18,675	49,840	24,150	116,700	36,375	118,944	39,955	70,832	12,237	66,280	13,750	53,490	26,225	91,854	70,375	321,550	45,575	244,780	110,680	455,535	74,763
		711	381,663	64,550	319,750	50,275	160,380	269,000	186,160	52,825	211,103	46,100	139,200	59,150	279,274	73,063	247,382	106,333	366,675	31,613	382,420	209,900	587,680	98,900	515,830	76,225	712,450	138,250	1,079,951	134,125
		717	101,270	3,495	62,400	5,375	51,870	29,600	138,900	2,360	13,700	0	71,100	4,290	183,300	3,350	124,628	28,150	47,790	9,681	111,100	12,400	93,950	48,250	6,910	7,300	130,550	21,725	664,500	61,188
		718	98,280	5,525	126,000	5,215	53,280	25,850	100,500	2,580	43,230	4,125	52,280	3,093	65,610	1,396	53,377	8,561	49,728	5,850	56,158	14,800	222,500	41,275	167,500	5,025	222,935	30,063	278,000	14,113
		719	84,260	7,713	18,750	14,600	35,400	68,875	114,150	6,025	63,258	4,950	71,670	7,213	74,962	3,838	63,490	10,218	41,835	1,995	70,830	9,850	263,000	52,950	207,200	11,200	33,226	56,535	271,200	21,625
		722	5,400	1,350	2,340	1,075	5,430	4,450	20,385	0	1,980	700	4,068	0	270	0	5,320	176	1,917	0	565	900	8,450	3,388	23,475	0	12,283	4,275	67,807	1,925
		724	13,700	353	3,510	4,450	0	724	10,430	0	834	0	3,120	90	9,106	338	9,415	0	1,217	0	4,310	0	22,250	800	4,815	538	3,200	6,900	32,120	2,300
		725	40,400	5,400	39,000	4,725	6,120	7,238	29,820	0	28,504	0	42,750	75	54,263	0	55,389	2,030	15,102	288	19,600	2,938	26,555	6,850	36,900	269	8,587	7,850	25,250	2,938
		726	2,340	675	850	6,988	23,820	3,713	39,050	2,613	3,120	13,800	22,080	210	6,700	0	5,550	160	3,854	3,763	1,040	0	5,380	5,725	42,800	0	4,200	3,850	19,500	0
		738	106,200	10,850	75,400	21,225	54,440	24,488	86,695	538	50,720	1,563	66,894	3,556	23,994	30	32,475	1,276	23,418	31,550	31,270	76,050	33,150	295,970	317,243	19,038	96,204	38,200	297,900	100,625
		739	663,500	176,350	485,000	184,175	168,200	230,700	315,900	65,875	236,150	214,000	336,735	99,186	162,688	52,864	291,200	97,110	655,513	201,288	388,500	457,825	1,109,000	431,050	442,540	129,325	546,500	789,288	1,034,820	451,082
		740	327,000	133,200	329,000	64,875	109,100	63,200	149,900	7,475	145,280	47,163	96,650	57,338	118,040	10,700	123,160	17,500	119,900	59,425	132,500	125,900	267,250	72,975	124,600	17,350	109,620	86,563	159,750	50,300
		741	386,000	80,750	352,920	154,800	155,440	301,625	387,000	95,050	202,208	47,375	215,989	69,135	110,458	49,423	147,845	115,269	249,950	270,375	244,560	527,950	502,040	455,925	273,583	83,400	359,700	357,375	1,708,800	380,650
	20	744	146,890	41,800	40,800	19,550	28,040	19,050	113,125	21,550	27,925	48,450	68,975	70,005	93,400	14,688	63,150	11,580	48,330	27,975	40,790	79,250	83,600	54,250	59,425	9,100	49,088	159,250	404,100	7,896
		745	133,720	15,275	121,800	49,830	35,820	73,450	69,675	9,088	58,478	7,850	79,318	14,058	112,100	9,313	87,416	19,750	89,288	49,438	50,247	85,500	122,195	109,875	215,150	28,250	121,116	87,050	152,900	37,088
		746	208,050	77,925	113,700	85,625	39,700	10,463	31,160	8,338	44,030	28,725	31,150	42,825	100,260	2,400	49,134	7,231	23,544	46,000	53,420	41,050	26,850	46,175	54,513	9,800	33,608	30,763	123,000	47,638
		747	151,350	87,500	166,100	133,750	181,500	267,925	321,550	56,900	294,532	246,350	360,620	426,000	197,120	154,750	215,170	140,521	320,920	311,363	260,870	129,288	66,380	495,500	317,700	59,425	165,766	199,613	99,950	153,644
		748	13,820	41,435	50,700	3,588	17,520	25,675	86,750	8,175	20,090	22,775	19,430	27,400	70,340	1,163	12,470	4,671	13,882	21,425	22,785	60,400	24,000	9,300	40,455	7,475	80,643	32,800	123,200	24,638
		749	90,800	37,950	109,000	51,480	46,320	33,925	91,400	44,725	54,490	36,263	92,950	82,483	80,521	52,665	67,078	17,848	107,100	39,175	57,170	84,650	53,000	60,650	72,850	27,325	51,414	23,054	63,900	119,950
		752	194,650	79,030	113,800	46,465	44,300	45,255	137,650	25,825	34,375	39,168	77,450	79,230	100,988	30,401	127,906	14,862	36,530	30,325	44,820	91,075	52,810	50,350	85,800	17,820	95,040	85,650	188,350	41,818
		753	31,480	30,058	36,850	15,590	15,515	19,350	49,235	5,288	11,970	20,093	26,950	12,642	28,245	2,063	22,300	6,400	20,303	7,390	17,785	52,525	28,200	39,050	65,550	1,885	24,730	20,950	307,950	10,093
		754	24,250	20,535	95,850	39,980	8,955	114,340	18,500	3,478	11,100	16,755	7,610	24,365	24,815	8,300	12,200	27,267	12,510	14,585	10,320	22,000	19,900	78,250	96,000	7,880	14,993	9,055	15,000	11,593
		758	73,200	40,440	47,750	16,000	20,120	34,700	8,650	15,945	22,785	46,110	33,425	100,200	26,903	1,925	45,902	33,074	26,465	9,495	20,225	33,360	22,750	102,350	81,650	2,335	37,935	34,000	47,900	40,533
		759	155,698	51,225	42,300	37,575	88,800	78,480	329,375	13,900	56,506	54,008	14,655	68,500	35,090	14,500	70,619	26,925	100,900	87,770	162,500	31,475	97,550	13,050	77,525	8,438	189,795	49,875	352,400	21,191
		766	0	3,995	NA	0	2,500	137	1,475	0	13,500	375	118	95	785	1,925	6,975	1,668	1,847	9,813	5,265	42,600	10,480	25,445	15,794	8,050	29,683	12,950	18,052	21,838
		770	26,418	4,605	0	7,300	27,665	45,275	71,245	3,238	40,225	3,683	50,525	692	59,825	5,809	13,141	2,412	38,500	2,248	17,536	11,138	23,790	19,695	95,200	10,110	24,711	41,000	118,218	17,855
		771	9,000	5,288	11,890	2,055	7,335	860	18,675	343	11,488	1,600	6,730	440	14,725	0	10,906	555	18,323	1,158	11,130	7,400	19,850	10,595	25,375	2,570	14,435	10,528	25,700	4,648
		774	62,770	34,040	21,600	28,900	27,350	15,850	64,830	6,935	36,240	29,125	22,145	16,818	108,050	16,619	28,118	9,083	25,150	29,170	20,040	41,550	19,100	22,700	70,510	8,480	58,815	33,550	37,400	23,035
		775	24,930	8,515	4,130	2,965	15,515	14,265	41,370	3,783	12,775	10,245	25,560	2,735	18,511	450	10,892	1,661	23,600	5,335	31,150	40,900	14,780	17,400	226,100	7,365	75,290	27,925	59,120	15,648
		788	0	0	0	0	0	2,270	0	0	0	67,275	3,639	106,400	7,405	32	14,588	4,675	132,550	16,225	48,380	75,675	34,025	43,700	63,660	11,950	33,160	85,450	36,200	5,606
	30	758	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
228	10	863	52,803	5,415	14,480	14,450	128,450	105,330	78,350	7,920	26,080	50,590	12,330	231,110	251,800	2,450	69,350	54,120	57,440	42,815	110,150	13,580	31,450	19,600	54,450	32,240	29,745	24,745	378,400	17,125
	20	828	NA	NA	NA	NA	NA	2,150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		833	37,070	18,375	13,600	49,250	5,070	24,210	29,250	9,200	15,020	5,900	2,368	19,320	17,600	0	12,350	6,893	15,755	22,900	21,000	20,613	26,050	24,875	16,378	40,700	26,890	58,650	297,675	5,838
		834	2,421,630	155,250	481,760	621,000	1,184,800	773,263	940,150	153,950	538,580	97,400	602,960	302,100	541,583	96,875	356,830	232,363	739,978	380,000	860,760	265,025	833,400	329,300	748,780	212,150	965,260	730,400	1,574,900	180,775
		835	2,129,500	73,800	289,820	368,750	598,200	519,350	741,450	134,900	465,925	47,850	305,960	226,815	363,806	100,735	229,405	166,779	569,305	145,450	659,400	107,325	1,204,400	301,075	994,340	145,225	1,228,710	341,900	2,345,060	129,350
		836	11,650	64,225	80,200	36,750	116,025	66,875	77,475	37,850	196,045	31,925	89,660	97,154	173,940	13,580	100,400	48,073	212,700	54,570	187,320	69,888	244,050	61,950	389,700	105,125	227,720	137,339	696,780	61,625
		837	304,860	21,825	0	240,250	54,750	315,750	106,700	2,150	37,860	6,375	19,040	24,400	33,225	2,900	20,579	6,538	54,664	48,688	52,860	28,150	87,210	65,975	357,750	42,650	58,010	100,638	668,975	31,200
		839	99,560	14,525	30,280	105,750	82,890	185,750	130,060	30,975	87,775	36,000	53,920	35,000	73,000	12,545	36,560	24,530	81,800	39,500	146,190	27,375	128,600	115,560	506,280	73,600	158,050	112,400	412,850	36,650
	30	844	215,050	115,969	185,400	254,000	176,350	369,500	180,400	57,050	250,760	168,125	81,610	425,225	216,944	14,060	129,763	269,338	167,773	283,150	375,420	216,350	221,650	317,700	147,656	103,625	248,880	248,000	762,200	75,125
		847	354,650	67,325	134,200	219,250	170,290	375,250	196,300	79,600	158,250	152,250	144,020	416,700	266,548	31,165	124,288	167,350	123,737	218,900	849,000	116,800	245,200	260,400	136,935	44,750	211,720	289,350	1,659,450	65,550
		849	25,065	16,590	5,580	62,700	24,900	204,800	41,650	13,695	34,140	44,190	39,250	106,960	190,500	7,105	38,110	30,982	26,539	49,280	46,620	17,070	19,050	47,870	34,355	51,980	37,865	70,050	439,300	16,130
		850	301,505	23,925	135,000	85,375	146,800	405,000	276,675	63,775	100,230	76,650	67,510	163,075	353,800	3,573	99,900	82,825	73,310	63,500	473,400	52,460	90,700	114,775	57,580	25,750	94,080	214,250	501,500	31,225
		851	58,350	18,113	12,450	26,125	58,885	193,800	136,750	4,613	44,005	44,450	64,270	192,075	219,250	8,400	23,575	29,600	49,333	48,075	94,260	52,975	27,950	67,000	26,560	48,500	73,370	83,100	349,690	19,338
		856	22,750	4,190	8,980	59,150	66,055	57,280	85,250	10,900	24,760	56,180	25,143	242,050	3,726	3,585	59,850	26,520	45,037	42,500	12,000	27,730	16,950	17,550	14,310	5,700	32,280	56,750	293,170	12,795
		857	30,570	5,610	8,030	18,110	23,300	238,800	69,050	11,575	29,290	35,630	26,930	122,225	50,750	6,010	17,125	29,095	52,975	116,700	31,800	25,575	11,400	34,750	7,910	18,525	94,085	38,050	462,825	28,775
		858	89,037	4,940	10,580	10,060	18,270	11,350	11,250	4,920	25,440	34,230	950	98,305	13,650	2,048	18,065	37,860	42,800	90,100	19,100	18,115	18,390	31,750	16,795	28,950	47,400	92,700	352,825	18,315
		861	219,135	27,475	104,525	142,125	112,500	403,250	181,000	96,225	204,710	88,200	123,930	372,300	431,925	15,933	115,250	155,550	228,850	219,400	181,200	89,400	107,450	90,575	139,840	88,375	205,400	249,750	880,750	4,290
		862	5,451	1,870	3,060	11,630	102,610	24,695	35,250	2,795	14,360	24,930	7,760	90,275	59,800	1,575	58,075	18,022	34,345	6,800	49,725	10,090	7,100	15,600	112,250	33,050	118,840	77,050	412,075	7,280
	40	821	NA	NA	NA	NA	NA	NA	NA	323 NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		827	285,550	69,775	85,300	90,500	78,045	184,125	145,950	25,725	97,368	97,438	58,290	118,018	206,250	56,419	78,200	56,650	77,965	36,550	47,040	25,038	98,692	123,550	96,905	43,800	129,760	266,000	619,825	104,075
		828	1,840,500	156,918	445,240	324,970	333,200	542,275	444,625	125,675	255,960	203,375	347,600	294,936	543,090	150,424	374,878	170,350	383,935	204,475	557,820	135,250	346,950	214,625	328,750	41,175	323,440	512,500	1,408,700	232,000
		829	62,550	26,825	17,560	36,850	35,750	85,400	74,000	6,350	22,765	37,725	9,740	29,850	56,519	31,665	27,250	35,725	38,634	19,950	69,600	10,488	23,300	21,695	33,428	17,200	55,240	57,100	189,000	19,000
		831	1,486,320	55,050	213,000	120,000	243,925	406,575	336,475	120,050	227,765	86,513	208,590	86,665	120,816	44,470	110,590	82,025	124,531	90,325	437,850	96,350	190,770	106,275	337,630	67,825	251,580	108,063	511,650	132,975
	50	815	NA	NA	NA	NA	NA	NA	NA	0 NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		817	503,820	54,600	102,140	126,500	242,550	291,250	246,675	34,725	118,990	57,675	149,170	77,675	208,257	12,643	171,306	36,675	224,020	29,725	294,840	34,515	138,625	101,700	291,150	54,175	248,160	136,625	586,150	104,400
		818	692,740	64,875	131,496	195,950	292,800	401,750	294,750	57,260	120,970	59,650	160,040	64,155	395,857	23,007	276,020	91,458	254,418	61,925	388,380	26,888	232,864	134,600	260,110	48,050	267,680	172,950	839,500	199,425
		821	906,940	75,450	132,420	100,875	144,600	496,375	255,650	32,640	69,643	107,425	195,273	83,415	282,350	60,224	205,340	116,588	119,024	60,875	14,040	8,375	120,020	106,775	107,560	65,300	160,380	142,700	587,100	143,800
	60	805	2,050	3,315	0	14,175	390	21,000	4,990	1,050	9,000	1,050	7,970	2,575	13,525	0	10,700	736	1,800	1,115	2,460	6,950	5,678	5,300	65,750	16,125	36,775	8,175	171,600	22,575
		806	13,935	8,925	470	18,300	14,460	295,750	34,525	22,900	24,530	94,825	45,535	19,913	90,896	12,350	53,390	5,370	24,430	2,075	6,840	12,250	64,750	31,775	57,650	109,350	88,080	67,625	506,850	193,575
		807	1,125	2,700	0	4,125	5,120	24,650	7,030	1,938	7,610	5,363	12,260	285	12,500	105	76,063	1,440	6,530	2,350	3,090	2,650	10,200	13,450	33,200	31,550	26,500	8,375	232,400	52,525
		810	78,290	33,275	19,980	137,750	87,730	336,750	110,600	94,100	103,167	48,100	98,255	92,000	216,642	48,099	114,234	100,350	65,150	36,575	228,000	72,375	102,500	127,250	106,000	274,650	142,600	225,000	790,070	129,200
		811	24,600	8,825	4,100	10,213	50,900	173,250	51,660	6,200	9,015	8,550	12,395	15,423	59,100	2,225	48,175	35,672	51,900	2,475	84,180	153,150	163,300	39,450	90,050	16,825	210,550	188,475	609,350	23,013
		812	1,688,780	699,445	582,900	699,000	909,800	1,080,000	1,106,750	536,100	816,580	128,175	659,860	328,338	1,123,860	371,575	928,405	247,850	648,850	332,150	668,700	327,400	1,134,300	614,800	870,250	918,000	1,913,350	1,593,500	2,804,550	544,043
		815	1,614,540	1,104,188	541,600	857,775	800,450	1,744,750	1,136,550	386,350	644,349	373,225	494,910	508,698	891,240	421,753	1,458,338	714,663	864,560	502,250	1,549,200	518,443	1,412,733	647,750	1,428,600	981,813	1,858,850	2,033,530	3,569,200	628,150
229	10	242	NA	NA	0	0 NA	NA	0	0	0	0 NA	NA	0	4,010	29,700	1,150	23,500	3,580	11,500	4,375	23,880	57,620	16,975	26,000	7,475	89,750	45,775	139,950	43,550	

Add chum salmon present to stream