January 31, 2008

RC 77

PROPOSAL 152 5AAC 21.368 Big River Sockeye Salmon Management Plan

I have physically participated in the Big River Sockeye Salmon Management Plan every year since it opened as a CFEC permit holder, except the year 2000. I feel that by adding the drift fleet to the fishery it would have a significant detrimental impact on the amount of fish bound for the other management areas and fishing districts. Set netting with the outer end of the net, no further than 35 fathoms off shore at the lowest tide of the day allows many of the kings to pass by without restricting their travel to their streams of origin. If the drift fleet is allowed to participate the set netters in this fishery would suffer a significant loss in their catch.

PROPOSAL 112 5AAC 21.345 Registration

In my opinion and those of otheres that I have talked to there are more Important proposals to consider. What Ive experienced in past seasons when permit holders are allowed to fish at random with out comitting to fish in one district for the season, is crowding, nets in the Big River Fishery especially were being operated closer than the 1800 ft. minumum, also I can recall one season that some fishermen coming from other districts than those that fish in W fishing registration area must have thought it was a King fishery because they harvested enough Kings to put the incedental catch at the limit very early in the season before the reds were at peak levels.

I am not in favor of the content in the above proposals that I have outlined in this testament. William Van Hoose

RC 78

2 feb. 2008

Alaska board of fish

I have chosen to give testimony about one subject today, and that is the windows regulation in the Cook Inlet set net fishery. It is my belief that the windows regulation has adversely effected a number of areas of my concern.

(1) Adaptive Management

When you made this regulation did you use the best available science. Would it not been better to have in season flexible management.

(2) Optimum Sustained Yield

We have had quite a few years of over escapement in the Kenai and Kasilof rivers, which is counter productive to the fundamental principle of the Optimum Sustained Yield.

(3) Lost Yield

We can not tell the fish when to go up the rivers. Mother Nature tells them, and try as we might we can't change it. If the bulk of the sockeye salmon run goes up the rivers during the mandatory closure, it can adversely effect the lively hood of many fisherman. It can also contribute to over escapement. (see number two)

(4)Commercial Fishing Communities

When the last motorhome rolls of the Kenai Peninsula and the last commercial fishing guide goes back to the lower 48, ask the local businesses how are they going to make it through the winter.

Please remove the noose you or your predecessors have placed on local fish and game managers. Please let our local mangers manage. Thank you for your time.

Leon Marcinkowski
P.O. Box 7428 Nikiski, Alaska 99635 907 7765552

Brent M. Western
2500 Autumn Drive
Anchorage, AK 99516

RC79

February 1, 2008

Mel Morris, Chair
Alaska Board of Fisheries
P.O. Box 115526
Juneau, AK 99811-5526
FAX (907) 465-6094

RE: UPPER COOK INLET SALMON MANAGEMENT

Dear Mr. Chair/Morris and Board of Fisheries members,

My family has commercially fished in Upper Cook Inlet since 1966 and we have invested our lives into the halibut and salmon fisheries. My hope is that my children and their children can continue on with this livelihood.

Like a hopeful fisherman heading out to the open waters with calm seas and the daylight breaking the horizon, I too have faith that a levelheaded, problem-solving approach between the various user groups of Upper Cook Inlet (UCI) can occur at the Board of Fish (BOF) meetings this week. But as any seaman knows, the winds can change in an instant resulting in chaotic, confusing seas, which given past experience is highly likely to occur again at the BOF—but let's be optimistic our salmon runs are the envy of the world. I believe that sound-minded individuals from all the user groups could create good long-term biological, socioeconomic solutions based on clear unambiguous facts.

Over escapement, or better defined; as an unacceptable level of risk associated with high escapements is not wise resource management for any user. The recent ADF&G study (Special Publication No. 07-17) shows decreased yield and harvest with overescapement. Particularly, the annual yield harvest loss is 1 million sockeye from the Kenai, Kasilof and Crescent Rivers. 37 of the 40 lake systems studied showed a decrease in yield due to overescapement. One can only put so many cattle on a range before all the grass is gone. Fish are no different, and when you have back-to-back years of extremely high escapements the problem is only exasperated.

Combining excessive escapement with the increased turbidity and reduction in the Euphotic Zone Depth in Skilak Lake has greatly diminished the level of food available to current and future returns. The EZD has reduced 28% in the last 4 years as compared to the previous 4 years before (EZD Table). What happens to the fry when the food is gone? Where are the studies and discussion on these starving fry/smolt? Maximum sustained yield (MSY) is an underlining principle of resource management. MSY goal is to manage the resource to produce at the highest and most constant levels for the benefit of all users. Optimal sustained yield is an essential component to manage our fisheries economically and environmentally as mandated by Alaska's Constitution.

ADF&G weir and sonar counts, mark recapture, tagging, genetic and other studies indicate that central district drifters have a low exploitation rate on northern district bound stocks--10% coho, 6% chum, 2% pink, 20% red, 0% king (ADF&G Addendum To Fishery Manuscript No. 07-07 (1/25/08) & 2002 Marine Tagging Studies). These percentages, studies and the increased in-river catches demonstrate that the majority of these salmon are entering the rivers for users and that the escapement goals are being met.

Comparing 5-year time intervals of the late eighties to the last five years we see a 27% plus reduction in drift fishing participants and a 4.5 times increase in restrictions placed on the drift fleet (ADF&G Management Actions & Sockeye Enumeration Tables). Even with less drifters fishing and more restrictions—the Yetna average escapements of these 2 timer periods are identical at an average of 92,000 sockeye. It is interesting to note that even in 1989 when drifters didn't fish due to the Exxon spill, the Yetna sockeye escapement was only 96,000.

The Yetna/Susitna issue is not about allocation or exploitation, but about the current or potential yield of these systems. If larger returns are desired, we need to look at what the rearing capacity is of each system and how to increase production. To accomplish this—it is the duty of this board and all Alaskans to address the impact of pike, beavers, land development, watercraft (hydrocarbons, erosion, etc...) or other natural or manmade habitat degradation causes (limnology, water temp, etc...) and encourage agencies/users to work together and foster good watershed planning, such as adopt a stream or other programs (SWPPP/BMPs, etc...).

We need the state to provide all pertinent information 60 days prior to these board meetings. I know that we have some excellent state biologists who put aside politics and strive to do what's best for the resource. State and federal laws require that we must use all best available data—my hope is that we are getting all the available, non-tainted or censored data at our disposal to make sound management decisions.

I would suggest that those who feel that the blame of lower production in Valley systems is the results of central district catches first cast out the beam out of their own eye. How is it that over the years, Valley and Anchorage representatives haven't participated with the Cook Inlet Aquaculture Association? How is it that those who spearheaded the funding and studies to understand and potentially improve production of northern Cook Inlet streams are Kenai Peninsula commercial fishermen and not those from the Valley? The reason is that it is far too easy to suggest that the perceived problems of the northern district stocks are due to the central district catch—the data proves that this is not the case.

The fishing industry is a vital part of Alaska's economy, and bright economic days are ahead as consumers are becoming aware of the intrinsic value of wild salmon. Millions of private and public dollars are being spent on new docks, chilling facilities, value-added equipment and marketing of wild Alaskan salmon.

Cook Inlet is uniquely positioned with the necessary infrastructure to market fresh, high value product to the world. Salmon plays an integral part in the seafood industry and like a leg on a third legged stool is essential for standing upright, the salmon industry is vital in making the seafood industry an important contributor to our economies and communities. Economic diversity is essential to Alaska's chance for an enduring and healthy economy. My family is part of this larger economic fishing community and we have invested considerable more time and capital compared to the more recently established commercial in-river enterprises.

My proposals (107 & 125) deal directly with a comprehensive plan that takes steps to create a more economically viable and sustainable fishery based on sound science. A comparison of Bristol Bay, Prince William Sound and Upper Cook Inlet salmon drift fisheries based on average gross earnings (Data from the State of Alaska CFEC to create Drift Avg. Gross Chart) shows that the drift fishery in Upper Cook Inlet is overcapitalized with the current management changes of the last 10 years and is trending downward and separating from these other two drift fisheries. Creating even more stringent and unwarranted management measures on the drift fleet will only exacerbate and adversely affect the economic sustainability of this 100-year fishery.

As a life-long Alaskan resident who has friends involved in guiding and one who enjoys fly-fishing Susitna tributaries and on the Kenai, hunting, and all else this great state offers—my hope is that we all can find common ground by creating long-term, sound biological and socio-economical solutions to the challenges facing us.

Once again, we need to turn our efforts towards what the real reason is for any possible reduction in production is for these northern systems. We need to know the rearing capacity of these systems and what can be done to improve the in river system's production. As mandated by federal and state law we need to create and maintain sustainable and economical fisheries based on clear and concise goals, sound biology, flexible management and realistic expectations that can be met—not politics. I encourage this board and all of us to get beyond the rhetoric and this culture of conflict.

Respectfully,

Brent M. Western

Attachments: ADF&G Skilak EZD Table
ADF&G Sockeye Enumeration—Goals & Escapements
ADF&G Susitna Management Actions/Restrictions
ADF&G Annual UCI Drift Participation Table
Drift Average Gross Earnings Chart

SKILAK EZD

Table 1.	Mean annual euphotic zone depth in Skilak Lake, 1986-2006.
Year	Mean EZD
1986	9.0
1987	8.3
1988	12.4
1989	11.8
1990	5.7
1991	6.7
1992	9.6
1993	7.7
1994	5.9
1995	8.3
1996	3.4
1997	5.8
1998	5.1
1999	7.6
2000	6.9
2001	9.2
2002	8.7
2003	4.3
2004	6.0
2005	5.8
2006	7.3
SOURCE ADF&G	

AVG. = 8.10

AVG. = 5.85

= 28% EZD REDUCTION

UCI DRIFT PARTICIPATION

No. of Drift Gillnet permits fished in UCI

Year	Permits
1985	590
1986	585
1987	587
1988	587
1989	EXXON
1990	582
1991	578
1992	581
1993	580
1994	569
1995	578
1996	562
1997	575
1998	528
1999	487
2000	513
2001	468
2002	409
2003	420
2004	441
2005	472
2006	396
2007	417

586 5-YR AVG.

429 5-YR AVG.

= -27% REDUCTION IN EFFORT

SOURCE ADF&G

* LESS FULL-TIME SEASON PARTICIPANTS - MORE FISHERMEN DECIDING JUST TO FISH THE PEAK OF THE SEASON.

SUSITNA MGMT. ACTIONS

Management actions in the N. District and Central District drift fisheries to conserve Susitna sockeye salmon

Year	EO	Action	Date
1990	5	Closed drifting in all Central District	13-Jul
	10	Restrict drifting to S. of south end of Kalgin Isl	23-Jul
1991	5	Restrict drifting to full corridor	12-Jul
	11	Closed ND	29-Jul
1992	13	Closed ND; drifting restricted to 8 mile corridor	24-Jul
	16	Closed ND; drifting restricted to 8 mile corridor	27-Jul
1993	3	Restrict drifting to full corridor	9-Jul
	6	Restrict drifting to S. of Clam Gulch Tower	16-Jul
	12	Close ND; drifting restricted to S. of north tip of Kalgin Isl	23-Jul
1994	3	Restrict drift to full corridor	11-Jul
	7	Restrict drift to S. of south tip of Kalgin Isl	18-Aug
	11	Closed ND; closed drifting in Central District	22-Jul
	19	Extra period to ND from 6:00 a.m. to 8:00 p.m.	3-Aug
1995	4	Restricted drifting to corridor	14-Jul
	8	Closed ND; Restricted drifting S. of Kalgin Isl	24-Jul
1996	7	Restricted drifting to corridor	12-Jul
	13	Closed ND; restricted drifting to S. of 60° 17'	22-Jul
1997	9	Restricted drifting to corridor	11-Jul
	13	Closed ND; restricted drifting to corridor	18-Jul
	16	Closed ND; restricted drifting to corridor	21-Jul
1998	7	Restricted drifting to corridor	13-Jul
	10	Closed ND; Closed drifting	20-Jul
	14	Closed ND; Closed drifting	27-Jul
	15	Closed ND; Closed drifting	31-Jul
1999	6	Closed Drifting	12-Jul
	12	Closed ND; Closed drifting	22-Jul
	18	Closed ND; Drifting restricted N. of north end of Kalgin	29-Jul
2000	5	Restricted drifting to corridor	10-Jul
	7	Restricted drifting to S. of south end of Kalgin	13-Jul
	14	Extended ND for 4 hrs	20-Jul
2001	10	Restricted drifting to corridor	9-Jul
	16	Closed ND; Closed drifting	23-Jul
	19	Closed ND; drifting restricted to corridor	26-Jul
2002	10	Restricted drifting to corridor	11-Jul
	14	ND gear reduced to 1 net; Drifting restricted to S. of Colliers	22-Jul
	16	ND closed; Drifting restricted to S. of south end of Kalgin	25-Jul
	20	ND closed; Drifting restricted to S. of south end of Kalgin	29-Jul
2003	8	Restricted drifting to corridor	10-Jul
	10	Restricted drifting to S. of Blanchard line	14-Jul
	21	Restricted drifting to conserve ND coho	24-Jul
	24	Restricted drifting to conserve ND coho	28-Jul
2004	15	Restrict drifting to S. of Kalg. Buoy	12-Jul
	18	Restrict drift to S. of N. end of Kalgin Isl	15-Jul
	24	Restrict drift to S. of N. end of Kalgin Isl	21-Jul
	36	Reduce ND to 2 nets; Drifting restricted to S. of line from Colliers to Kalgin Isl	26-Jul
	41	Reduce ND to 1 net; Drifting restricted to S. of line from Colliers to Kalgin Isl	29-Jul
	47	Closed ND	2-Aug
2005	7	Restrict drifting to Area 1	?
	29	Restrict drifting to Areas 1 & 2	18-Jul
	33	ND closed; Restrict drifting to S. of Kalgin buoy	21-Jul
	38	ND closed; Restrict drifting to S. of Blanchard Line	25-Jul
	43	ND closed; Restrict drifting to S. of line from Colliers to Kalgin Isl	28-Jul
	48	ND closed; Restrict drifting to S. of line from Colliers to Kalgin Isl	1-Aug
	52	ND closed	4-Aug
2006	9	Restrict drifting to Ken/Kas Sections; Closed ND to commercial fishing	10-Jul
	12	Restrict drifting to Ken/Kas Sections; Closed ND to commercial fishing	13-Jul
	16	Restrict drifting to Ken/Kas Sections; Closed ND to commercial fishing	17-Jul
	20	Closed drift gillnetting; Closed ND to commercial fishing	20-Jul
	27	Closed drift gillnetting; Closed ND to commercial fishing	24-Jul
	28	Closed drift gillnetting; Closed ND to commercial fishing	27-Jul
	31	Restricted drifting to south of Blanchard Line and Ken/Kas Section; Closed ND	31-Jul
	34	Restricted drifting to south of NW point on Kalgin Isl and Ken/Kas Section	2-Aug
	35	Closed ND to commercial fishing	3-Aug
2007	na	Restrict drifting to Area 1 by regulation	7/9 & 7/12
	9	Restrict drifting to Area 1	16-Jul
	12	Restrict drifting to Area 1	19-Jul
	17	Restrict drifting south of Blanchard; ND reduced to 1 net	23-Jul
	20	Restrict drifting south of Blanchard; ND closed	26-Jul
	25	Restrict drifting south of N. Kalgin; ND closed	30-Jul
	29	Restrict drifting south of Colliers dock to Kalgin; ND closed	2-Aug
	34	Restrict drifting south of Colliers dock to Kalgin; ND closed	6-Aug

PRE 1990 RESTRICTIONS SIMILAR

4.5 X'S INCREASE IN RESTRICTIONS COMPARED TO 10-15 YRS AGO.

SOCKEYE ENUMERATION

Appendix A.10. Enumeration goals and counts of sockeye salmon in selected Streams of Upper Cook Inlet, 1978-2004.

	Kenai River		Kasilof River		Fish Creek	
Year	Enumeration Goal	Enumeration Estimate[a,f]	Enumeration Goal	Enumeration Estimate[a,f]	Enumeration Goal	Enumeration Estimate[b]
1978	350,000-500,000	398,900	75,000-150,000	116,600	0	3,555
1979	350,000-500,000	285,020	75,000-150,000	152,179	0	68,739
1980	350,000-500,000	464,038	75,000-150,000	184,260	0	62,828
1981	350,000-500,000	407,639	75,000-150,000	256,625	0	50,479
1982	350,000-500,000	619,831	75,000-150,000	180,239	50,000	28,164
1983	350,000-500,000	630,340	75,000-150,000	210,271	50,000	118,797
1984	350,000-500,000	344,571	75,000-150,000	231,685	50,000	192,352
1985	350,000-500,000	502,820	75,000-150,000	505,049[g]	50,000	68,577
1986	350,000-500,000	501,157	75,000-150,000	275,963	50,000	29,800
1987	400,000-700,000	1,596,871	150,000-250,000	249,250	50,000	91,215
1988	400,000-700,000	1,021,469	150,000-250,000	204,000[d]	50,000	71,603
1989	400,000-700,000	1,599,959	150,000-250,000	158,206	50,000	67,224
1990	400,000-700,000	659,520	150,000-250,000	144,289	50,000	50,000
1991	400,000-700,000	647,597	150,000-250,000	238,269	50,000	50,500
1992	400,000-700,000	994,798	150,000-250,000	184,178	50,000	71,385
1993	400,000-700,000	813,617	150,000-250,000	149,939	50,000	117,619
1994	400,000-700,000	1,003,446	150,000-250,000	205,117	50,000	95,107
1995	450,000-700,000	630,447	150,000-250,000	204,935	50,000	115,000
1996	550,000-800,000	797,847	150,000-250,000	249,944	50,000	63,160
1997	550,000-825,000	1,064,818	150,000-250,000	266,025	50,000	54,656
1998	550,000-850,000	767,558	150,000-250,000	273,213	50,000	22,853
1999	750,000-950,000	803,379	150,000-250,000	312,587	50,000	26,667
2000	600,000-850,000	624,578	150,000-250,000	256,053	50,000	19,533
2001	600,000-850,000	650,036	150,000-250,000	307,570	50,000	43,469
2002	750,000-950,000	957,924	150,000-250,000	226,682	20,000 - 70,000	90,483
2003	750,000-959,000	1,181,309	150,000-250,000	359,633	20,000 - 70,000	92,298
2004	850,000-1,100,000	1,385,981	150,000-250,000	577,581	20,000 - 70,000	22,157

	Yentna River		Crescent River		Packers Creek	
Year	Enumeration Goal[c]	Enumeration Estimate[a,f]	Enumeration Goal	Enumeration Estimate[a,f]	Enumeration Goal	Enumeration Estimate[b]
1978	100,000		0	N/C	0	N/C
1979	100,000		50,000	86,654	0	N/C
1980	100,000		50,000	90,863	0	16,477
1981	100,000	139,401	50,000	41,213	0	13,024
1982	100,000	113,847	50,000	58,957	0	15,687
1983	100,000	104,414	50,000	92,122	0	18,403
1984	100,000	149,375	50,000	118,345	0	30,684
1985	100,000	107,124	50,000	128,628	0	36,850
1986	100,000-150,000	92,076	50,000	20,385[e]	0	29,604
1987	100,000-150,000	66,054	50,000-100,000	120,219	0	35,401
1988	100,000-150,000	52,330	50,000-100,000	57,716	15,000-25,000	18,607
1989	100,000-150,000	96,269	50,000-100,000	71,064	15,000-25,000	22,304
1990	100,000-150,000	140,290	50,000-100,000	52,238	15,000-25,000	31,868
1991	100,000-150,000	109,632	50,000-100,000	44,578	15,000-25,000	41,275
1992	100,000-150,000	66,054	50,000-100,000	58,229	15,000-25,000	28,361
1993	100,000-150,000	141,694	50,000-100,000	37,556	15,000-25,000	40,869
1994	100,000-150,000	128,032	50,000-100,000	30,355	15,000-25,000	30,788
1995	100,000-150,000	121,479	50,000-100,000	52,311	15,000-25,000	29,473
1996	100,000-150,000	90,781	50,000-100,000	28,729	15,000-25,000	19,095
1997	100,000-150,000	157,822	50,000-100,000	70,768	15,000-25,000	33,846
1998	100,000-150,000	119,623	50,000-100,000	62,257	15,000-25,000	17,732
1999	100,000-150,000	99,029	25,000-50,000	66,519	15,000-25,000	25,648
2000	100,000-150,000	133,094	25,000-50,000	56,599	15,000-25,000	20,151
2001	100,000-150,000	83,532	25,000-50,000	78,081	15,000-25,000	no count
2002	90,000-160,000	78,591	25,000-50,000	62,833	15,000-25,000	no count
2003	90,000-160,000	180,813	25,000-50,000	122,457	15,000-25,000	no count
2004	90,000-160,000	71,281	25,000-50,000	103,201	15,000-25,000	no count

AVG. = 92K+

EXXON

AVG. = 92K+

[a] Derived from sonar counters unless otherwise noted

[b] Weir Counts.

[c] Yentna River escapement goal only.

[d] Combined counts from weirs on Bear and Glacier Flat Creeks and surveys of remaining spawning streams; sonar count was 151,8

[e] Counts through 16 July only

[f] Enumeration estimates prior to 2004 reflect minor adjustments to the escapement databas

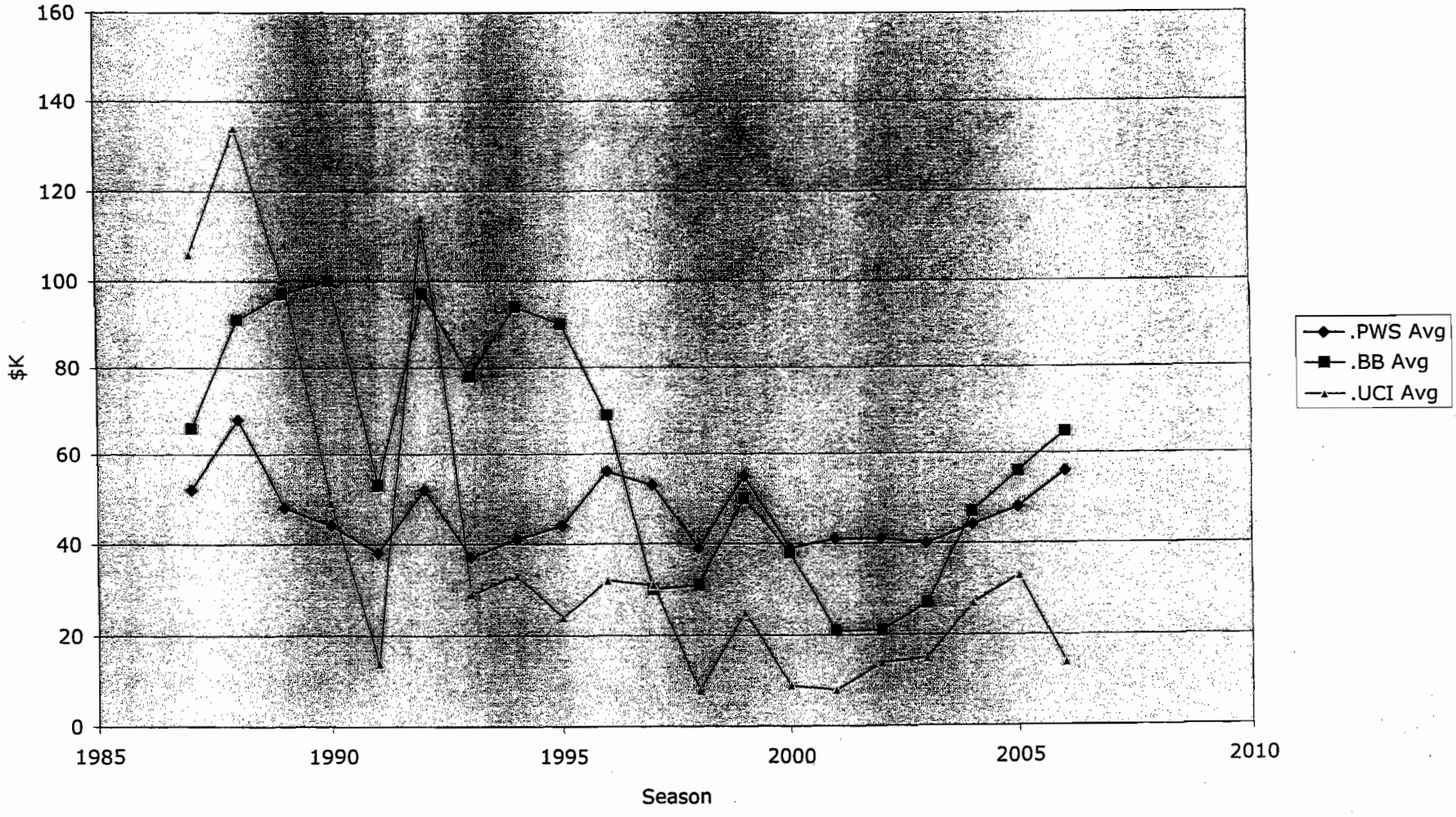
2005 36,921

2006 92,840

2007 79,901

DRIFT

BB-PWS-UCI Avg. Gross Earnings Per Permit



*1989 Est.-Exxon

Testimony Board of Fish, February 2, 2008 RC 80

Live in Soldotna representing Kenai River Sportfishing Association.

Please follow along w/ RC 27 and RC 30.

NO drastic changes are needed, the current management plans needs only small modifications and allocation moderation.

Windows are successful at providing sport and personal use opportunities for Alaskans filling their freezers **(RC 27, pg 40, Figure 18)**. Windows can additionally allow equal harvest throughout the duration of the run to avoid excessive harvest early or late in the run and avoid temporal shifts in run timing.

Currently the status quoi we are successfully providing fish for sport, personal use, and commercial fisheries interests combined. **(RC 27, pg 10, Figure 4)**.

Commercial harvest levels are exceeding the 50 year average; two out of the last five years were near record levels **(RC 30, pg 30 figure 23).**

Management plans have ensured meeting minimum escapements for virtually all Upper Cook Inlet stocks every year, except in the Northern District.

The current plans work and are not broken, but when fisheries managers go outside their management objectives, the sport fishery has problems such as the Kasilof In-River Opportunity, lack of returns in Northern District.

The 2002 through 2006 average commercial harvest of 3.7 million sockeye per year is 70% greater than the preceding 5 year average; we are at a 70% harvest rate.

Large escapements in the Kenai and Kasilof Rivers are not a biological emergency. Biological risks are being misrepresented in order to allocate more fish to Commercial Fisherman.

Ty Wyatt
P O Box 1942
Soldotna, AK 9669

Submitted By: Mac Minard

RC81

Sockeye/Pike relationship - Susitna/Yentna

PIKE	LAKE	RIVER		ADULT PROD	S/R 1:4	2006 ESC	2007 ESC	
	Bunco	SU		1,600	400			
	Byers	SU		37,200	9,300	3,074	1,701	
(P)	Caswell	SU		13,700	3,425			
	Larson	SU		45,100	11,275	56,305	47,819	
(P)	Neil	SU		7,600	1,900			
(P)	Red Shirt	SU	PNS	69,500	17,375			
	Spink	SU		23,500	5,875			
	Stephan	SU		63,700	15,925		4,120	
(P)	Sucker	SU		8,300	2,075			
(P)	Trapper	SU	PNS	16,800	4,200			
				287,000	71,750	59,379	53,640	**28%**
(P)	Chelatna	YE		389,200	97,300	13,266	11,671	
(P)	Eightmile	YE	PNS	5,600	1,400			
(P)	Fish	YE	PNS	10,600	2,650			
(P)	Fish Creek	YE	PNS	9,000	2,250			
(P)	Hewitt O^2	YE		60,600	15,150	2,507		
(P)	Judd	YE		59,500	14,875	40,630	58,187	
(P)	Lockwood	YE		11,000	2,750			
	Movie	YE		6,700	1,675			
	Puntilla	YE		8,800	2,200			
	Red Salmon	YE		3,400	850			
(P)	Shell	YE		103,800	25,950	69,747	26,784	
(P)	Swan	YE		11,000	2,750		5,474	
	Trinity	YE		19,300	4,825			
	Whiskey	YE		23,600	5,900			
				722,100	180,525	126,150	102,116	**72%**
	Total - Susitna/Yentna			**1,009,100**	**252,275**			

Susitna represents 287,000 / 1,009,100 posssible adults or 28%

Yentna represents 722,100 / 1,009,100 possible adults or 72%

United Cook Inlet Drift Association
43961 K-Beach Road, Suite E
Soldotna, Alaska 99669

Robert Mac

Attn: Denby 465-6141

Roland will e-mail you later. A.

AN ESTIMATE OF ADULT SOCKEYE SALMON (*Oncorhynchus nerka*) PRODUCTION, BASED ON EUPHOTIC VOLUME, FOR THE SUSITNA RIVER DRAINAGE, ALASKA.

by

Kenneth E. Tarbox

and

Gary B. Kyle

Regional Information Report[1] No. 2S89-01

Alaska Department of Fish and Game
Division of Commercial Fisheries
Division of Fisheries Rehabilitation, Enhancement, and Development
333 Raspberry Road
Anchorage, Alaska 99518

January 1989

[1]Contribution 89-1 from the Soldotna area office. The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished divisional reports. These reports frequently serve diverse ad hoc informational purposes or archive basic uninterpreted data. To accommodate timely reporting of recently collected information, reports in this series undergo only limited internal review and may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Division of Commercial Fisheries.

Table 2. Estimated adult sockeye salmon production based on euphotic volume for selected lakes of the Susitna River drainage lakes, Alaska.

Lake	Surface Area (acres)	Euphotic Depth[a] (m)	Euphotic Volume (10^6 m^3)	Adult Production[b] (fish)
Bunco	106	1.5	0.64	1,600
Byers 4	368	10.0	14.89	37,200
Caswell	159	8.5	5.47	13,700
Chelatna	4,181	9.2	155.67	389,200
Eightmile	115	4.8	2.23	5,600
Fish Creek	111	8.2	3.61	9,000
Fish	132	8.0	4.24	10,600
Hewitt	697	8.6	24.25	60,600
Judd	316	18.6	23.79	59,500
Larson	437	10.2	18.04	45,100
Lockwood	233	4.7	4.43	11,000
Movie	110	6.0	2.67	6,700
Neil	115	6.5	3.03	7,600
Puntilla	90	9.7	3.53	8,800
Red Salmon	113	3.0	1.37	3,400
Red Shirt	1,272	5.4	27.80	69,500
Shell	1,487	6.9	41.52	103,800
Spink	252	9.2	9.38	23,500
Stephan	899	7.0	25.47	63,700

continued

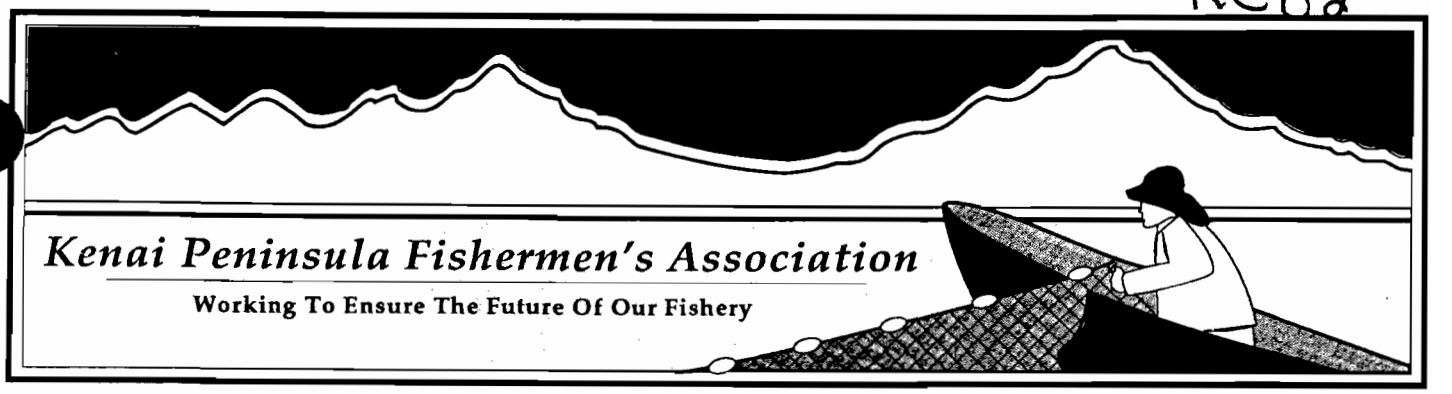
14/24

Table 2. (p 2 of 2).

Lake	Surface Area (acres)	Euphotic Depth[a] (m)	Euphotic Volume (10^6 m^3)	Adult Production[b] (fish)
Sucker	273	3.0	3.31	8,300
Swan	385	2.8	4.36	11,000
Trapper	1,188	1.4	6.73	16,800
Trinity	308	6.2	7.73	19,300
Whiskey	271	8.6	9.43	23,600
TOTAL	13,618		403.50	1,009,100

[a] This value represents a seasonal mean.
[b] Estimated adult sockeye salmon production was calculated by using a total return of 2500 adults per euphotic volume unit ($10^6 m^3$).

RC82



43961 Kalifornsky Beach Road • Suite F • Soldotna, Alaska 99669
(907) 262-2492 • Fax: (907) 262-2898 • E Mail: kpfa@alaska.net

February 2, 2008

Chairman Morris,

Members of the Board, my name is Paul A. Shadura II, I am currently the executive director of the Kenai Peninsula Fishermen's Association. I am also a set net fishermen with direct descendants of fishing families who have harvested, traded and bartered on the Salamantof and Kalifonsky Beach areas for over a century. I also am a representative of the South K-Bch Independent fishermen's (SOKI) alliance but I reserve the right to speak on those particular proposals at a different time. I am also one of three elected commercial fishing representatives on the Kenai-Soldotna Advisory Committee.

At this time I would like to formally protest the untimely presentation of information/reports/and so called "options" distributed by the department of Fish and Game. Even with special meetings, statewide ACR's and directed letters, the free flow of information prior to this meeting has been severally hindered . KPFA members, commercial fishermen of the south central fishing community feel that we have been substantially and adversely impacted by the inability of the state's managers to adequately supply us with the "Best Available Science". How can problems be adequately understood or solutions be addressed if the affected stakeholders do not have unbiased data available to them. How can the stakeholders assist the Board in making decisions when they only have anecdotal, interest group information to rely on. How can this Board integrate the concepts of Optimum Sustained Yield or Lost Yield within their management plans if they do not have the best information available to assess adaptive management practices or ecosystem, habitat changes?

At this time we would like to draw your attention to PC 45, RC 63.

Thank You,

Paul A. Shadura II
Exe. Director

RC 83

ALASKA DEPARTMENT OF FISH & GAME

Commercial Fisheries Division

Deliberation Materials
Committees A, B, & C

UCI BOF Meetings
February 2008
Anchorage

TABLE OF CONTENTS

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COMMITTEE C: PINK, KENAI, AND KASILOF MANAGEMENT PLANS

COMMITTEE A

Proposal 73
Commercial herring harvest by fishery, Upper Cook Inlet, 1973-2007.

	Harvest (Tons)				
Year	Eastside	Chinitna Bay	Tuxedni Bay	Kalgin Isl.	Total
1973	13.8	-	-		13.8
1974	36.7	-	-		36.7
1975	6.2	-	-		6.2
1976	5.8	-	-		5.8
1977	17.3	-	-		17.3
1978	8.3	55.3	-		63.6
1979	67.3	96.2	24.8		188.3
1980	37.4	20.0	86.5		143.9
1981	86.2	50.5	84.9		221.6
1982	60.2	91.8	50.2		202.2
1983	165.3	49.2	238.2		452.7
1984	117.5	90.6	159.0		367.1
1985	121.7	47.4	220.5		389.6
1986	178.9	111.1	191.9		481.9
1987	130.5	65.1	152.5		348.1
1988	50.7	23.4	14.1		88.2
1989	55.2	122.3	34.3		211.8
1990	55.4	55.9	16.1		127.4
1991	13.4	15.7	1.6		30.7
1992	24.7	10.4	*0.0*		35.1
1993	*0.0*	*0.0*	*0.0*		-
1994	*0.0*	*0.0*	*0.0*		-
1995	*0.0*	*0.0*	*0.0*		-
1996	*0.0*	*0.0*	*0.0*		-
1997	*0.0*	*0.0*	*0.0*		-
1998	19.5	*0.0*	*0.0*		19.5
1999	10.4	*0.0*	*0.0*		10.4
2000	14.7	*0.0*	*0.0*		14.7
2001	9.9	*0.0*	*0.0*		9.9
2002	16.2	1.9	0.0		18.1
2003	3.7	0.0	0.0		3.7
2004	6.7	0.1	0.0		6.8
2005	17.1	0.2	0.0	0.0	17.3
2006	14.4	0.0	0.0	0.0	14.4
2007	13.4	0.0	0.0	0.0	13.4

Proposal 76-77. Map of Kenai and Kasilof Section

Latitude and Longitude are based on the North American Datum of 1983 (NAD 83) which is equilivalent to the World Geodetic System 1984 (WGS 84).

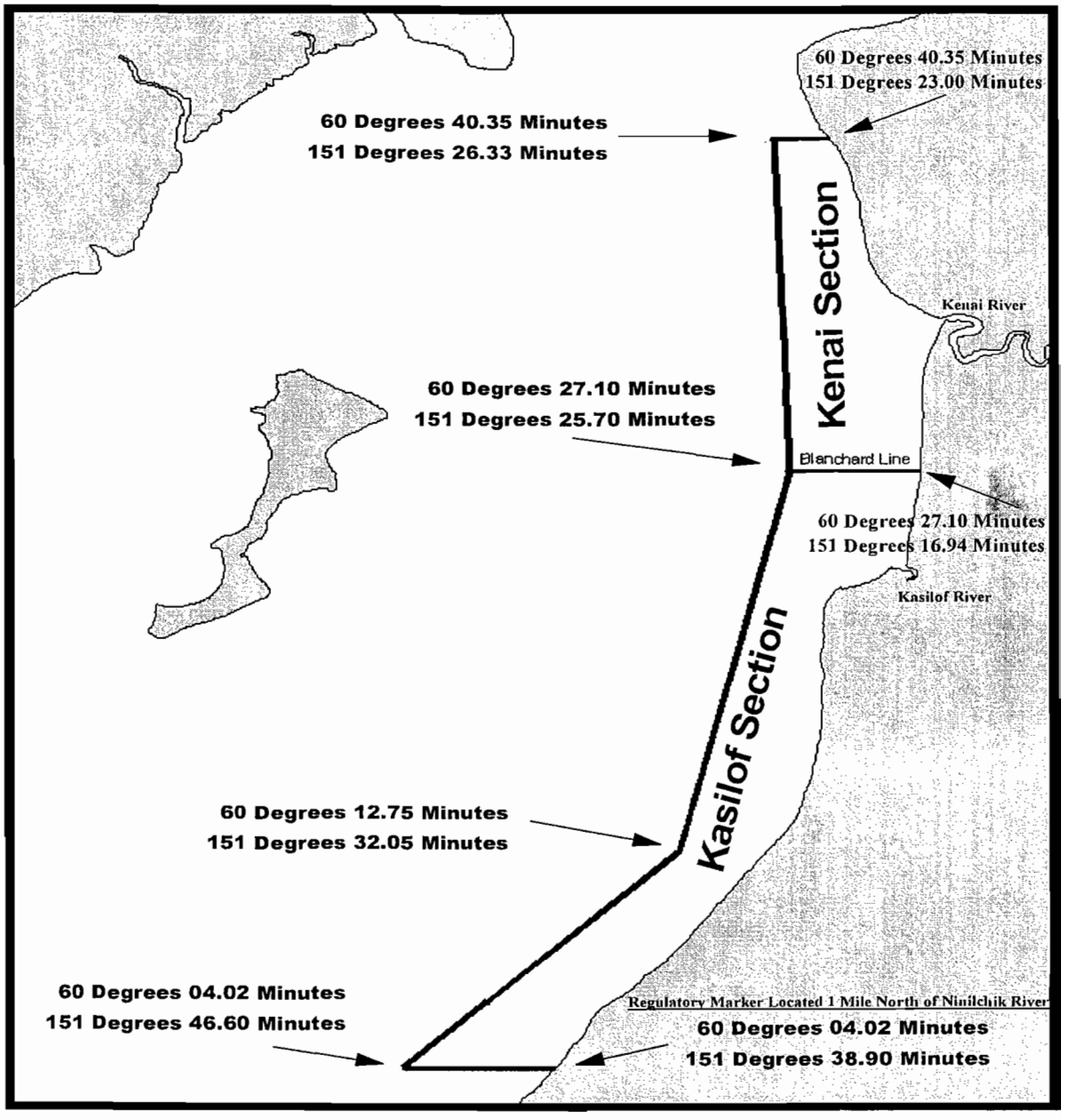
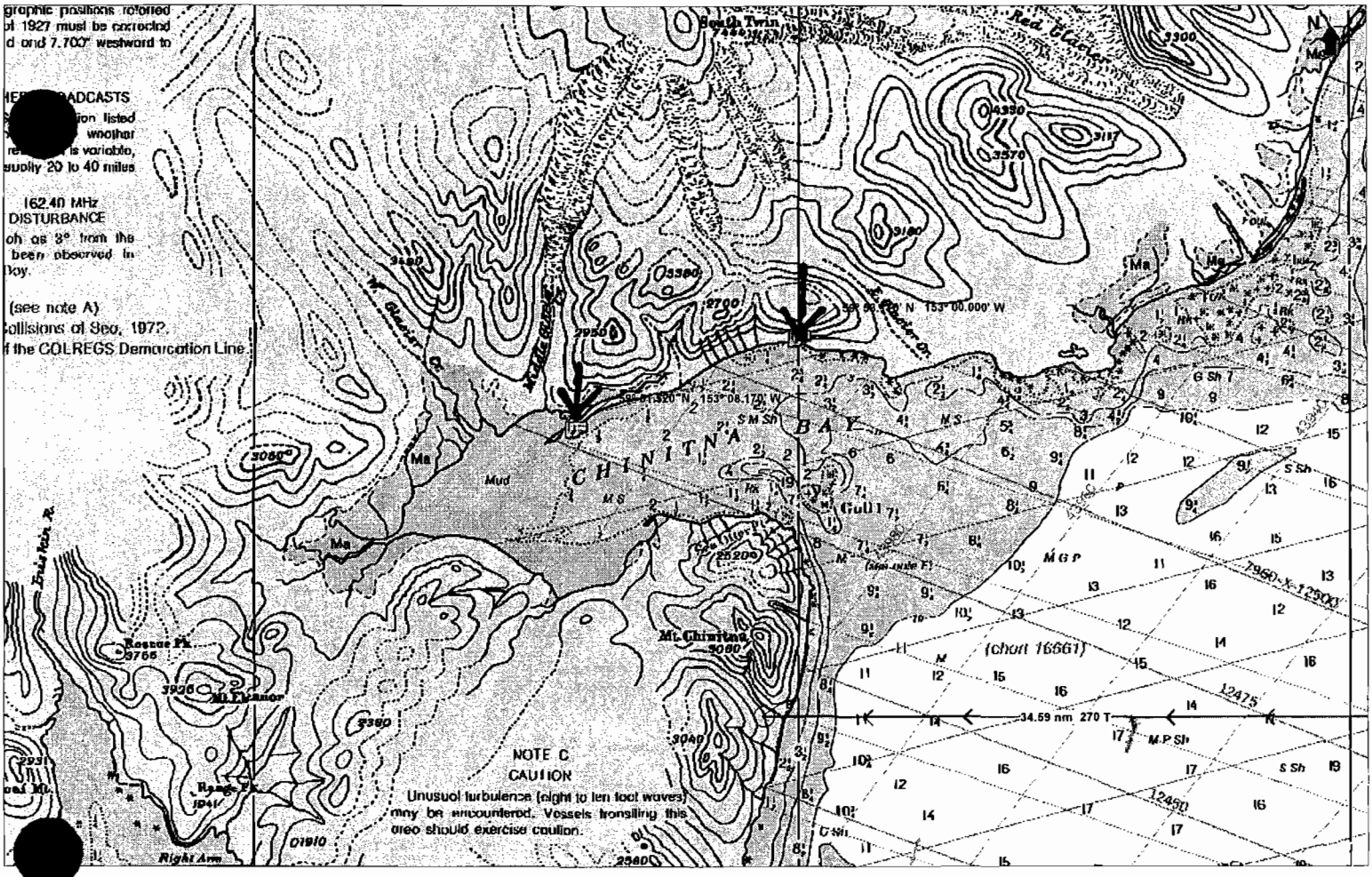


Figure 1. Map of the Kenai and Kasilof Sections with waypoint descriptions.

COOK INLET SOUTHERN PART
Chart 16640_1 (BSB Electronic Charts) Depth Units: FATHOMS



DO NOT USE FOR NAVIGATION PURPOSES
Printed by ChartView™ from Nautical Software (503) 579-1414

Prof 78

Proposal 79: Remove restrictions from drift and set gillnet fisheries for coho protection

Table 26.–Estimated abundance of coho salmon in the Kenai River during selected time intervals, 1999 through 2003, with estimates of escapement.

Year[a]	Estimate Type	Estimate Interval[b]	Total Abundance at Fish Wheels		Capture/Tagging Mortality		Discounted	Live Abundance		Upstream Sport Harvest[e,f]		Escapement	
			Estimate	SE	Estimate[c]	SE	Fish Count[d]	Estimate	SE	Estimate	SE	Estimate	SE
1999	Pooled Petersen	8/ 6 - 9/30	23,001	5,154	175	18	18	22,808	5,157	15,112	1,171	7,696	5,288
2000	Pooled Petersen	8/ 1 - 10/ 6	89,918	9,295	515	93	40	89,363	9,322	16,621	1,165	72,742	9,395
2001	ML Darroch	8/ 2 - 9/30	93,524	16,502	528	88	12	92,984	16,502	17,862	1,540	75,122	16,574
2002	ML Darroch	8/ 2 - 9/30	156,960	20,256	942	235	26	155,992	20,255	22,380	1,442	133,612	20,306
2003	ML Darroch	8/ 4 - 9/30	99,309	36,085	190	74	19	99,100	36,085	19,185	1,372	79,915	36,111

[a] Estimates of abundance pertain to the riverkilometer 31 capture location in 1999 and riverkilometer 45 in 2000-2003.

[b] Estimates of abundance pertain to this temporal interval.

[c] Estimated number of all tagged fish that did not migrate upstream into the recapture reach based on rates of radio-tagged fish (=M(1-p^)).

[d] Atypically injured/stressed fish or adipose finclipped sacrificed fish (from Appendices A3, B3, C3, D3, and E3) ; these fish were excluded from model data.

[e] Source: Statewide harvest Survey. Sport harvest occurring upstream from the locations to which the abundance estimates pertain (in 1999, sum of SWHS estimates upstream of Soldotna Bridge including Skilak Lake, Hidden Lake, and Russian River; in 2000-2003, 1/2 of the SWHS estimate for the river section between the Soldotna Bridge and the Moose River confluence plus all estimated harvest upstream from the Moose River including Skilak Lake, Hidden Lake, and Russian River).

[f] Source: Statewide Harvest Survey. In 2002 and 2003, an "unspecified river reach" category was added to the SWHS for the Kenai River. Prior to calculating the sport harvest upstream from river kilometer 45, the estimates for this unspecified category were apportioned among the four specified mainstem river reaches based on the proportion of the total mainstem harvest represented by the reach-specific harvest reported (standard errors were recalculated according to standard procedures).

proposal 79 - estimated abundance of coho salmon in the Kenai River.xls

Proposal 79: Estimates of total return, exploitation, and marine survival for Kenai River coho salmon

Table 27.–Estimates of total return, exploitation, and marine survival for coho salmon from the Kenai River, 1999 through 2003.

	Year				
Estimate	1999	2000	2001	2002	2003
Abundance at Fish Wheels[a]	23,001	89,918	93,524	156,960	99,309
SE	5,154	9,295	16,502	20,256	36,085
Downstream Sport Harvest[b,c]	20,442	35,868	37,142	43,724	32,759
SE	1,454	1,740	1,878	2,516	1,908
Personal Use Harvest	1,009	1,449	1,555	1,721	1,332
SE	108	62	105	96	68
Commercial Harvest[d]	3,894	2,965	1,934	6,115	2,578
SE	326	255	176	499	263
Total Run	48,346	130,200	134,155	208,520	135,978
SE	5,366	9,460	16,610	20,418	36,137
Total Harvest[e]	40,457	56,903	58,493	73,940	55,854
SE	1,898	2,110	2,438	2,934	2,366
Exploitation Rate[f]	0.837	0.437	0.436	0.355	0.411
SE	0.101	0.036	0.057	0.037	0.110
Smolt Abundance in Prior Year[d]	799,687	578,355	601,236	641,693	626,335
SE	42,111	19,884	25,454	14,436	27,409
Marine Survival	0.060	0.225	0.223	0.325	0.217
SE	0.007	0.018	0.029	0.033	0.058

[a] Repeated from Table 28 for convenience.

[b] Source: Statewide Harvest Survey. Sport harvest occurring downstream from the locations to which the abundance estimates pertain (in 1999, sum of SWHS estimates downstream of Soldotna Bridge; in 2000-2003, 1/2 of the SWHS estimate for the river section between the Soldotna Bridge and the Moose River confluence plus all estimated sport harvest downstream from Soldotna Bridge).

[c] Source: Statewide Harvest Survey. In 2002 and 2003, an "unspecified river reach" category was added to the SWHS for the Kenai River. Prior to calculating the sport harvest downstream from river kilometer 45, the estimates for this category were apportioned among the four specified mainstem river reaches based on the proportion of the total mainstem harvest represented by the reach-specific harvest reported (standard errors were recalculated according to standard procedures).

[d] Sources: 1999-Massengill 2007; 2000 and 2001-Massengill and Carlon 2004 *a* and *b*; 2002 and 2003-Massengill and Carlon 2007 *a* and *b*.

[e] Aggregate of all harvest estimates from Tables 28 and 29 (sport, commercial, and personal-use/subsistence); repeated for convenience.

[f] (Estimated Grand Total Harvest) / (Estimated Total Return).

Proposal 79: Table of estimated harvest, total return and exploitation of Kenai River coho salmon (2000-2004)

Run Component	2000	2001	2002	2003	2004	No. Fish	Average Exploitation	Average No. of Fish
Escapement[a]	72,742	75,122	133,612	79,915	95,394	91,357	57.6%	91,357
Research Mortality/Discounted Fish	555	540	968	209	2,106	876	0.6%	876
Sport Harvest[b]	52,489	55,004	66,104	51,944	72,565	59,621	37.6%	59,621
Personal Use Harvest	1,449	1,555	1,721	1,332	2,661	1,744	1.1%	1,744
Commercial Harvest[c]	2,965	1,934	6,115	2,578	11,149	4,948	3.1%	4,948
Total Run[d]	130,200	134,155	208,520	135,978	183,875	158,546	100.0%	158,546
Harvest and Harvest Rate[e]	56,903	58,493	73,940	55,854	86,375	66,313	41.83%	66,313

a Escapement Source: Carlon and Evans 2007; Massengill and Evans 2007.

b Source: Statewide Harvest Survey.

c Sources: Massengill and Carlon 2004 a,b; Massengill and Carlon 2007 a,b; Massengill 2007.

d Aggregate of all harvest estimates (sport, commercial, and personal-use or subsistence and escapment).

e Harvest Rate = (Estimated Total Harvest) / (Estimated Total Return).

Proposals 79-81; 83-86

Estimated Harvest of Kenai River Coho Salmon During Commercial Season Extension

Fishery	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	Total	Daily Avg
ESSN Set Net	1,954	1,767	1,913	2,278	1,968	9,880	**1,976**
Regular Drift	81	72	85	34	77	349	**70**
Corridor Only Drift	51	51	51	51	51	256	**51**
Reg.Drift and Set Net	2,035	1,839	1,998	2,312	2,045	10,229	**2,046**
Corridor and Set Net	2,005	1,818	1,964	2,329	2,019	10,136	**2,027**

Estimated daily harvest of Kenai River coho salmon in some Upper Cook Inlet fisheries under differing fishery participation scenarios.[a,b,c]

	Scenario if August participation is similar to **1990s average**		Scenario if August participation is similar to **05-07average**	
Upper Cook Inlet Fisheries	Average Daily harvest	Daily exploitation increase	Daily harvest	Daily exploitation increase
ESSN Set Net[d]	1,976	1.25%	1,205	0.76%
Regular drift[e]	295	0.19%	186	0.12%
Corridor only drift[f]	52	0.03%	33	0.02%
Combined Fisheries				
Regular drift and ESSN	2,271	1.43%	1,392	0.88%
Corridor and ESSN	2,028	1.28%	1,238	0.78%

Proposal 79-88

Kenai River sockeye salmon passage estimates

% of passage counted before August		(August only)
2000-2007 Avg =	69%	31%
1978-1999 Avg =	84%	16%
All Years =	80%	20%

Year	Aug Passage	All Passage	Aug %	After Aug 10
1978	40,400	398,900	10.1%	2,100
1979	14,251	285,020	5.0%	5,350
1980	19,761	464,038	4.3%	10,393
1981	21,116	407,639	5.2%	0
1982	42,576	619,831	6.9%	0
1983	68,758	630,340	10.9%	2,621
1984	24,832	344,571	7.2%	0
1985	44,923	502,820	8.9%	23,421
1986	51,833	501,157	10.3%	0
1987	269,298	1,596,871	16.9%	33,262
1988	156,608	1,021,469	15.3%	48,200
1989	247,052	1,599,959	15.4%	55,006
1990	87,745	659,520	13.3%	0
1991	104,971	647,597	16.2%	7,822
1992	156,155	994,798	15.7%	44,325
1993	151,554	813,617	18.6%	24,501
1994	532,377	1,003,446	53.1%	230,237
1995	121,712	630,447	19.3%	24,960
1996	153,988	797,847	19.3%	14,652
1997	325,737	1,064,818	30.6%	229,775
1998	234,776	767,558	30.6%	29,123
1999	215,905	803,379	26.9%	63,855
2000	66,746	624,578	10.7%	0
2001	108,926	650,036	16.8%	9,415
2002	194,157	957,924	20.3%	27,620
2003	147,594	1,181,309	12.5%	0
2004	463,527	1,385,981	33.4%	182,584
2005	531,050	1,376,452	38.6%	330,088
2006	861,036	1,499,692	57.4%	529,929
2007	312,047	867,572	36.0%	147,461
Avg	192,380	Average =	20%	69,223

Proposals 79-86

Upper Cook Inlet Commercial Salmon Harvest in stat areas 24430 & 24440 (all beaches north of the Kasilof River) from August 11-August 15

Year	Chinook	Sockeye	Coho	Even year Pink	Odd year Pink	Chum	Total
1980	102	944	7,013	78,512		507	87,078
1981	37	372	1,170		7	191	1,777
1982	158	1,728	17,263	87,551		655	107,355
1983	84	3,707	1,891		7	113	5,802
1984	33	449	1,394	13,158		16	15,050
1985	77	5,577	1,882		52	192	7,780
1986	155	5,215	3,083	32,351		161	40,965
1987	61	3,154	2,477		4	36	5,732
1988	144	6,810	9,752	31,866		278	48,850
1989	75	7,628	6,498		65	119	14,385
1990	60	5,763	6,630	62,074		92	74,619
1991	34	6,156	3,546		24	654	10,414
1992	35	14,243	5,602	13,051		57	32,988
1993	14	1,425	1,446		19	17	2,921
1994	160	16,285	7,229	13,768		137	37,579
1995	121	16,626	4,449		24	181	21,401
1996	43	2,181	1,153	8,989		32	12,398
MEAN	82	5,780	4,852	37,924	25	202	31,006

Proposal 80

UCI Set Gillnet Fishing Periods in Kenai (24430) & Salamatof (24440) Sections Only (i.e., times when Kasilof Section not open, but Kenai and E. Forelands were)

note: Kenai Section during this time included waters north of the Kasilof River to the Kenai River

note: Salamatof Section during this time included waters north of the Kenai River to N. Dist. boundary

Year	Hrs Opened
1980	0
1981	0
1982	36
1983	0
1984	0
1985	0
1986	0
1987	0
1988	142
1989	163
1990	57
1991	0
1992	0
1993	250
1994	0
1995	0
1996	0
1997	0
1998	0
1999	0
2000	0
2001	0
2002	0
2003	0
2004	0
2005	0
2006	0
2007	0

	CHINOOK		SOCKEYE		COHO	
Date	Daily	Cum	Daily	Cum	Daily	Cum
7/29/82	317	317	29,674	29,674	4,797	4,797
8/1/82	182	499	3,471	33,145	3,490	8,287

	CHINOOK		SOCKEYE		COHO	
Date	Daily	Cum	Daily	Cum	Daily	Cum
7/19/88	181	181	95,595	95,595	1,228	1,228
7/27/88	156	337	35,250	130,845	745	1,973
7/28/88	186	523	52,710	183,555	1,100	3,073
7/30/88	227	750	18,997	202,552	1,875	4,948
7/31/88	332	1,082	25,362	227,914	2,707	7,655

	CHINOOK		SOCKEYE		COHO	
Date	Daily	Cum	Daily	Cum	Daily	Cum
7/15/89	189	189	129,377	129,377	659	659
7/16/89	223	412	272,700	402,077	986	1,645
7/18/89	181	593	97,843	499,920	240	1,885
7/19/89	191	784	251,221	751,141	655	2,540
7/22/89	100	884	237,787	988,928	1,135	3,675
8/3/89	83	967	25,672	1,014,600	2,187	5,862

	CHINOOK		SOCKEYE		COHO	
Date	Daily	Cum	Daily	Cum	Daily	Cum
7/25/90	97	97	35,940	35,940	337	337
7/26/90	194	291	42,151	78,091	690	1,027
7/29/90	77	368	66,038	144,129	2,733	3,760

	CHINOOK		SOCKEYE		COHO	
Date	Daily	Cum	Daily	Cum	Daily	Cum
7/22/93	306	306	65,521	65,521	615	615
7/24/93	380	686	41,700	107,221	868	1,483
7/27/93	461	1,147	57,413	164,634	1,348	2,831
7/28/93	398	1,545	75,359	239,993	3,155	5,986
7/29/93	297	1,842	53,363	293,356	3,782	9,768
8/1/93	233	2,075	35,345	328,701	1,748	11,516
8/3/93	183	2,258	11,326	340,027	1,392	12,908
8/4/93	142	2,400	19,419	359,446	2,199	15,107
8/7/93	61	2,461	9,678	369,124	1,520	16,627

Proposal 87: Upper Subdistrict Set Gillnet Sockeye Salmon Harvest from August 1 to August 15, 1980-2007

5% days

harvest after 5% closures

Using the 5% rule for 2 consecutive days, the ESSN fishery would have lost more than 2.3 million sockeye salmon from 1980-2007. The average annual loss for years when the season would have closed early is 89,000

	1980		1981		1982		1983		1984		1985		1986		1987	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
1-Aug	3,042	552,540		489,613	3,471	958,964	22,601	1,496,696		474,909	23,219	1,376,768	44,446	1,526,676	58,218	3,199,518
2-Aug		552,540		489,613	3,594	962,558		1,496,696		474,909	38,513	1,415,281	23,693	1,550,369	53,003	3,252,521
3-Aug		552,540	3,385	492,998		962,558		1,496,696	8,447	483,356	43,595	1,458,876	17,458	1,567,827	32,628	3,285,149
4-Aug	3,281	555,821		492,998	3,286	965,844		1,496,696		483,356	26,858	1,485,734	24,154	1,591,981	37,043	3,322,192
5-Aug		555,821		492,998		965,844		1,496,696		483,356	25,421	1,511,155		1,591,981	39,035	3,361,227
6-Aug		555,821		492,998	1,784	967,628		1,496,696	4,345	487,701	23,006	1,534,161	25,634	1,617,615	52,998	3,414,225
7-Aug		555,821	1,437	494,435		967,628		1,496,696		487,701		1,534,161		1,617,615	25,478	3,439,703
8-Aug	2,276	558,097		494,435		967,628		1,496,696		487,701		1,534,161	11,073	1,628,688		3,439,703
9-Aug		558,097		494,435	1,196	968,824		1,496,696		487,701	12,864	1,547,025	10,516	1,639,204		3,439,703
10-Aug		558,097	1,118	495,553		968,824	6,181	1,502,877	1,850	489,551		1,547,025	9,311	1,648,515	10,901	3,450,604
11-Aug	525	558,622		495,553	819	969,643		1,502,877		489,551		1,547,025	5,997	1,654,512		3,450,604
12-Aug		558,622		495,553	527	970,170	2,589	1,505,466		489,551	14,175	1,561,200		1,654,512		3,450,604
13-Aug	489	559,111		495,553	518	970,688		1,505,466	722	490,273		1,561,200		1,654,512		3,450,604
14-Aug	453	559,564	450	496,003		970,688		1,505,466		490,273		1,561,200		1,654,512	3,866	3,454,470
15-Aug	248	559,812		496,003	735	971,423	1,458	1,506,924		490,273		1,561,200	3,649	1,658,161		3,454,470
	3,991		**1,568**		**8,865**		**4,047**		**2,572**		**145,919**		**107,792**		**201,949**	

	1988		1989		1990		1991		1992		1993		1994		1995	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
1-Aug	20,917	2,385,386	97,595	4,363,877		1,078,463	42,993	723,177	39,373	2,409,747	35,345	1,836,373	81,716	1,219,099	16,308	884,272
2-Aug		2,385,386	67,004	4,430,881		1,078,463	51,634	774,811	54,643	2,464,390	39,697	1,876,070	58,161	1,277,260		884,272
3-Aug		2,385,386	25,672	4,456,553	13,318	1,091,781	17,978	792,789	50,428	2,514,818	11,326	1,887,396	38,404	1,315,664		884,272
4-Aug		2,385,386	48,024	4,504,577		1,091,781	15,464	808,253	47,960	2,562,778	19,419	1,906,815	42,424	1,358,088	26,866	911,138
5-Aug	26,211	2,411,597		4,504,577		1,091,781	18,617	826,870	91,711	2,654,489		1,906,815	36,296	1,394,384	11,219	922,357
6-Aug		2,411,597		4,504,577	10,470	1,102,251		826,870	60,338	2,714,827	13,133	1,919,948	16,619	1,411,003		922,357
7-Aug		2,411,597	24,442	4,529,019		1,102,251		826,870	60,021	2,774,848	9,678	1,929,626	12,638	1,423,641	11,482	933,839
8-Aug	9,156	2,420,753		4,529,019		1,102,251		826,870	33,177	2,808,025		1,929,626	12,347	1,435,988		933,839
9-Aug		2,420,753		4,529,019		1,102,251	9,401	836,271		2,808,025	9,767	1,939,393		1,435,988		933,839
10-Aug		2,420,753		4,529,019	8,040	1,110,291		836,271	14,826	2,822,851		1,939,393		1,435,988		933,839
11-Aug		2,420,753	7,176	4,536,195		1,110,291		836,271		2,822,851		1,939,393		1,435,988	12,536	946,375
12-Aug	5,185	2,425,938		4,536,195		1,110,291	7,885	844,156		2,822,851		1,939,393	14,676	1,450,664		946,375
13-Aug		2,425,938		4,536,195	5,107	1,115,398		844,156		2,822,851	2,390	1,941,783		1,450,664		946,375
14-Aug		2,425,938	7,297	4,543,492		1,115,398		844,156	15,225	2,838,076		1,941,783		1,450,664	14,841	961,216
15-Aug	2,447	2,428,385		4,543,492	2,183	1,117,581		844,156		2,838,076		1,941,783	7,498	1,458,162		961,216
	16,788		**112,611**		**15,330**		**35,903**		**373,686**		**65,713**		**142,498**		**50,078**	

Proposal 87: Upper Subdistrict Set Gillnet Sockeye Salmon Harvest from August 1 to August 15, 1980-2007

Date	1996		1997		1998		1999		2000		2001		2002		2003	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
1-Aug		1,429,460	45,958	1,748,577	38,740	404,730	37,659	960,698		527,293		870,019	16,894	1,288,777		1,698,173
2-Aug	31,301	1,460,761	25,220	1,773,797	34,327	439,057	42,486	1,003,184		527,293		870,019		1,288,777		1,698,173
3-Aug		1,460,761	28,568	1,802,365	37,015	476,072	28,552	1,031,736		527,293		870,019		1,288,777	21,646	1,719,819
4-Aug		1,460,761	30,459	1,832,824		476,072	24,618	1,056,354		527,293		870,019	5,642	1,294,419	18,650	1,738,469
5-Aug	14,818	1,475,579		1,832,824	20,092	496,164	23,932	1,080,286		527,293		870,019	8,739	1,303,158		1,738,469
6-Aug		1,475,579		1,832,824		496,164		1,080,286		527,293		870,019		1,303,158		1,738,469
7-Aug		1,475,579		1,832,824	7,416	503,580		1,080,286	2,454	529,747		870,019		1,303,158	8,372	1,746,841
8-Aug		1,475,579		1,832,824		503,580		1,080,286		529,747		870,019		1,303,158		1,746,841
9-Aug	4,377	1,479,956		1,832,824		503,580	6,990	1,087,276		529,747		870,019		1,303,158		1,746,841
10-Aug		1,479,956		1,832,824	8,645	512,225		1,087,276		529,747		870,019		1,303,158		1,746,841
11-Aug		1,479,956		1,832,824		512,225		1,087,276		529,747		870,019		1,303,158		1,746,841
12-Aug	3,052	1,483,008		1,832,824		512,225	5,670	1,092,946		529,747		870,019		1,303,158		1,746,841
13-Aug		1,483,008		1,832,824												
14-Aug		1,483,008		1,832,824												
15-Aug		1,483,008		1,832,824												
Lost Harv	**7,429**		**59,027**		**8,645**		**89,762**						**8,739**		**8,372**	

Date	2004		2005		2006		2007	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
1-Aug	51,381	2,043,400	57,773	1,995,944	42,067	744,987	44,261	1,167,373
2-Aug	49,023	2,092,423		1,995,944	57,081	802,068	23,132	1,190,505
3-Aug		2,092,423	57,473	2,053,417	10,078	812,146		1,190,505
4-Aug	43,937	2,136,360	63,391	2,116,808	31,772	843,918		1,190,505
5-Aug	33,613	2,169,973		2,116,808	48,710	892,628	22,660	1,213,165
6-Aug	34,020	2,203,993	83,139	2,199,947	29,475	922,103	40,162	1,253,327
7-Aug	26,913	2,230,906	73,738	2,273,685	22,380	944,483	25,246	1,278,573
8-Aug		2,230,906	69,265	2,342,950	7,170	951,653	14,851	1,293,424
9-Aug		2,230,906	43,616	2,386,566	11,467	963,120	44,352	1,337,776
10-Aug		2,230,906	69,368	2,455,934		963,120		
Lost Harv	**138,483**		**402,517**		**161,052**		**147,271**	

Proposal 90: Drift Gillnet Commercial Harvest after August 10, 1966-2007

Year	Chinook	Sockeye	Coho	Even year Pink	Odd year Pink	Chum	Total
1966		1,380	321	830		1,552	4,083
1967	2		653		7		662
1968	2	424	1,417	8,065		445	10,353
1969		9	671		212	7,304	8,196
1970		227	1,061	926		6,862	9,076
1971	9	74	255		2	3,618	3,958
1972	1	42	296	969		36,073	37,381
1973		6	269		13	3,288	3,576
1974	3	19	803	1,183		4,137	6,145
1975	2	41	1,643		27	10,909	12,622
1976	1	50	1,112	8,671		8,958	18,792
1977	3	161	2,442		195	93,198	95,999
1978	15	856	4,052	40,589		14,235	59,747
1979	9	428	4,640		32	39,223	44,332
1980	10	209	4,889	9,748		679	15,535
1981	7	238	11,601		209	19,033	31,088
1982	2	2,988	37,147	23,571		66,392	130,100
1983	14	648	4,050		25	6,411	11,148
1984	6	428	6,453	5,205		34,678	46,770
1985	18	1,803	14,816		88	5,459	22,184
1986	13	4,927	12,284	26,807		16,327	60,358
1987	1	468	2,811		23	2,945	6,248
1988	10	4,555	12,971	24,889		7,929	50,354
1990	5	3,817	18,739	40,137		3,653	66,351
1991	7	4,622	23,833		122	15,025	43,609
1992	3	2,069	8,207	2,395		1,282	13,956
1993	1	519	2,561		64	297	3,442
1994	3	7,654	17,640	4,021		7,974	37,292
1995	3	7,011	8,695		304	9,140	25,153
1996							
1997							
1998							
1999							
2000							
2001							
2002		4	10	116		18	148
2003							
2004		247	183	66		37	533
2005	4	7,262	10,952		40	366	18,624
2006	4	11,870	12,750	18,442		1,785	44,851
2007	10	2,184	8,111		79	379	10,763
Avg (for yrs fished)	5	2,030	7,217	6,563	44	13,017	28,876

PROPOSAL 90

Drift Gillnet Commercial Salmon Catch after Aug 10, 1980-1996

Year	Permit No's Max	Permit No's Avg.	Catch (numbers) Sockeye	Coho	Pink	Chum
1980	108	20	209	4,889	9,748	679
1981	221	41	238	11,601	209	19,033
1982	246	28	2,988	37,147	23,571	66,392
1983	92	20	648	4,050	25	6,411
1984	247	33	428	6,453	5,205	34,678
1985	165	28	1,803	14,816	88	5,459
1986	267	50	4,927	12,284	26,807	16,327
1987	28	8	468	2,811	23	2,945
1988	120	34	4,555	12,971	24,889	7,929
1990	201	52	3,817	18,739	40,137	3,653
1991	187	45	4,622	23,833	122	15,025
1992	57	22	2,069	8,207	2,395	1,282
1993	16	6	519	2,561	64	297
1994	155	28	7,654	17,640	4,021	7,974
1995	141	27	7,011	8,695	304	9,140
average	150	29	2,797	12,446	9,174	13,148
	avg per permit (no)		95	424	312	448
	avg per permit (lbs)		589	2,798	1,098	3,246
	avg fish weight (lbs)		6.2	6.6	3.5	7.2

Drift Gillnet Commercial Salmon Catch after Aug 10, 2004-2007

Year	Permit No's Max	Permit No's Avg.	Catch (numbers) Sockeye	Coho	Pink	Chum
2004	2	2	247	183	66	37
2005	39	14	7,262	10,952	40	366
2006	41	17	11,870	12,750	18,442	1,785
2007	22	10	2,184	8,111	79	379
average	26	11	5,391	7,999	4,657	642
	avg per permit (no)		507	752	438	60
	avg per permit (lbs)		2,981	4,850	1,633	446
	avg fish weight (lbs)		5.9	6.4	3.7	7.4

Proposal 93: Kasilof River sockeye salmon passage estimates, 1998-2007 (last 10 years)

Date	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	**Avg**	**Cum**
6/9											0	0
6/10											0	0
6/11											0	0
6/12											0	0
6/13											0	0
6/14					2,918						292	292
6/15	296	645	172	1,802	3,170	1,516	4,176	7,624	3,214	3,927	2,654	2,946
6/16	432	644	316	4,380	2,669	964	1,837	7,395	1,673	4,474	2,478	5,424
6/17	775	875	565	6,959	2,694	697	1,346	10,559	1,822	2,597	2,889	8,313
6/18	2,905	626	1,226	6,531	3,761	951	2,650	14,488	1,611	2,154	3,690	12,004
6/19	3,489	867	1,281	6,619	6,435	2,030	2,855	17,172	2,563	1,892	4,520	16,524
6/20	1,882	1,430	1,682	3,595	5,249	5,472	6,512	16,292	3,421	2,093	4,763	21,287
6/21	3,413	2,752	1,335	4,037	4,454	7,577	11,133	9,405	5,420	2,111	5,164	26,450
6/22	4,560	3,927	3,010	4,111	4,170	4,039	22,798	2,552	4,234	3,269	5,667	32,117
6/23	4,667	5,382	3,606	6,911	3,887	9,913	26,543	1,801	3,850	4,185	7,075	39,192
6/24	3,238	5,466	4,688	8,710	2,429	7,608	28,054	3,563	4,117	2,424	7,030	46,222
6/25	3,589	8,351	5,204	10,972	2,113	5,377	20,270	7,802	6,457	2,390	7,253	53,474
6/26	4,565	6,607	6,062	5,741	4,046	8,684	1,092	6,818	7,444	909	5,197	58,671
6/27	7,776	8,394	5,970	9,119	4,194	959	1,524	4,462	7,310	2,222	5,193	63,864
6/28	7,752	10,509	5,444	10,969	686	457	2,941	4,441	7,120	5,605	5,592	69,456
6/29	8,700	10,888	7,903	3,881	456	3,240	4,517	9,274	7,633	748	5,724	75,180
6/30	3,238	8,915	7,297	7,312	927	8,223	4,636	2,099	2,558	492	4,570	79,750

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Proposal 93: Kasilof Section Set Gillnet Commercial Harvest in June, 1999-2007

Year	Date	CHINOOK Daily	CHINOOK Cum	SOCKEYE Daily	SOCKEYE Cum
1999	none				
2000	none				
2001	25-Jun	131	131	38,491	38,491
	28-Jun	263	394	43,131	81,622
	30-Jun	194	**588**	36,527	**118,149**
2002	27-Jun	162	162	18,003	18,003
	28-Jun	204	366	29,849	47,852
	29-Jun	306	**672**	26,235	**74,087**
2003	26-Jun	296	296	30,693	30,693
	27-Jun	377	673	24,863	55,556
	28-Jun	531	1,204	25,643	81,199
	30-Jun	376	**1,580**	28,414	**109,613**
2004	25-Jun	174	174	79,912	79,912
	26-Jun	227	401	46,987	126,899
	27-Jun	8	409	4,281	131,180
	28-Jun	197	606	61,285	192,465
	29-Jun	21	627	13,396	205,861
	30-Jun	275	**902**	61,973	**267,834**
2005	20-Jun	70	70	34,508	34,508
	21-Jun	67	137	27,860	62,368
	22-Jun	84	221	37,595	99,963
	23-Jun	120	341	28,184	128,147
	25-Jun	113	454	37,480	165,627
	26-Jun	122	576	26,880	192,507
	27-Jun	138	714	28,526	221,033
	29-Jun	359	1,073	44,748	265,781
	30-Jun	379	**1,452**	36,511	**302,292**
2006	26-Jun	209	209	27,555	27,555
	29-Jun	307	516	36,885	64,440
	30-Jun	193	**709**	25,333	**89,773**
2007	25-Jun	115	115	8,372	8,372
	28-Jun	210	325	23,071	31,443
	29-Jun	139	464	14,956	46,399
	30-Jun	313	**777**	16,654	**63,053**
Average for years fished =			**954**		**146,400**

Mean date when Kasilof River sockeye salmon escapement reaches 25,000 fish		
1979-2007	**24-Jun**	**(earliest date of June 17 in 1987 & 2005)**
Past 10 yrs	**21-Jun**	**(earliest date of June 17 in 2005)**

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PROPOSAL 99

SUSITNA RIVER (#6)

The Susitna River watershed is the largest watershed in Northern Cook Inlet (49,210 km^2) draining a major portion of the Mat-Su Valley. The three largest tributaries of the Susitna River are the Yentna, Talkeetna, and Chulitna rivers (Figure 3). Following is a brief history of the development of the Susitna River escapement goal, rationale for changing to the Yentna River goal, a brief characterization of the major features of each segment of the Susitna system, and a cursory evaluation on the escapements to each river segment.

There is a great deal of confusion related to the escapement goal of 200,000 sockeye salmon in the Susitna River and that the department currently estimates total Susitna River escapement by means of a sonar counter in the Yentna River. Side-scanning sonar equipment was first used to count adult salmon in the mainstem of the Susitna River in 1978 just below the confluence with the Yentna River (Figure 3). Concurrently, the Cook Inlet Regional Planning Team made subjective estimates of potential productivity of the Susitna River drainage, and suggested the system should be capable of supporting a total return of 800,000 sockeye salmon. The department, assuming an average return per spawner of 4 to 1 (based on Kenai and Kasilof River data), established an initial ***optimum*** escapement goal of 200,000 sockeye salmon as measured by sonar at Susitna Station. This optimum point goal remained in place until changes in river configuration caused by flooding in 1984 made it impossible to count salmon with sonar at this location. Fortunately, Su-Hydro investigators had used a sonar site on the Yentna River since 1981. Therefore a five-year database was available to estimate the percentage of the total Susitna River escapement which entered the Yentna River (Table 2). Total Susitna River drainage escapement for the above years was estimated by adding Yentna River sonar counts to Sunshine Station mark-recapture estimates (also from Su-Hydro investigations) for all years except 1981, when the Susitna Station sonar estimate was used. Given these results, the department set a Yentna River escapement goal range of 100,000 to 150,000 sockeye salmon to assure that at least 200,000 sockeye salmon escaped into the Susitna drainage when the Yentna River goal is met or exceeded. This action effectively raised the escapement goal in the Susitna River from a point goal of 200,000, to a range of 200,000 to 300,000 sockeye salmon on average.

Reference: Regional Information Report[1] 2A98-01

Prof 99

Table 2. Comparison of Yentna River sonar estimates of sockeye salmon escapement and estimates of total sockeye salmon escapement into the Susitna River obtained from sonar operated at Susitna Station and mark-recapture projects conducted at Sunshine Station.

Year	Yentna R. Sonar	Susitna R. Sonar	Yentna Sonar + Sunshine M-R	Yentna Fraction
1981	139,401	340,232		41.0%
1982	113,847		265,332	42.9%
1983	104,414		176,114	59.3%
1984	149,375		279,446	53.5%
1985	107,124		227,924	47.0%
Average				48.7%

Proposal #99

Appendix C8.-Escapement goal for Yentna River sockeye salmon.

System: **Yentna River**
Species: **sockeye salmon**
Stock Unit: **N/A**

Description of stock and escapement goals.

Regulatory Area:	Cook Inlet - Northern District
Management Division:	Commercial Fisheries
Primary Fishery:	Commercial Set and Drift Gillnet
Previous Escapement Goal:	100,000 - 150,000 (1996)
Escapement Goal Type:	SEG
Recommended Escapement Goal:	90,000 - 160,000
Optimal Escapement Goal:	none
Inriver Goal:	none
Action Points:	none
Escapement Enumeration:	Sonar estimates; 20 years of data available.
Summary:	
Data Quality	good
Data Type	sonar estimates; harvests and return estimates not available
Contrast	3.0
Criteria for SEG	low contrast
15th-maximum	86,972 - 157,822
Years within recommended SEG	17 out of 20
Comments	The goal represents an estimate of total spawner abundance.

Proprosal 99: Euphotic volume model estimating sockeye salmon potential productin by lake system (from Koenings & Burkett)

Drainage	Lake	Lake Area (acres)	Adult Production	Percent
Chulitna	Byers	368	37,200	3.80%
	Swan	385	11,000	1.10%
	Spink	252	23,500	2.40%
	Bunco	106	1,600	0.20%
	Total	**1,111**	**73,300**	**7.60%**
Mainstem	**Caswell**	**159**	**13,700**	**1.40%**
	Trapper	**1,188**	**16,800**	**1.70%**
	Fish	**132**	**10,600**	**1.10%**
	Sucker	**273**	**8,300**	**0.90%**
	Red Shirt	**1,272**	**69,500**	**7.20%**
	Neil	**115**	**7,600**	**0.80%**
	Total	**3,139**	**126,500**	**13.00%**
Talkeetna	Larson	437	45,100	4.60%
	Stephan	899	63,700	6.60%
	Total	**1,336**	**108,800**	**11.20%**
Yentna	**Chelatna**	**3,906**	**363,574**	**37.50%**
	Trinity	308	19,300	2.00%
	Whiskey	**271**	**23,600**	**2.40%**
	Fish Creek	**111**	**9,000**	**0.90%**
	Shell	**1,293**	**90,265**	**9.30%**
	Puntilla	90	8,800	0.90%
	Eightmile	**115**	**5,600**	**0.60%**
	Movie	110	6,700	0.70%
	Lockwood	**233**	**11,000**	**1.10%**
	Judd	316	59,500	6.10%
	Hewitt	**697**	**60,600**	**6.20%**
	Red Salmon	113	3,400	0.40%
	Total	**7,563**	**661,339**	**68.20%**
	Grand Total	**13,149**	**969,939**	**100%**

Proposal 99. **Summary of sockeye salmon escapement into Susitna River watershed lakes.**

	Yentna River						Susitna River				
Year	Yentna R. Sonar	Judd Weir	Shell Weir	Hewitt Weir	Chelatna Weir	Total Weir	Larson Weir	Swan Weir	Stephan Weir	Byers Weir	Total Weir
1981	139,401										
1982	113,847										
1983	104,414										
1984	149,375	18,104				18,104	35,254				35,254
1985	107,124						37,874				37,874
1986	92,076		4,237			4,237	32,322				32,322
1987	66,054						16,753				16,753
1988	52,330										
1989	96,269	12,792				12,792					
1990	140,290				5,283	5,283					
1991	109,632				7,689	7,689					
1992	66,074				35,300	35,300					
1993	141,694				20,235	20,235					
1994	128,032				28,303	28,303					
1995	121,220				20,104	20,104					
1996	90,660				28,684	28,684					
1997	157,822				84,899	84,899	40,282				40,282
1998	119,623	34,416			27,284	61,700	63,514				63,514
1999	99,029						18,943				18,943
2000	133,094						11,987				11,987
2001	83,532										
2002	78,591										
2003	180,813										
2004	71,281										
2005	36,921						9,751				9,751
2006	92,051	40,633	69,720	2,507	13,266	126,126	56,445			3,074	59,519
2007	79,901	58,134	26,784		11,671	96,589	47,819	5,400	4,320	1,701	59,240
Average	105,598	32,816	33,580	2,507	28,812		33,722	5,400	4,320	2,388	35,040

[a] Partial counts, weir flooded for peak of the return

[b] Weir counts for shell Lake in 1974 was 956 sockeye and in 1975the count was 2,027 sockeye

Management actions in the N. District and Central District drift fisheries to conserve Susitna sockeye salmon

PROP 99

Year	EO	Action	Date
1990	5	Closed drifting in all Central District	13-Jul
	10	Restrict drifting to S. of south end of Kalgin Isl	23-Jul
1991	5	Restrict drifting to full corridor	12-Jul
	11	Closed ND	29-Jul
1992	13	Closed ND; drifting restricted to 8 mile corridor	24-Jul
	16	Closed ND; drifting restricted to 8 mile corridor	27-Jul
1993	3	Restrict drifting to full corridor	9-Jul
	6	Restrict drifting to S. of Clam Gulch Tower	16-Jul
	12	Close ND; drifting restricted to S. of north tip of Kalgin Isl	23-Jul
1994	3	Restrict drift to full corridor	11-Jul
	7	Restrict drift to S. of south tip of Kalgin Isl	18-Aug
	11	Closed ND; closed drifting in Central District	22-Jul
	19	Extra period to ND from 6:00 a.m. to 8:00 p.m.	3-Aug
1995	4	Restricted drifting to corridor	14-Jul
	8	Restricted drifting S. of Kalgin Isl	24-Jul
1996	7	Restricted drifting to corridor	12-Jul
	13	Closed ND; restricted drifting to S. of 60^0 17'	22-Jul
1997	9	Restricted drifting to corridor	11-Jul
	13	Closed ND; restricted drifting to corridor	18-Jul
	16	Closed ND; restricted drifting to corridor	21-Jul
1998	7	Restricted drifting to corridor	13-Jul
	10	Closed ND; Closed drifting	20-Jul
	14	Closed ND; Closed drifting	27-Jul
	15	Closed ND; Closed drifting	31-Jul
1999	6	Closed Drifting	12-Jul
	12	Closed ND; Closed drifting	22-Jul
	18	Closed ND; Drifting restricted N. of north end of Kalgin	29-Jul
2000	5	Restricted drifting to corridor	10-Jul
	7	Restricted drifting to S. of south end of Kalgin	13-Jul
	14	Extended ND for 4 hrs	20-Jul
2001	10	Restricted drifting to corridor	9-Jul
	16	Closed ND; Closed drifting	23-Jul
	19	Closed ND; drifting restricted to corridor	26-Jul
2002	10	Restricted drifting to corridor	11-Jul
	14	ND gear reduced to 1 net; Drifting restricted to S. of Colliers	22-Jul
	16	ND closed; Drifting restricted to S. of south end of Kalgin	25-Jul
	20	ND closed; Drifting restricted to S. of south end of Kalgin	29-Jul
2003	8	Restricted drifting to corridor	10-Jul
	10	Restricted drifting to S. of Blanchard line	14-Jul
	21	Restricted drifting to conserve ND coho	24-Jul
	24	Restricted drifting to conserve ND coho	28-Jul
2004	15	Restrict drifting to S. of Kalg. Buoy	12-Jul
	18	Restrict drift to S. of N. end of Kalgin Isl	15-Jul
	24	Restrict drift to S. of N. end of Kalgin Isl	21-Jul
	36	Reduce ND to 2 nets; Drifting restricted to S. of line from Colliers to Kalgin Isl	26-Jul
	41	Reduce ND to 1 net; Drifting restricted to S. of line from Colliers to Kalgin Isl	29-Jul
2005	?	Restrict drifting to Area 1	?
	29	Restrict drifting to Areas 1 & 2	18-Jul
	33	ND closed; Restrict drifting to S. of Kalgin buoy	20-Jul
	38	ND closed; Restrict drifting to S. of Blanchard Line	25-Jul
	43	ND closed; Restrict drifting to S. of line from Colliers to Kalgin Isl	28-Jul
	48	ND closed; Restrict drifting to S. of line from Colliers to Kalgin Isl	1-Aug
	52	ND closed	4-Aug
2006	9	Restrict drifting to Ken/Kas Sections; Closed ND to commercial fishing	10-Jul
	12	Restrict drifting to Ken/Kas Sections; Closed ND to commercial fishing	13-Jul
	16	Restrict drifting to Ken/Kas Sections; Closed ND to commercial fishing	17-Jul
	20	Closed drift gillnetting; Closed ND to commercial fishing	20-Jul
	27	Closed drift gillnetting; Closed ND to commercial fishing	24-Jul
	28	Closed drift gillnetting; Closed ND to commercial fishing	27-Jul
	31	Restricted drifting to south of Blanchard Line and Ken/Kas Section; Closed ND	31-Jul
	34	Restricted drifting to south of NW point on Kalgin Isl and Ken/Kas Section	2-Aug
	35	Closed ND to commercial fishing	3-Aug
2007	na	Restrict drifting to Area 1 **by regulation**	7/9 & 7/12
	9	Restrict drifting to Area 1	16-Jul
	12	Restrict drifting to Area 1	19-Jul
	17	Restrict drifting south of Blanchard; ND reduced to 1 net	23-Jul
	20	Restrict drifting south of Blanchard; ND closed	26-Jul
	25	Restrict drifting south of N. Kalgin; ND closed	30-Jul
	29	Restrict drifting south of Colliers dock to Kalgin; ND closed	2-Aug
	34	Restrict drifting south of Colliers dock to Kalgin; ND closed	6-Aug

Proposal 99: Estimated Susitna and Yentna sockeye salmon harvest reported in 2008 genetics report to BOF

	2005	2006	2007
Drift	20,154	10,418	159,793
Set T11+12	10,547	4,132	64,731
total	30,701	14,550	224,524
esc Bendix	67710	178451	152907
run	98,411	193,001	377,431

	2005	2006	2007
Drift	20,154	10,418	159,793
Set T11+12	10,547	4,132	64,731
total Har	30,701	14,550	224,524
esc Didson	155,750	361,179	245,950
run	186,451	375,729	470,474

Proposal 99

Susitna River Sport Harvest 1977-2006

Approximate Numbers

Year	Chinook	Sockeye	Coho	Pinks	Chums	Total
1977	3,581	5,177	9,379	26,783	1,611	46,531
1978	2,843	971	15,072	55,418	15,667	89,971
1979	6,910	1,586	12,893	12,516	4,027	37,932
1980	7,389	1,571	16,499	56,621	4,759	86,839
1981	6,944	1,283	9,391	8,660	4,207	30,485
1982	10,521	2,205	16,664	16,822	6,843	53,055
1983	12,211	4,057	8,096	4,531	5,034	33,929
1984	15,651	3,865	20,063	11,036	5,659	56,274
1985	16,353	2,072	15,747	2,868	2,303	39,343
1986	21,022	6,798	24,401	13,040	5,069	70,330
1987	13,826	4,093	17,510	3,676	3,259	42,364
1988	14,774	4,477	31,996	6,093	7,223	64,563
1989	18,590	3,819	31,941	3,237	4,458	62,045
1990	17,234	3,562	23,879	5,223	1,671	51,569
1991	19,323	4,517	36,987	2,318	2,141	65,286
1992	32,572	4,627	46,626	7,127	2,272	93,224
1993	34,076	6,129	40,535	4,501	1,602	86,843
1994	25,000	4,852	34,420	3,227	1,516	69,015
1995	14,005	5,596	34,668	2,634	3,825	60,728
1996	16,849	3,448	39,589	4,448	3,105	67,439
1997	18,607	8,728	16,728	3,141	3,719	50,923
1998	19,905	7,930	35,250	7,107	2,613	72,805
1999	29,468	9,504	42,563	3,464	3,362	88,361
2000	29,104	11,420	60,852	13,580	3,873	118,829
2001	27,343	12,430	45,501	4,724	3,619	93,617
2002	22,052	5,308	41,379	4,460	3,766	76,965
2003	24,534	11,394	34,725	2,224	3,201	76,078
2004	24,192	6,465	38,269	5,613	3,067	77,606
2005	24,632	4,105	36,223	3,156	2,665	70,781
2006	24,864	2,308	45,775	4,505	1,499	78,951
Ave. 1977-1996	15,484	3,735	24,318	12,539	4,313	60,388
Ave. 1997-2006	24,470	7,959	39,727	5,197	3,138	80,492

Proposal 99

Little Susitna River Sport Harvest by Year, 1977-2006

Not including Nancy Lake (Approximate Numbers)

Year	King	Sockeye	Coho	Pink	Chum	Total
1977	191	888	3,415	1,208	131	5,833
1978	93	859	4,865	1,517	956	8,290
1979	800	1,478	3,382	618	364	6,642
1980	646	2,127	6,302	3,918	465	13,458
1981	1,418	1,619	5,940	709	278	9,964
1982	1,467	1,865	7,116	1,163	943	12,554
1983	1,187	2,787	2,835	251	450	7,510
1984	1,883	6,385	14,253	2,045	1,708	26,274
1985	1,845	2,894	7,764	590	382	13,475
1986	1,457	3,616	6,039	696	822	12,630
1987	2,282	3,513	13,003	217	534	19,549
1988	2,822	2,310	19,009	1,146	673	25,960
1989	4,204	2,315	14,129	518	712	21,878
1990	1,965	891	7,497	325	170	10,848
1991	2,102	1,722	16,450	419	425	21,118
1992	3,920	1,274	20,033	870	319	26,416
1993	3,441	2,487	27,610	124	500	34,162
1994	4,204	1,809	17,665	455	690	24,823
1995	1,698	1,116	14,451	264	620	18,149
1996	1,484	2,286	16,753	763	310	21,596
1997	2,938	1,845	7,756	319	241	13,099
1998	2,031	872	14,469	552	467	18,391
1999	2,713	1,282	8,864	52	481	13,392
2000	2,802	3,661	20,357	801	905	28,526
2001	2,243	1,959	17,068	163	513	21,946
2002	3,144	2,133	19,278	283	1,227	26,065
2003	2,138	3,337	13,672	30	838	20,015
2004	2,362	2,776	15,307	346	326	21,117
2005	2,724	1,442	10,203	181	602	15,152
2006	3,303	1,556	12,399	517	720	18,495
Ave 1977-1996	1,955	2,212	11,426	891	573	17,056
Ave 1997-2006	2,640	2,086	13,937	324	632	19,620

Proposal 99

Total Upper Cook Inlet Sport Harvest, 1977-2006

Year	King	Sockeye	Coho	Pink	Chum	Total
1977	19,807	82,235	33,756	36,968	2,098	174,864
1978	20,583	105,392	46,701	92,598	18,341	283,615
1979	25,913	63,479	49,063	17,378	5,708	161,541
1980	16,829	92,621	74,834	86,377	5,783	276,444
1981	27,588	64,424	55,910	14,191	5,011	167,238
1982	33,348	109,054	86,229	49,738	8,447	286,824
1983	42,791	125,986	51,200	11,852	6,693	238,716
1984	46,946	94,597	123,184	52,391	8,488	325,855
1985	50,213	140,392	95,398	9,736	3,997	299,958
1986	61,014	158,803	120,406	50,162	10,955	401,540
1987	57,501	441,912	108,393	10,082	7,315	625,434
1988	67,512	256,619	158,272	33,781	15,528	532,282
1989	54,557	368,337	154,286	10,236	11,120	599,341
1990	42,775	196,910	127,560	43,163	3,536	414,131
1991	51,991	281,126	171,286	10,030	3,904	518,968
1992	74,829	323,656	158,506	33,831	3,552	595,245
1993	103,177	216,201	177,273	11,037	3,241	511,878
1994	87,284	187,699	197,775	17,613	3,384	493,755
1995	67,663	180,991	146,543	10,803	8,716	414,716
1996	58,593	262,006	161,871	28,528	6,276	517,274
1997	64,581	251,307	87,924	9,614	5,125	418,551
1998	48,178	256,785	157,282	29,204	4,404	495,853
1999	69,157	293,872	125,809	7,346	4,509	500,693
2000	81,651	337,684	211,346	43,394	7,183	681,258
2001	62,432	285,082	164,813	10,234	5,794	528,355
2002	46,839	331,538	210,063	36,097	7,059	646,613
2003	57,305	370,794	156,647	9,343	4,992	599,081
2004	57,002	378,776	193,276	32,831	4,646	666,531
2005	63,130	369,861	160,293	10,519	3,806	607,609
2006	60,241	276,745	176,426	25,389	3,069	541,870
77-95 Ave.	50,122	183,707	112,451	31,682	7,148	385,387
96-06 Ave.	60,828	310,405	164,159	22,045	5,169	563,972

Proposal 111: Sources of Kenai River Late-Run Chinook salmon harvest

	Sport		PU		Deep Cr Marine		ESSN[a,b]		Drift[a]		Total
Year	No	%	No	%	No	%	No	%	No	%	Harvest
1986	10,188	31%	no data	-	630	2%	19,824	61%	1,834	6%	32,476
1987	13,223	33%	235	1%	1,218	3%	21,150	52%	4,552	11%	40,378
1988	19,871	55%	0	0%	1,487	4%	12,859	35%	2,237	6%	36,454
1989	9,779	44%	0	0%	1,368	6%	10,914	49%		0%	22,061
1990	6,966	52%	no data	-	1,605	12%	4,139	31%	621	5%	13,331
1991	7,919	54%	no data	-	1,705	12%	4,893	33%	246	2%	14,763
1992	7,790	37%	0	0%	2,115	10%	10,718	50%	615	3%	21,238
1993	18,253	51%	0	0%	2,834	8%	14,079	39%	765	2%	35,931
1994	18,409	51%	no data	-	1,869	5%	15,562	43%	464	1%	36,304
1995	13,081	46%	772	3%	2,069	7%	12,068	42%	594	2%	28,584
1996	8,449	37%	295	1%	2,038	9%	11,564	51%	389	2%	22,735
1997	13,325	47%	364	1%	2,931	10%	11,325	40%	627	2%	28,572
1998	8,110	52%	254	2%	1,784	11%	5,087	33%	335	2%	15,570
1999	14,277	55%	488	2%	1,004	4%	9,463	37%	575	2%	25,807
2000	15,721	74%	410	2%	1,052	5%	3,684	17%	270	1%	21,137
2001	17,305	68%	638	3%	920	4%	6,009	24%	619	2%	25,491
2002	13,272	55%	606	3%	427	2%	9,478	39%	415	2%	24,198
2003	18,746	52%	1,016	3%	200	1%	14,810	41%	1,240	3%	36,012
2004	18,393	42%	792	2%	1,660	4%	21,615	49%	1,526	3%	43,986
2005	19,481	43%	997	2%	1,040	2%	21,472	48%	1,839	4%	44,829
2006	16,641	59%	1,034	4%	938	3%	8,691	31%	1,051	4%	28,355
2007							12,124		865		12,989

[a]assumes all ESSN and Drift chinook harvest are late-run Kenai River stocks

[b]does not include Kasilof River terminal harvest area harvests

Year	Sport/PU	Commercial
1986	33%	67%
1987	36%	64%
1988	59%	41%
1989	51%	49%
1990	64%	36%
1991	65%	35%
1992	47%	53%
1993	59%	41%
1994	56%	44%
1995	56%	44%
1996	47%	53%
1997	58%	42%
1998	65%	35%
1999	61%	39%
2000	81%	19%
2001	74%	26%
2002	59%	41%
2003	55%	45%
2004	47%	53%
2005	48%	52%
2006	66%	34%
2007		
Avg	**57%**	**43%**

Proposal 119

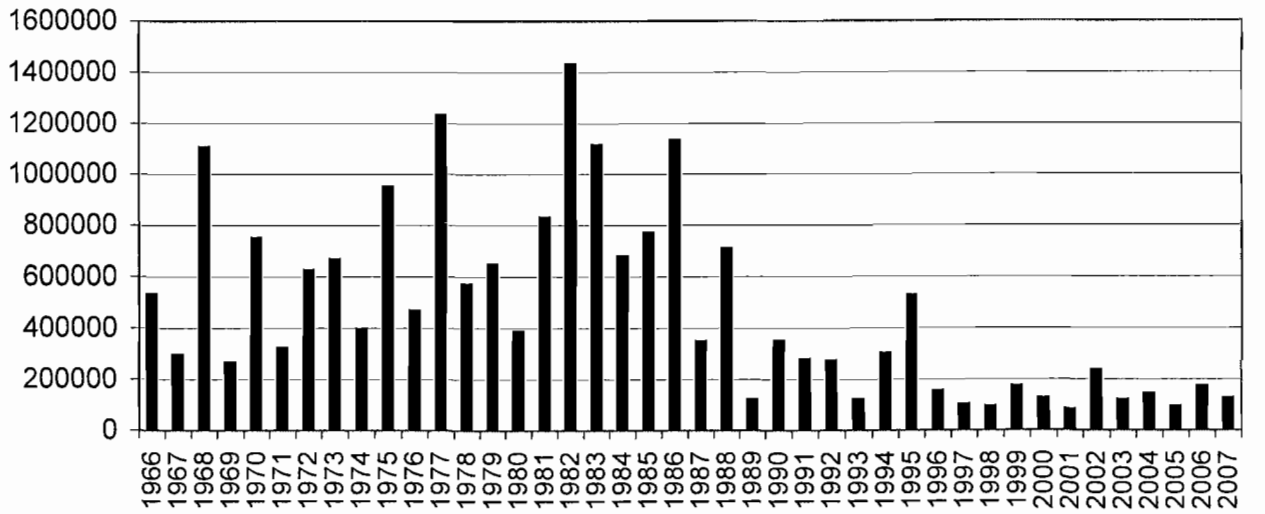
Management actions taken to conserve Susitna sockeye & coho salmon

Year	EO	Action	Date
1990	5	Closed drifting in all Central District	13-Jul
	10	Restrict drifting to S. of south end of Kalgin Isl	23-Jul
1991	5	Restrict drifting to full corridor	12-Jul
	11	Closed ND	29-Jul
1992	13	Closed ND; drifting restricted to 8 mile corridor	24-Jul
	16	Closed ND; drifting restricted to 8 mile corridor	27-Jul
1993	3	Restrict drifting to full corridor	9-Jul
	6	Restrict drifting to S. of Clam Gulch Tower	16-Jul
	12	Close ND; drifting restricted to S. of north tip of Kalgin Isl	23-Jul
1994	3	Restrict drift to full corridor	11-Jul
	7	Restrict drift to S. of south tip of Kalgin Isl	18-Aug
	11	Closed ND; closed drifting in Central District	22-Jul
1995	4	Restricted drifting to corridor	14-Jul
	8	Restricted drifting S. of Kalgin Isl	24-Jul
1996	7	Restricted drifting to corridor	12-Jul
	13	Closed ND; restricted drifting to S. of 60° 17'	22-Jul
1997	9	Restricted drifting to corridor	11-Jul
	13	Closed ND; restricted drifting to corridor	18-Jul
	16	Closed ND; restricted drifting to corridor	21-Jul
1998	7	Restricted drifting to corridor	13-Jul
	10	Closed ND; Closed drifting	20-Jul
	14	Closed ND; Closed drifting	27-Jul
	15	Closed ND; Closed drifting	31-Jul
1999	6	Closed Drifting	12-Jul
	12	Closed ND; Closed drifting	22-Jul
	18	Closed ND; Drifting restricted N. of north end of Kalgin	29-Jul
2000	5	Restricted drifting to corridor	10-Jul
	7	Restricted drifting to S. of south end of Kalgin	13-Jul
2001	10	Restricted drifting to corridor	9-Jul
	16	Closed ND; Closed drifting	23-Jul
	19	Closed ND; drifting restricted to corridor	26-Jul
2002	10	Restricted drifting to corridor	11-Jul
	14	ND gear reduced to 1 net; Drifting restricted to S. of Colliers	22-Jul
	16	ND closed; Drifting restricted to S. of south end of Kalgin	25-Jul
	20	ND closed; Drifting restricted to S. of south end of Kalgin	29-Jul
2003	8	Restricted drifting to corridor	10-Jul
	10	Restricted drifting to S. of Blanchard line	14-Jul
	21	Restricted drifting to conserve ND coho	24-Jul
	24	Restricted drifting to conserve ND coho	28-Jul
2004	15	Restrict drifting to S. of Kalg. Buoy	12-Jul
	18	Restrict drift to S. of N. end of Kalgin Isl	15-Jul
	24	Restrict drift to S. of N. end of Kalgin Isl	21-Jul
	36	Reduce ND to 2 nets; Drifting restricted to S. of line from Colliers to Kalgin Isl	26-Jul
	41	Reduce ND to 1 net; Drifting restricted to S. of line from Colliers to Kalgin Isl	29-Jul
2005	?	Restrict drifting to Area 1	?
	29	Restrict drifting to Areas 1 & 2	18-Jul
	33	ND closed; Restrict drifting to S. of Kalgin buoy	20-Jul
	38	ND closed; Restrict drifting to S. of Blanchard Line	25-Jul
	43	ND closed; Restrict drifting to S. of line from Colliers to Kalgin Isl	28-Jul
	48	ND closed; Restrict drifting to S. of line from Colliers to Kalgin Isl	1-Aug
	52	Closed ND to commercial fishing	4-Aug
2006	9	Restrict drifting to Ken/Kas Sections; Closed ND to commercial fishing	10-Jul
	12	Restrict drifting to Ken/Kas Sections; Closed ND to commercial fishing	13-Jul
	16	Restrict drifting to Ken/Kas Sections; Closed ND to commercial fishing	17-Jul
	20	Closed drift gillnetting; Closed ND to commercial fishing	20-Jul
	27	Closed drift gillnetting; Closed ND to commercial fishing	24-Jul
	28	Closed drift gillnetting; Closed ND to commercial fishing	27-Jul
	31	Restricted drifting to south of Blanchard Line and Ken/Kas Section; Closed ND	31-Jul
	34	Restricted drifting to south of NW point on Kalgin Isl and Ken/Kas Section	2-Aug
	35	Closed ND to commercial fishing	3-Aug
2007	na	Restrict drifting to Area 1	7/9 & 7/12
	9	Restrict drifting to Area 1	16-Jul
	12	Restrict drifting to Area 1	19-Jul
	17	Restrict drifting south of Blanchard; ND reduced to 1 net	23-Jul
	20	Restrict drifting south of Blanchard; ND closed	26-Jul
	25	Restrict drifting south of N. Kalgin; ND closed	30-Jul
	29	Restrict drifting south of Colliers dock to Kalgin; ND closed	2-Aug
	34	Restrict drifting south of Colliers dock to Kalgin; ND closed	6-Aug

Proposal 120: 2002 UCI Marine Tagging Population Estimates

Species	Tag Type	Pop Estimate	Harvest	Esc	Exploitation
Coho	Telemetry	1.61	0.25	1.36	15%
	PIT	2.52	0.25	2.27	10%
Pink	PIT	21.28	0.45	20.83	2%
Chum	**PIT**	**3.88**	**0.24**	**3.64**	**6%**

Upper Cook Inlet Chum Salmon Commercial Harvest



COMMITTEE B

Proposal 91: Susitna River Mark Recapture Study, 2006-2007

	Yentna Sonar		Weir Counts (Yentna Side)					Weir Counts (Susitna Side)				
Year	Bendix	Didson	Judd	Shell	Hewett	Chelatna	Total	Byers	Larson	Swan	Stephan	Total
2006	92,896	160,462	40,633	69,800	2,513	13,272	126,218	3,071	57,411			60,482
2007	79,901	130,000	58,134	26,784		11,671	96,589	1,707	47,819	5,489	4,120	59,135

Mark Recapture Estimates (2007 estimates are PRELIMINARY)

Year	River	Estimate	95% CI		Method
2006	Susitna	107,000	49,180	164,820	Pit tag
2006	Yentna	417,750	261,930	573,570	Pit tag (July 29 & later)
		311,197	252,000	391,000	Radio tags (entire year)
2007	Susitna	85,000			Radio tags (entire year)
	Yentna	247,000			Radio tags (entire year)

Proposal 100-101: Set gillnet harvest in the W. Subdistrict in June, 2000-2007

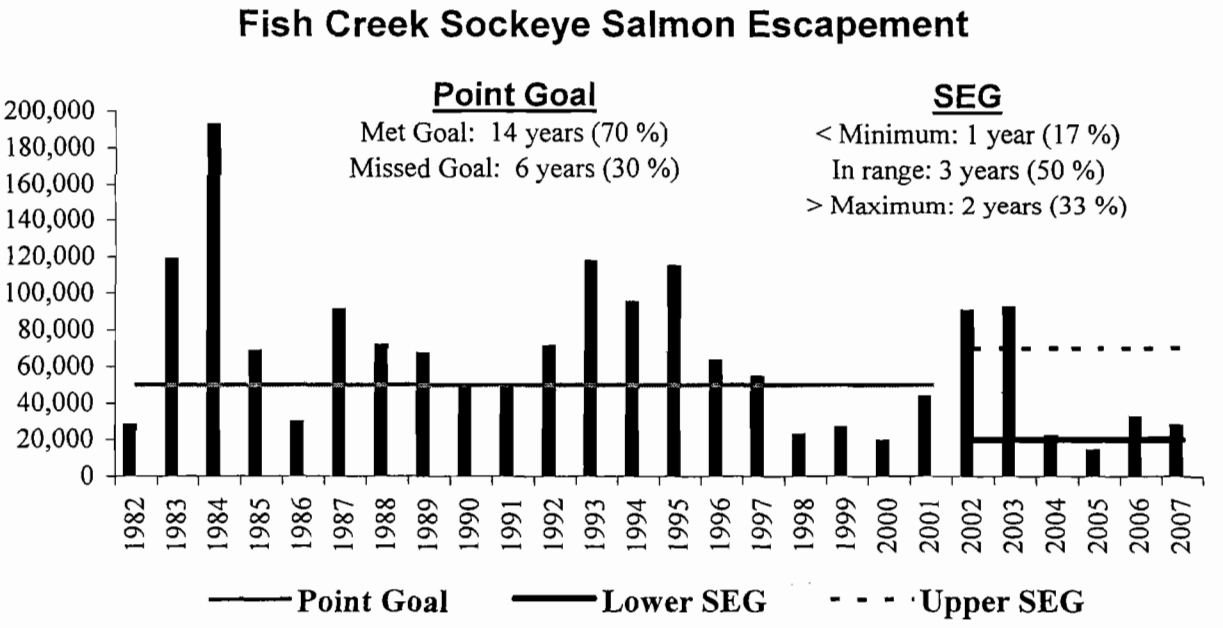
Note: this area has never opened prior to June 16, which is the current regulation for opening the season

Year	Date	No. of Deliveries	CHINOOK Daily	CHINOOK Cum	SOCKEYE Daily	SOCKEYE Cum	COHO Daily	COHO Cum	PINK Daily	PINK Cum	CHUM Daily	CHUM Cum	TOTAL Daily	TOTAL Cum
2000	22-Jun	10	31	31	724	724	1	1			1	1	757	757
	26-Jun	13	39	70	1,203	1,927		1			2	3	1,244	2,001
	29-Jun	13	23	93	2,122	4,049	5	6	1	1	1	4	2,152	4,153
2001	18-Jun	1	14	14	44	44			19	19			77	77
	21-Jun	6	3	17	58	102			1	20			62	139
	25-Jun	8	14	31	463	565			14	34	1	1	492	631
	28-Jun	9	11	42	528	1,093			41	75		1	580	1,211
2002	17-Jun	3	17	17	245	245							262	262
	20-Jun	3	3	20	281	526							284	546
	24-Jun	10	25	45	573	1,099							598	1,144
	27-Jun	11	26	71	1,639	2,738					3	3	1,668	2,812
	28-Jun	6	7	78	415	3,153	3	3			1	4	426	3,238
	29-Jun	10	68	146	1,322	4,475		3			4	8	1,394	4,632
2003	6-Jun	1	6	6	15	15							21	21
	16-Jun	4	16	22	277	292							293	314
	19-Jun	2	23	45	93	385							116	430
	23-Jun	1	24	69	151	536			2	2			177	607
	26-Jun	11	31	100	1,866	2,402	1	1	8	10			1,906	2,513
	30-Jun	12	34	134	1,737	4,139	1	2	13	23	3	3	1,788	4,301
2004	9-Jun	1			47	47							47	47
	17-Jun	1	5	5	54	101							59	106
	21-Jun	3	33	38	174	275							207	313
	24-Jun	1		38	30	305							30	343
	25-Jun	9	71	109	1,771	2,076	3	3					1,845	2,188
	26-Jun	9	4	113	1,086	3,162		3	1	1			1,091	3,279
	28-Jun	15	99	212	3,308	6,470	5	8	1	2			3,413	6,692
	29-Jun	10	16	228	1,917	8,387	8	16	3	5	1	1	1,945	8,637
	30-Jun	9	14	242	1,033	9,420	4	20		5		1	1,051	9,688
2005	16-Jun	6	15	15	413	413							428	428
	23-Jun	13	12	27	1,011	1,424			14	14			1,037	1,465
	27-Jun	13	39	66	691	2,115	1	1	98	112			829	2,294
	28-Jun	10	11	77	1,301	3,416		1	125	237			1,437	3,731
	29-Jun	8	11	88	894	4,310	12	13	106	343	1	1	1,024	4,755
	30-Jun	15	7	95	1,506	5,816	1	14	86	429		1	1,600	6,355
2006	19-Jun	9	6	6	107	107							113	113
	22-Jun	11	10	16	243	350	3	3	4	4	1	1	261	374
	26-Jun	8	12	28	460	810	10	13		4	1	2	483	857
	29-Jun	9		28	285	1,095	9	22		4	1	3	295	1,152
	30-Jun	5	58	86	678	1,773	9	31		4	1	4	746	1,898
2007	18-Jun	10	8	8	582	582							590	590
	21-Jun	10	40	48	864	1,446	3	3					907	1,497
	25-Jun	12	12	60	2,107	3,553	42	45	36	36	15	15	2,212	3,709
	28-Jun	15	16	76	1,950	5,503	5	50	12	48	1	16	1,984	5,693

Proposal 117

Fish Creek Sockeye Salmon Escapement

Year	Count	Point	Lower	Upper
1982	28,164	50,000		
1983	118,797	50,000		
1984	192,352	50,000		
1985	68,577	50,000		
1986	29,800	50,000		
1987	91,215	50,000		
1988	71,603	50,000		
1989	67,224	50,000		
1990	50,000	50,000		
1991	50,500	50,000		
1992	71,385	50,000		
1993	117,619	50,000		
1994	95,107	50,000		
1995	115,000	50,000		
1996	63,160	50,000		
1997	54,656	50,000		
1998	22,853	50,000		
1999	26,667	50,000		
2000	19,533	50,000		
2001	43,469	50,000		
2002	90,483		20,000	70,000
2003	92,298		20,000	70,000
2004	22,157		20,000	70,000
2005	14,215		20,000	70,000
2006	32,566		20,000	70,000
2007	27,948		20,000	70,000



Big Lake Sockeye Salmon Smolt

Smolt Year	Number	Wild	Hatchery	Hatchery %	Hatchery 95% C.I.
2002*	48,865	48,547	318	0.7	(+1.4)
2003	116,994	23,399	93,595	80.0	(+2.0)
2004	256,321	99,965	156,356	61.0	(+2.8)
2005	150,821	39,364	111,457	73.9	(+0.2)
2006	241,335	116,364	124,971	52.8	(+2.8)
Avg[1]	191,368	69,773	121,595	66.9	
Hist. Mean[2]	573,860	132,885	566,966	69.9	

*CIAA did not release fish in 2001; few hatchery fish were expected

[1]Does not include 2002 data

[2]These are historical means dirived from Clupach and Kyle 1990 1976 to1989 from Clupach and Kyle 1990

Proposal 117 Data set used in 2001 to set Fish Creek SEG

Good escapement counts.
Pre-enhancement.

1938	182,463
1939	116,588
1940	306,982
1941	55,077
1946	57,000
1947	150,000
1948	150,000
1949	68,240
1950	29,659
1951	34,704
1952	92,724
1953	54,343
1954	20,904
1955	32,724
1957	15,630
1965	16,544
1969	12,456
1970	25,000
1971	31,900
1972	6,981
1973	2,705
1974	16,225
1975	29,882
1976	14,032
1977	5,183
1978	3,555

Percentiles of good data.

Point	*Column1*	*Rank*	*Percent*
3	306,982	1	100.00%
1	182,463	2	96.00%
6	150,000	3	88.00%
7	150,000	3	88.00%
2	116,588	5	84.00%
11	92,724	6	80.00%
8	**68,240**	**7**	**76.00%**
5	57,000	8	72.00%
4	55,077	9	68.00%
12	54,343	10	64.00%
10	34,704	11	60.00%
14	32,724	12	56.00%
19	31,900	13	52.00%
23	29,882	14	48.00%
9	29,659	15	44.00%
18	25,000	16	40.00%
13	20,904	17	36.00%
16	16,544	18	32.00%
22	16,225	19	28.00%
15	**15,630**	**20**	**24.00%**
24	14,032	21	20.00%
17	12,456	22	16.00%
20	6,981	23	12.00%
25	5,183	24	8.00%
26	3,555	25	4.00%
21	2,705	26	.00%

PROP 117

In 2006, male and female adult sockeye salmon in spawning areas were collected by weir and dipnet and artificially spawned. Gametes were collected, transported and fertilized using a delayed fertilization technique. Gamete collection procedures are described in CIAA's "Egg-Take Procedures" manual (CIAA, 1993).

Table 1. Summary of sockeye salmon gamete collection and fry releases at Big Lake, 1993 - 2006.

Brood Year	No. eggs taken	No. females used	Fecundity	Receiving hatchery	No. fry released to Meadow Creek	No. fall-fry released to Meadow Creek	No. Smolt released to Meadow Creek	No. fry released to Blodgett Lake	No. Smolt released to Eklutna Tail Race	No. Smolt released to Grouse Lake	Egg-to-fry survival (%)	No. smolt produced	Fry to smolt survival (%)
1991				Fry Transfer from Big Lake Hatchery to Eklutna					869,000				
1992				Fry Transfer from Big Lake Hatchery to Eklutna; IHNV detected all fish destroyed					0				
1993	9,000,000	3,600	2,500	Eklutna	3,000,000			2,000,000	1,000,000	200,000	68.9	ND	NA
1994	7,755,000	2,674	2,900	Eklutna	3,000,000			2,000,000	0	0	64.5	ND	NA
1995	8,000,000	3,200	2,500	Eklutna	3,000,000			2,000,000	1,000,000	500,000	75.0	ND	NA
1996	8,000,000	3,200	2,500	Eklutna	2,900,000			1,118,000	1,009,000	226,000	62.8	ND	NA
1997	8,000,000	3,200	2,500	Eklutna	3,000,000			2,000,000	PNLA	0	62.5	ND	NA
1998	5,132,000	1,955	2,625	Trial Lakes	197,000			0	PNLA	0	20.3 *	ND	NA
1999	1,149,000	574	2,002	Trial Lakes	846,000			0	PNLA	PNLA	73.6	ND	NA
2000	3,638,000	1,408	2,584	Trial Lakes	0			0	PNLA	PNLA	0.0	ND	NA
2001	6,574,000	2,206	2,980	Trail Lakes	4,316,000			0	PNLA	PNLA	65.7	107,359	2.49%
2002	6,342,000	2,305	2,751	Trail Lakes	3,589,000			0	PNLA	PNLA	56.6	165,547	4.61%
2003	7,046,000	2,685	2,624	Trail Lakes	5,004,000			0	PNLA	PNLA	71.0	139,309	2.78%
2004	2,590,000	1,124	2,304	Trail Lakes	1,742,300			0	PNLA	PNLA	67.3	114,898	6.59%
2005	2,185,000	1,088	2,008	Trail Lakes	444,000	426,000		0	PNLA	PNLA	74.0 [1]		
2006	6,483,000	2,864	2,284	Trail Lakes									
Total	81,894,000	32,083			31,038,000			9,118,000	3,878,000	926,000		527,113	
Mean	5,849,571	2,292	2,504		2,549,525			759,833	646,333	154,333	58.6	137,405	3.29%

PNLA = Project No Longer Active

*Reflects the survival of 1.042 million fry. 197,000 were released to Meadow creek, while the remaining 845,000 of these fry were held over to be released to Grouse Lake as smolt, but were later destoryed due to IHN virus.

[1] Survival rate is for 1,612,000. These fry were divided into three groups for release: fry (2006), fall fry (2006), and smolt (for release in 2007);

Brood Year Incomplete

Between 8 August and 18 August 2006, 6.483 million eggs were collected from 2,864 female sockeye salmon and shipped to Trail Lakes Hatchery for fertilization. Mixing the eggs from each female with a portion of the milt from eight to ten males and then activating the sperm with a 0.7% saline solution completed fertilization. An estimated 5.895 million eggs (90.9%) have survived to the eyed stage.

The sockeye eggs collected in 2006 are currently being incubated at Trail Lakes Hatchery and are beginning to emerge. Incubation will follow standard hatchery procedures (Wilson and Hetrick, 1992) and water temperature will be regulated to thermally mark the otoliths of fish scheduled for release in 2007.

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Table 3. Hatchery sockeye salmon stocking into Big Lake , 1975 - 2000.

Brood Year	Release Year	Return Years	Stock	Egg Take	Fish Released and Site					Marks	Hatchery	Comments
					Hatchery	Blodgett Lake or Upstream	Big Lake Shore Areas	Transferred to Eklutna Hatchery	Total			
1975	1976	1979, 1980	Meadow Cr	180,000	71,000				71,000	No	Big Lake	
1976	1977	1980, 1981	Meadow Cr, Fish Cr	10,000,000	2,200,000		4,400,000		6,600,000	Fin [2/]	Big Lake	
1977	1978	1981, 1982	Tustumena L, Fish Cr	8,700,000	3,600,000		2,100,000		5,700,000	Fin [3/]	Big Lake	
1978	1979	1982, 1983	Meadow Cr, Fish Cr	9,800,000					0	No	Big Lake	IHN Loss [1/]
1979	1980	1983, 1984	Meadow Cr	5,000,000	747,000				747,000	No	Big Lake	IHN Loss
1980	1981	1984, 1985	Meadow Cr, Fish Cr	4,700,000	400,000		3,600,000		4,000,000	No	Big Lake	
1981	1982	1985, 1986	Meadow Cr, Fish Cr	5,700,000	3,100,000	1,200,000			4,300,000	No	Big Lake	
1982	1983	1986, 1987	Meadow Cr, Fish Cr	8,600,000	4,200,000	2,400,000			6,600,000	No	Big Lake	
1983	1984	1987, 1988	Meadow Cr	9,300,000	7,400,000				7,400,000	No	Big Lake	
1984	1985	1988, 1989	Meadow Cr, Fish Cr	16,200,000	8,900,000	3,500,000			12,400,000	CWT [4/]	Big Lake	
1985	1986	1989, 1990	Meadow Cr, Fish Cr	21,600,000	14,100,000	922,000			15,022,000	CWT [5/]	Big Lake	
1986	1987	1990, 1991	Meadow Cr	17,500,000	11,700,000				11,700,000	CWT [6/]	Big Lake	IHN Loss
1987	1988	1991, 1992	Meadow Cr, Fish Cr	20,300,000	14,000,000		281,000		14,281,000	CWT [7/]	Big Lake	IHN Loss
1988	1989	1992, 1993	Meadow Cr	19,700,000	13,200,000		1,200,000		14,400,000	CWT [8/]	Big Lake	
1989	1990	1993, 1994	Meadow Cr	14,800,000	10,800,000		531,000		11,331,000	CWT [9/]	Big Lake	
1990	1991	1994, 1995	Meadow Cr	14,700,000	8,400,000		1,600,000		10,000,000	CWT [10/]	Big Lake	
1991	1992	1995, 1996	Meadow Cr	7,400,000	1,400,000	1,200,000	535,000	1,000,000	4,135,000	No	Big Lake	
1992	1993	1996, 1997	Meadow Cr	9,000,000	3,000,000	1,600,000		1,500,000	6,100,000	No	Big Lake	
1993	1994	1997, 1998	Meadow Cr	9,000,000	3,000,000	2,000,000			5,000,000	No	Eklutna	
1994	1995	1998, 1999	Meadow Cr	7,700,000	3,000,000	2,000,000			5,000,000	No	Eklutna	
1995	1996	1999, 2000	Meadow Cr	8,000,000	3,000,000	2,000,000			5,000,000	No	Eklutna	
1996	1997	2000, 2001	Meadow Cr	8,000,000	2,900,000	1,100,000			4,000,000	No	Eklutna	
1997	1998	2001, 2002	Meadow Cr	8,000,000	3,000,000	2,000,000			5,000,000	No	Eklutna	
1998	1999	2002, 2003	Meadow Cr	5,100,000	197,000				197,000	Otolith	Trail Lake	IHN Loss
1999	2000	2003, 2004	Meadow Cr	1,500,000	846,000				846,000	Otolith	Trail Lake	
2000	2001	2004, 2005	Meadow Cr	3,600,000					0	Otolith	Trail Lake	IHN Loss

Proposal 117: Definitions of enhanced stock from Sustainable Salmon Fisheries Policy

(9) "enhanced salmon stock" means a stock of salmon that is undergoing specific manipulation, such as hatchery augmentation or lake fertilization, to enhance its productivity above the level that would naturally occur; "enhanced salmon stock" includes an introduced stock, where no wild salmon stock had occurred before, or a wild salmon stock undergoing manipulation, but does not include a salmon stock undergoing rehabilitation, which is intended to restore a salmon stock's productivity to a higher natural level;

(29) "rehabilitation" means efforts applied to a salmon stock to restore it to an otherwise natural level of productivity; "rehabilitation" does not include an enhancement, which is intended to augment production above otherwise natural levels;

(32) "salmon" means the five wild anadromous semelparous Pacific salmon species *Oncorhynchus sp.*, except steelhead and cutthroat trout, native to Alaska as follows:

(A) chinook or king salmon *(O. tschawytscha)*;

(B) sockeye or red salmon (*O. nerka*);

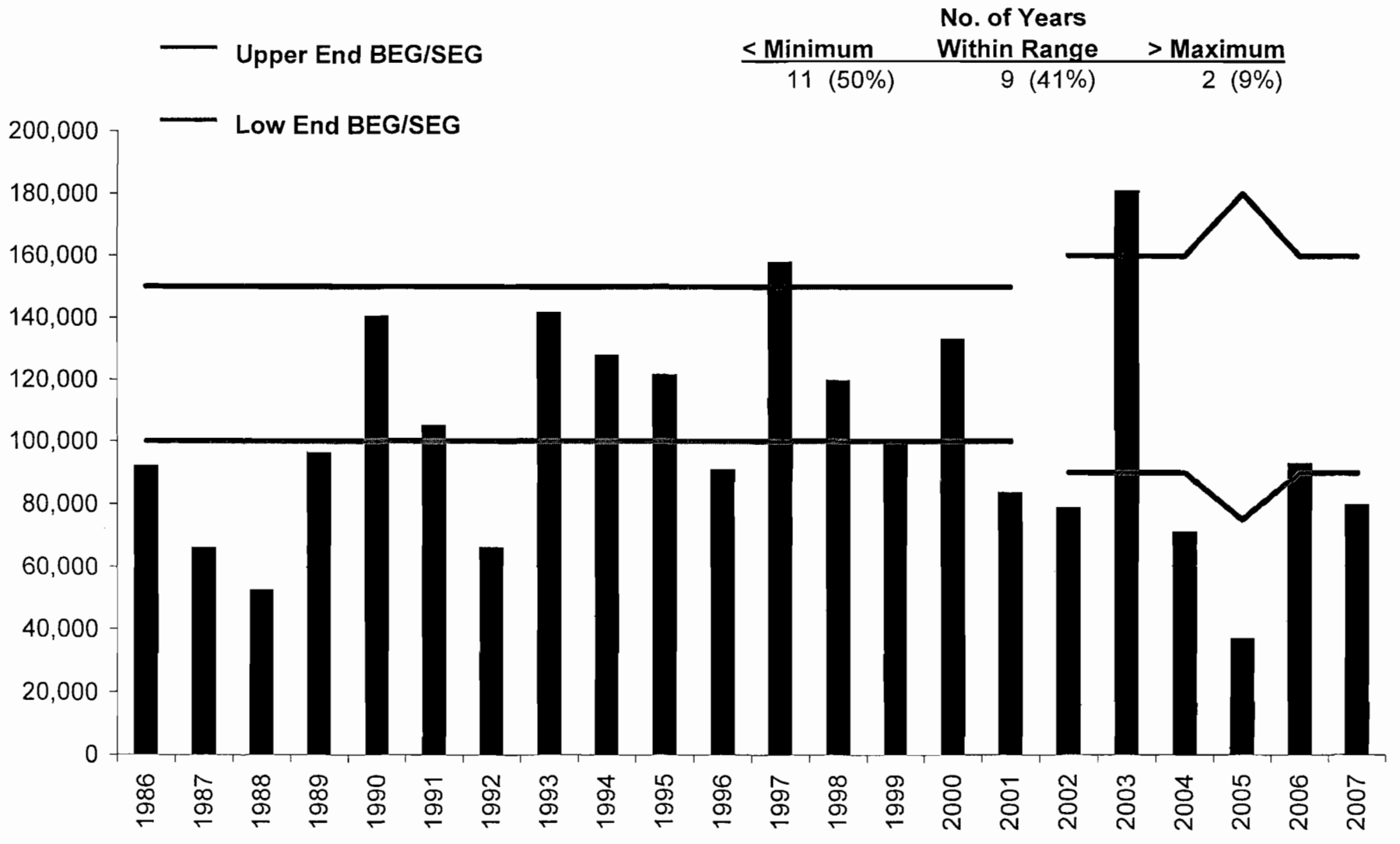
(C) coho or silver salmon (*O. kisutch*);

(D) pink or humpback salmon (*O. gorbuscha*); and

(E) chum or dog salmon (*O. keta*);

(43) "wild salmon stock" means a stock of salmon that originates in a specific location under natural conditions; "wild salmon stock" may include an enhanced or rehabilitated stock if its productivity is augmented by supplemental means, such as lake fertilization or rehabilitative stocking; "wild salmon stock" does not include an introduced stock, except that some introduced salmon stocks may come to be considered "wild" if the stock is self-sustaining for a long period of time.

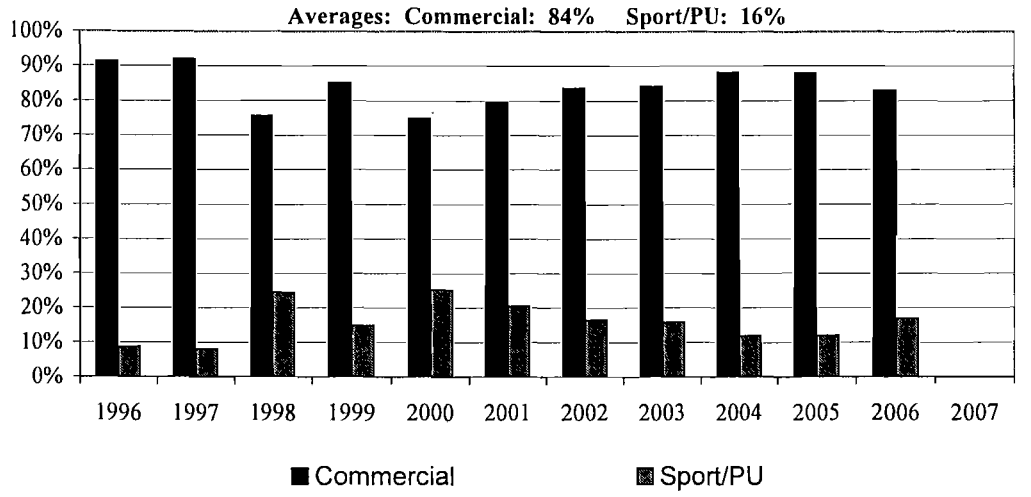
Proposal 121-122 Yentna River Sockeye Salmon Sonar Passage Estimate



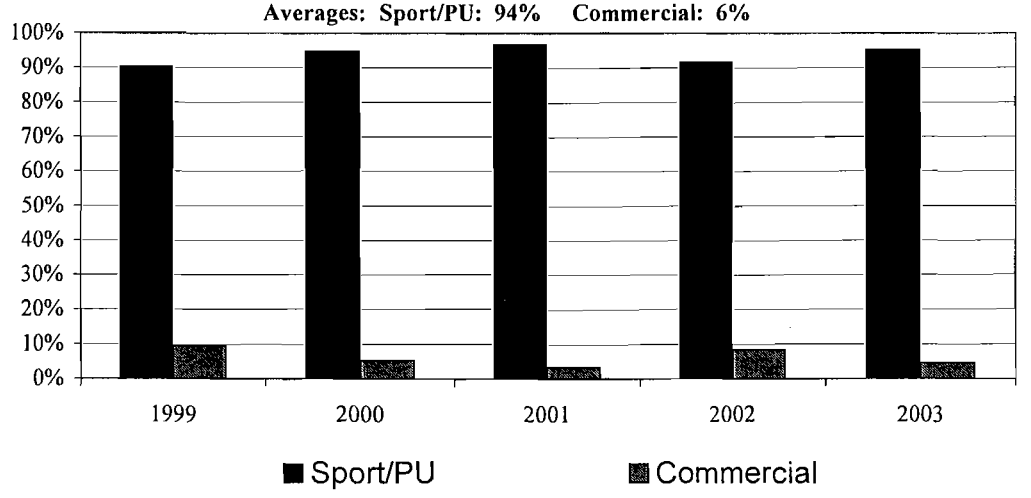
proposal 121,122- yentna sockeye esc.xls

Proposal 132: Sources of all Sockeye, and Kenai River Coho and Chinook salmon harvest

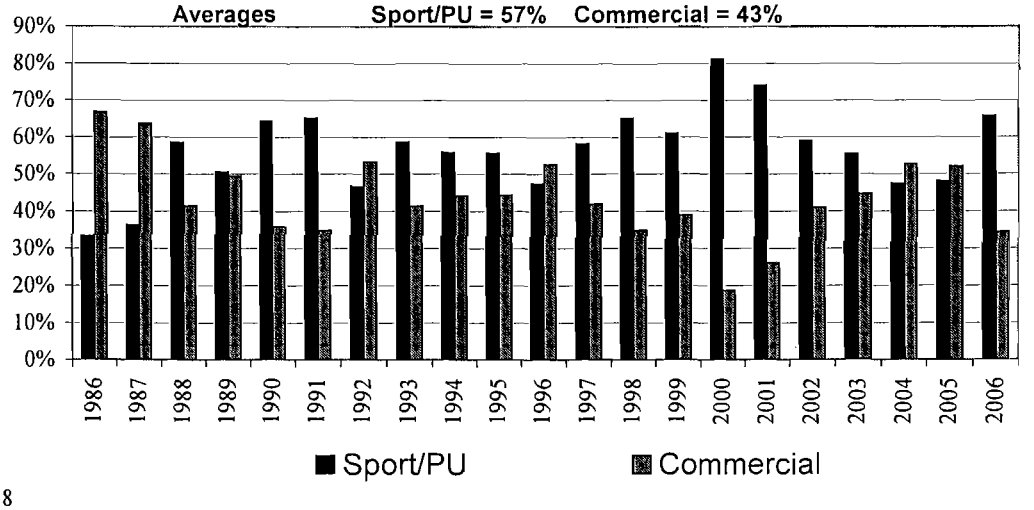
UCI Sockeye Salmon Sources of Harvest



Kenai River Coho Salmon - % of Harvest



Kenai River late-run Chinook salmon - Sources of Harvest



Proposal 141: Management actions taken in the N. Dist. set gillne fishery to reduce Susitna River sockeye salmon exploitation.

NORTHERN DISTRICT SET GILLNET			
Year	EO	Action	Date
1991	11	Closed ND	29-Jul
1992	13	Closed ND	24-Jul
	16	Closed ND	27-Jul
1993	12	Closed ND	23-Jul
1994	11	Closed ND	22-Jul
1995	8	Closed ND	24-Jul
1996	13	Closed ND	22-Jul
1997	13	Closed ND	18-Jul
	16	Closed ND	21-Jul
1998	10	Closed ND	20-Jul
	14	Closed ND	27-Jul
	15	Closed ND	31-Jul
1999	12	Closed ND	22-Jul
	18	Closed ND	29-Jul
2001	16	Closed ND	23-Jul
	19	Closed ND	26-Jul
2002	14	ND gear reduced to 1 net;	22-Jul
	16	Closed ND	25-Jul
	20	Closed ND	29-Jul
2004	36	Reduce ND to 2 nets	26-Jul
	41	Reduce ND to 1 net	29-Jul
	47	Closed ND	2-Aug
2005	33	Closed ND	21-Jul
	38	Closed ND	25-Jul
	43	Closed ND	28-Jul
	48	Closed ND	1-Aug
	52	Closed ND	4-Aug
2006	9	Closed ND	10-Jul
	12	Closed ND	13-Jul
	16	Closed ND	17-Jul
	20	Closed ND	20-Jul
	27	Closed ND	24-Jul
	28	Closed ND	27-Jul
	31	Closed ND	31-Jul
	35	Closed ND	3-Aug
2007	17	ND reduced to 1 net	23-Jul
	20	Closed ND	26-Jul
	25	Closed ND	30-Jul
	29	Closed ND	2-Aug
	34	Closed ND	6-Aug

Proposal 142: Coho salmon escapement data for Little Susitna River, Deshka River, and Jim Creek, 1988-2007

Year	Little Su River Weir[a]	Deshka River Weir[b]	Jim Creek Index[c]
1988	20,491		1,911
1989	15,232		597
1990	14,310		1,188
1991	37,601		902
1992	20,393		70
1993	33,378		1,038
1994	27,820		2,625
1995	11,817		1,990
1996	15,803		511
1997	9,894[d]	8,063	1,264
1998	15,159	6,773	1,482
1999	3,017[d]	4,563	332
2000	15,436	26,387	3,218
2001	30,383	29,927	1,594
2002	47,938	24,612	4,103
2003	10,877	17,305	1,814
2004	40,199	62,940	5,697
2005	16,839[d]	47,887	3,347
2006	8,786[d]	59,419	4,139
2007	17,573	10,575	1,875

[a] Weir located at RM 34 in 1986, 1988-1995; at RM 71 from 1996-2007

[b] Weir count, 1997-2000 @ RM7; 1998, 1999, 2002, & 2005 weir underwater for an extended time during coho season resulting in an incomplete count

[c] Foot surveys

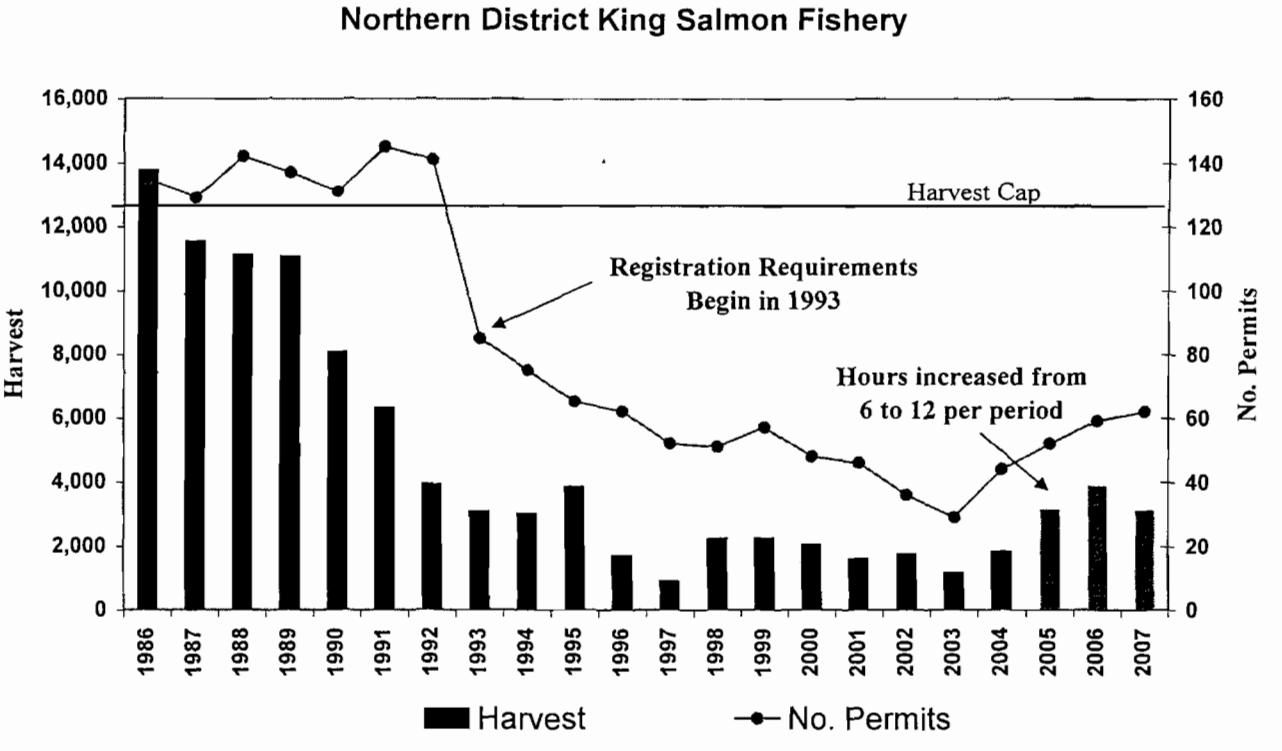
[d] Incomplete or partial count due to weir sumbersion.

Proposal 142 - N. Dist. Commercial Salmon Harvest after August 10, 1980-2007

Year	No. Periods	Chinook	Sockeye	Coho	Even year Pink	Odd year Pink	Chum	Total
1980	3	2	594	775	701		39	2,111
1981	7	1	279	1,747		13	341	2,381
1982	14	16	793	12,197	1,575		2,540	17,121
1983	8	5	1,042	6,261		120	2,316	9,744
1984	10	5	747	8,015	1,064		1,226	11,057
1985	14	5	2,869	15,628		255	2,907	21,664
1986	11	12	2,169	10,085	922		2,624	15,812
1987	9	26	1,312	21,814		55	10,965	34,172
1988	10	14	2,077	29,352	2,864		7,074	41,381
1989	14	11	3,695	54,976		425	3,617	62,724
1990	14	13	4,110	41,627	3,268		4,039	53,057
1991	14	13	4,638	45,766		57	11,229	61,703
1992	14	9	4,273	34,005	1,212		7,947	47,446
1993	10	6	1,964	21,310		78	2,066	25,424
1994	10	4	7,316	30,986	604		4,356	43,266
1995	11	25	8,008	17,445		138	5,717	31,333
1996	8	1	1,175	9,883	551		158	11,768
1997	-	-	-	-	-	-	-	-
1998	9	6	1,268	7,403	806		301	9,784
1999	10	2	1,489	7,664		17	50	9,222
2000	9	1	503	10,234	1,882		73	12,693
2001	10	2	380	11,038		17	268	11,705
2002	10	1	511	15,681	282		276	16,751
2003	10	2	1,922	7,939		30	225	10,118
2004	10	133	2,522	15,841	247		124	18,867
2005	11	2	6,387	21,648		6	111	28,154
2006	10	1	4,911	11,506	1,243		121	17,782
2007	10	1	3,416	9,995		57	157	13,626
MEAN	**10**	**12**	**2,606**	**17,808**	**1,230**	**98**	**2,625**	**23,736**
Avg/Period		**1**	**251**	**1,717**	**119**	**9**	**253**	**2,289**

Proposal 146, 148, 151: Northern District King Salmon Fishery

Year	Number	Permits	Periods
1986	13,771	135	3
1987	11,541	129	4
1988	11,122	142	3
1989	11,068	137	3
1990	8,072	131	3
1991	6,305	145	4
1992	3,918	141	3
1993	3,072	85	3
1994	3,006	75	2
1995	3,837	65	1
1996	1,690	62	1
1997	894	52	2
1998	2,240	51	2
1999	2,259	57	2
2000	2,046	48	3
2001	1,616	46	3
2002	1,747	36	3
2003	1,172	29	3
2004	1,819	44	3
2005	3,150	52	3
2006	3,887	59	3
2007	3,132	62	3
1986-1992 Avg	9,400	137	3.3
1993-07 Avg	2,371	55	2.5



Proposal 147, 149, 150: Chinook Salmon harvest from stat areas 247-30 & 247-41. These stat areas encompass the area one mile south of Theodore River to the Susitna River, which is open for 2nd fishing period only.

1986

Date	No. of Deliveries	Daily	Cum
2-Jun	15	1,028	1,028
9-Jun	26	1,986	3,014
16-Jun	18	1,863	4,877

1987

Date	No. of Deliveries	Daily	Cum
1-Jun	25	1,964	1,964
8-Jun	5	229	2,193
15-Jun	27	2,127	4,320
22-Jun	6	118	4,438

1988

Date	No. of Deliveries	Daily	Cum
6-Jun	31	1,663	1,663
13-Jun	31	2,230	3,893
20-Jun	22	2,232	6,125

1989

Date	No. of Deliveries	Daily	Cum
5-Jun	29	1,504	1,504
12-Jun	29	1,743	3,247
19-Jun	27	707	3,954

1990

Date	No. of Deliveries	Daily	Cum
4-Jun	12	223	223
11-Jun	25	605	828
18-Jun	27	987	1,815

1991

Date	No. of Deliveries	Daily	Cum
3-Jun	29	1,059	1,059
10-Jun	31	653	1,712
17-Jun	25	833	2,545
24-Jun	17	115	2,660

1992

Date	No. of Deliveries	Daily	Cum
1-Jun	10	85	85
8-Jun	29	652	737
15-Jun	14	239	976

1993

Date	No. of Deliveries	Daily	Cum
7-Jun	8	210	210
14-Jun	16	428	638
21-Jun	5	24	662

1994

Date	No. of Deliveries	Daily	Cum
6-Jun	13	802	802
13-Jun	18	919	1,721

1995

Date	No. of Deliveries	Daily	Cum
5-Jun	19	2,362	2,362

1996

Date	No. of Deliveries	Daily	Cum
3-Jun	15	950	950

Proposal 147, 149, 150: Chinook Salmon harvest from stat areas 247-30 & 247-41. These stat areas encompass the area one mile south of Theodore River to the Susitna River, which is open for 2nd fishing period only.

1997

Date	No. of Deliveries	Daily	Cum
2-Jun	9	180	180
23-Jun	2	31	211

1998

Date	No. of Deliveries	Daily	Cum
1-Jun	11	436	436
8-Jun	4	35	471

1999

Date	No. of Deliveries	Daily	Cum
7-Jun	8	574	574
14-Jun	3	27	601

2000

Date	No. of Deliveries	Daily	Cum
5-Jun	10	336	336
12-Jun	7	71	407

2001

Date	No. of Deliveries	Daily	Cum
4-Jun	8	110	110
11-Jun	3	22	132
18-Jun	1	6	138

2002

Date	No. of Deliveries	Daily	Cum
27-May	2	13	13
3-Jun	7	172	185
10-Jun	2	34	219

2003

Date	No. of Deliveries	Daily	Cum
26-May	5	73	73
2-Jun	6	49	122
9-Jun	7	120	242

2004

Date	No. of Deliveries	Daily	Cum
31-May	5	47	47
7-Jun	10	413	460
14-Jun	8	93	553

2005

Date	No. of Deliveries	Daily	Cum
30-May	7	224	224
6-Jun	7	387	611
13-Jun	7	98	709

2006

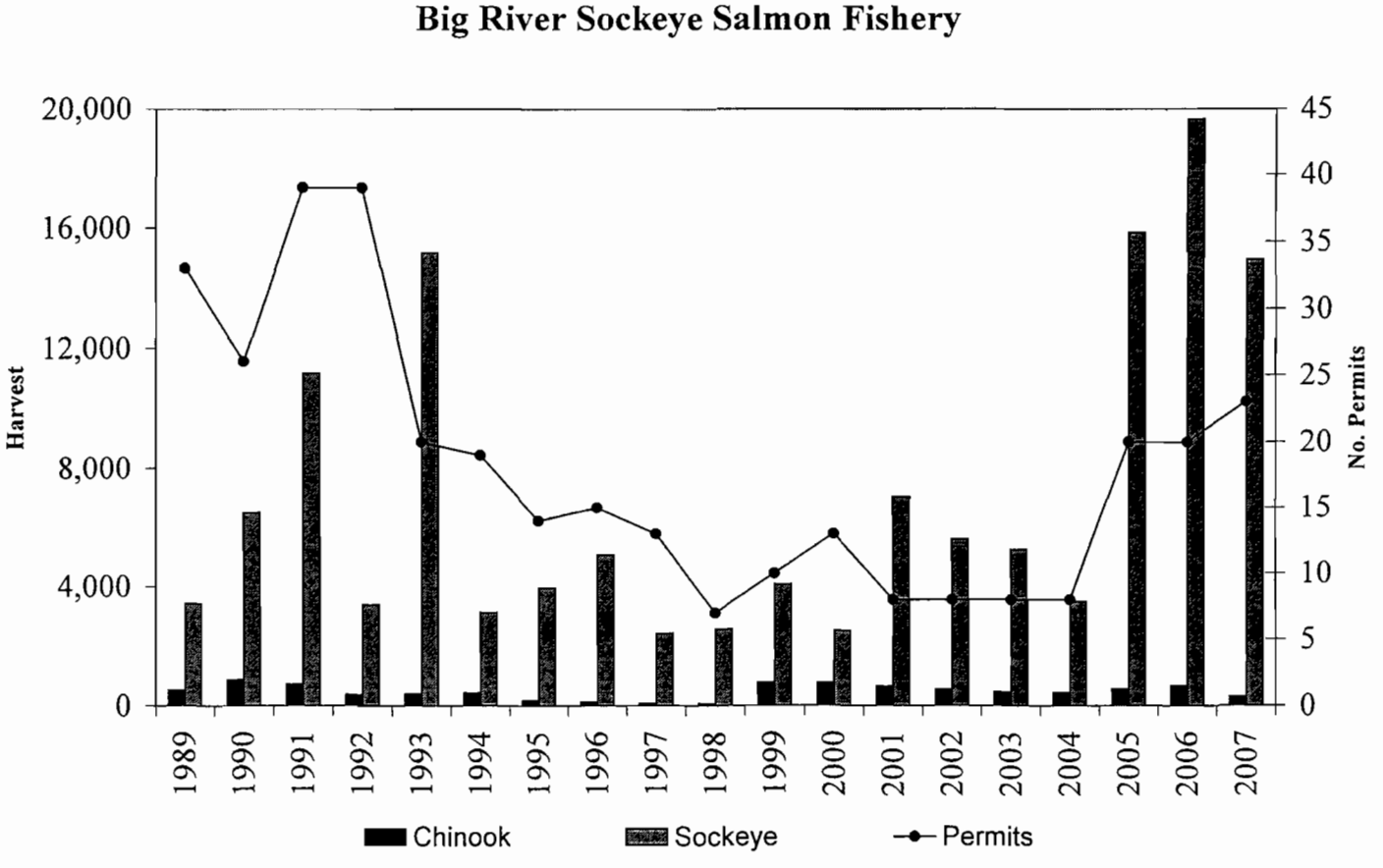
Date	No. of Deliveries	Daily	Cum
29-May	8	96	96
5-Jun	12	397	493
12-Jun	9	377	870

2007

Date	No. of Deliveries	Daily	Cum
28-May	5	36	36
4-Jun	10	359	395
11-Jun	9	246	641

Proposal 152: Big River Sockeye Salmon Fishery

Year	Chinook	Sockeye	Permits
1989	523	3,429	33
1990	871	6,483	26
1991	716	11,167	39
1992	365	3,382	39
1993	399	15,193	20
1994	435	3,124	19
1995	186	3,951	14
1996	136	5,070	15
1997	86	2,408	13
1998	78	2,555	7
1999	777	4,074	10
2000	774	2,510	13
2001	651	7,020	8
2002	536	5,600	8
2003	469	5,241	8
2004	429	3,494	8
2005	561	15,859	20
2006	674	19,674	20
2007	312	14,968	23
1989-2004	464	5,294	18
2005-2007	516	16,834	21



Proposal 165: Drift Gillnet Commercial Salmon Catch after Aug 10, 1980-1996

Year	Avg. No. Permits	Catch (numbers) Sockeye	Coho	Pink	Chum
1980	20	209	4,889	9,748	679
1981	41	238	11,601	209	19,033
1982	28	2,988	37,147	23,571	66,392
1983	20	648	4,050	25	6,411
1984	33	428	6,453	5,205	34,678
1985	28	1,803	14,816	88	5,459
1986	50	4,927	12,284	26,807	16,327
1987	8	468	2,811	23	2,945
1988	34	4,555	12,971	24,889	7,929
1990	52	3,817	18,739	40,137	3,653
1991	45	4,622	23,833	122	15,025
1992	22	2,069	8,207	2,395	1,282
1993	6	519	2,561	64	297
1994	28	7,654	17,640	4,021	7,974
1995	27	7,011	8,695	304	9,140
average	29	2,797	12,446	9,174	13,148
avg per permit (no)		95	424	312	448
avg per permit (lbs)		589	2,798	1,098	3,246
avg fish weight (lbs)		6.2	6.6	3.5	7.2

Drift Gillnet Commercial Salmon Catch after Aug 10, 2004-2007

Year	Avg. No. Permits	Catch (numbers) Sockeye	Coho	Pink	Chum
2004	2	247	183	66	37
2005	14	7,262	10,952	40	366
2006	17	11,870	12,750	18,442	1,785
2007	10	2,184	8,111	79	379
average	11	5,391	7,999	4,657	642
avg per permit (no)		507	752	438	60
avg per permit (lbs)		2,981	4,850	1,633	446
avg fish weight (lbs)		5.9	6.4	3.7	7.4

Drift Gillnet Commercial Harvest after August 10, 1966-2007

Year	Chinook	Sockeye	Coho	Even year Pink	Odd year Pink	Chum	Total
1966		1,380	321	830		1,552	4,083
1967	2		653		7		662
1968	2	424	1,417	8,065		445	10,353
1969		9	671		212	7,304	8,196
1970		227	1,061	926		6,862	9,076
1971	9	74	255		2	3,618	3,958
1972	1	42	296	969		36,073	37,381
1973		6	269		13	3,288	3,576
1974	3	19	803	1,183		4,137	6,145
1975	2	41	1,643		27	10,909	12,622
1976	1	50	1,112	8,671		8,958	18,792
1977	3	161	2,442		195	93,198	95,999
1978	15	856	4,052	40,589		14,235	59,747
1979	9	428	4,640		32	39,223	44,332
1980	10	209	4,889	9,748		679	15,535
1981	7	238	11,601		209	19,033	31,088
1982	2	2,988	37,147	23,571		66,392	130,100
1983	14	648	4,050		25	6,411	11,148
1984	6	428	6,453	5,205		34,678	46,770
1985	18	1,803	14,816		88	5,459	22,184
1986	13	4,927	12,284	26,807		16,327	60,358
1987	1	468	2,811		23	2,945	6,248
1988	10	4,555	12,971	24,889		7,929	50,354
1990	5	3,817	18,739	40,137		3,653	66,351
1991	7	4,622	23,833		122	15,025	43,609
1992	3	2,069	8,207	2,395		1,282	13,956
1993	1	519	2,561		64	297	3,442
1994	3	7,654	17,640	4,021		7,974	37,292
1995	3	7,011	8,695		304	9,140	25,153
1996							
1997							
1998							
1999							
2000							
2001							
2002		4	10	116		18	148
2003							
2004		247	183	66		37	533
2005	4	7,262	10,952		40	366	18,624
2006	4	11,870	12,750	18,442		1,785	44,851
2007	10	2,184	8,111		79	379	10,763
Avg (for yrs fished)	5	2,030	7,217	6,563	44	13,017	28,876
Avg (for all years)	4	1,640	5,813	5,284	35	10,478	23,254

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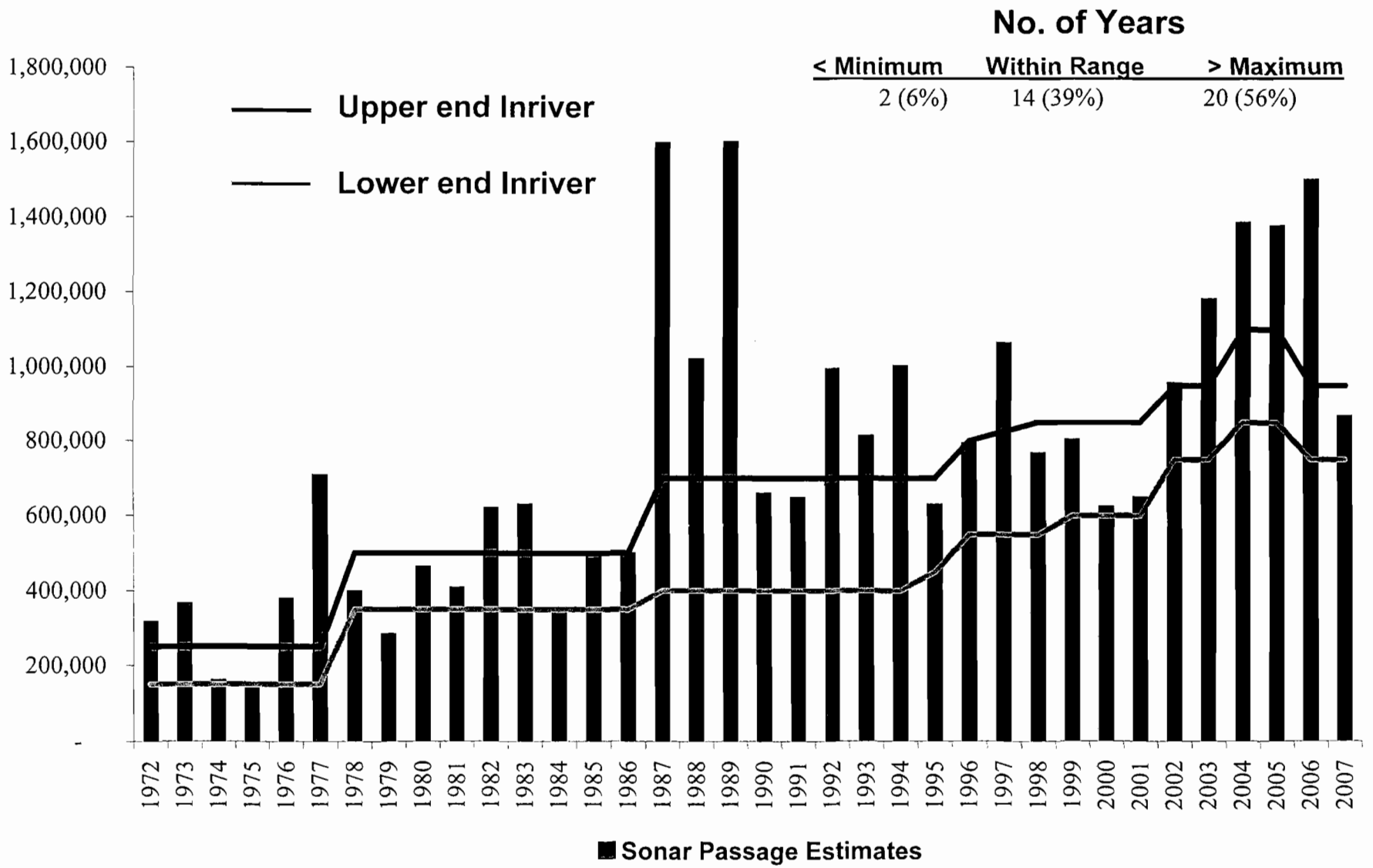
Proposal 118: Kenai River Sockeye Salmon



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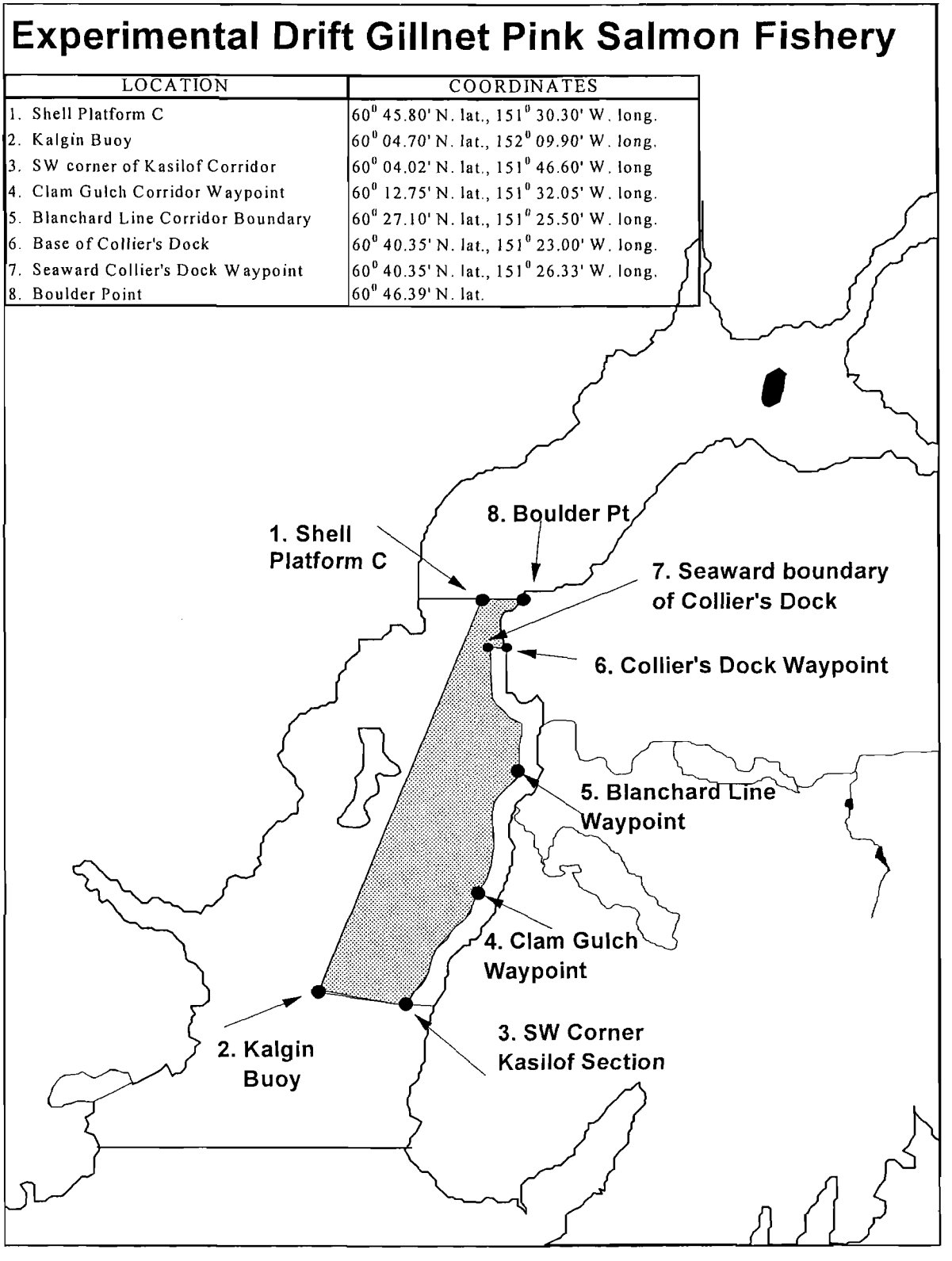
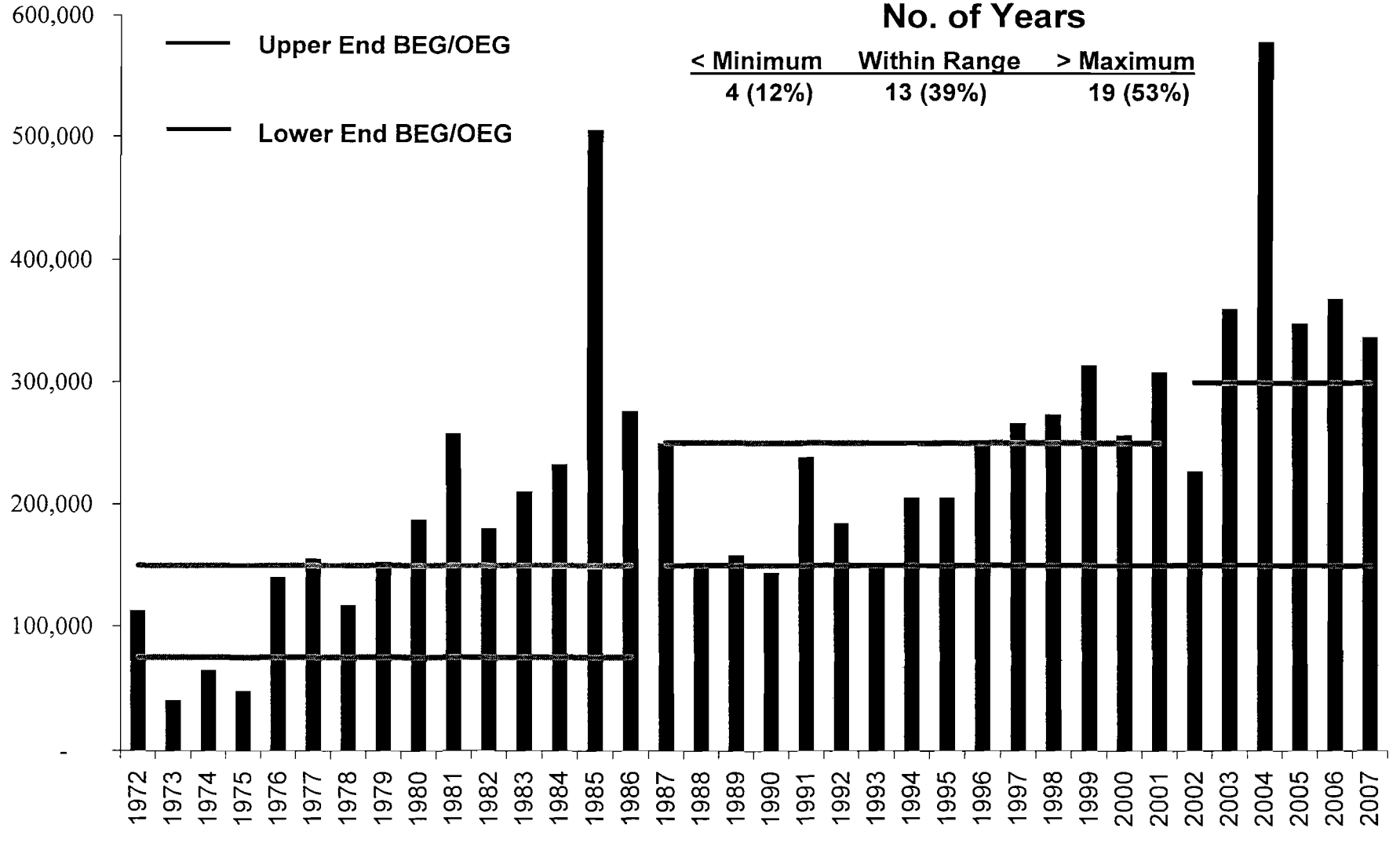


Proposal 153. Map of the area allowed for the drift gillnet experimental pink salmon fishery.

Proposal 156-157: ESSN Commercial Harvest by day, August 11-15, 1980-1999

		CHINOOK		SOCKEYE		COHO		PINK		CHUM	
Year	Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
1980	11-Aug	80	80	525	525	2,920	2,920	56,706	56,706	13	13
	13-Aug	35	115	489	1,014	3,810	6,730	26,638	83,344	147	160
	14-Aug	53	168	453	1,467	4,029	10,759	31,064	114,408	392	552
	15-Aug	29	197	248	1,715	1,736	12,495	19,081	133,489	16	568
1981	14-Aug	46	46	450	450	1,547	1,547	31	31	199	199
1982	11-Aug	63	63	819	819	8,770	8,770	32,689	32,689	562	562
	12-Aug	59	122	527	1,346	5,832	14,602	41,375	74,064	195	757
	13-Aug	48	170	518	1,864	4,338	18,940	47,698	121,762	19	776
	15-Aug	38	208	735	2,599	6,059	24,999	14,772	136,534	20	796
1983	12-Aug	75	75	2,589	2,589	1,457	1,457	7	7	89	89
	15-Aug	27	102	1,458	4,047	1,088	2,545	36	43	26	115
1984	13-Aug	49	49	722	722	3,085	3,085	20,567	20,567	38	38
1985	12-Aug	136	136	14,175	14,175	4,896	4,896	157	157	486	486
1986	11-Aug	162	162	5,997	5,997	3,894	3,894	40,606	40,606	113	113
	15-Aug	115	277	3,649	9,646	2,651	6,545	10,617	51,223	77	190
1987	14-Aug	101	101	3,866	3,866	3,360	3,360	19	19	43	43
1988	12-Aug	138	138	5,185	5,185	7,260	7,260	28,520	28,520	304	304
	15-Aug	66	204	2,447	7,632	4,883	12,143	11,642	40,162	68	372
1989	11-Aug	86	86	7,176	7,176	6,419	6,419	117	117	139	139
	14-Aug	32	118	7,297	14,473	7,223	13,642	144	261	247	386
1990	13-Aug	60	60	5,107	5,107	5,835	5,835	67,008	67,008	107	107
	15-Aug	35	95	2,183	7,290	5,658	11,493	22,325	89,333	46	153
1991	12-Aug	42	42	7,885	7,885	4,994	4,994	29	29	674	674
1992	14-Aug	43	43	15,225	15,225	7,084	7,084	15,533	15,533	73	73
1993	13-Aug	25	25	2,390	2,390	3,033	3,033	103	103	70	70
1994	12-Aug	140	140	14,676	14,676	7,505	7,505	15,453	15,453	155	155
	15-Aug	68	208	7,498	22,174	5,288	12,793	5,257	20,710	36	191
1995	11-Aug	110	110	12,536	12,536	3,265	3,265	30	30	160	160
	14-Aug	91	201	14,841	27,377	4,320	7,585	43	73	164	324
1996	12-Aug	82	82	3,052	3,052	1,611	1,611	12,766	12,766	54	54
1997											
1998											
1999	12-Aug	90	90	5,670	5,670	1,263	1,263	17	17	4	4
Avg (yrs fished)			126		8,513		7,874		30,649		278

Proposal 166: Kasilof River Sockeye Salmon Passage Estimates



Proposal 166 - Kasilof River sockeye salmon passage.xls

Proposal 168: Kasilof River Terminal Harvest Area Commercial Harvest

2004 Set Gillnet

Date	No. of Deliveries	CHINOOK Daily	CHINOOK Cum	SOCKEYE Daily	SOCKEYE Cum
14-Jul	2	1	1	1,341	1,341
23-Jul	2	2	3	93	1,434
24-Jul	1	8	11	285	1,719
25-Jul	5	7	18	738	2,457
27-Jul	3	2	20	400	2,857
28-Jul	1	25	45	601	3,458
30-Jul	3	9	54	780	4,238
7-Aug	1	14	68	666	4,904

2004 Drift Gillnet

Date	No. of Deliveries	CHINOOK Daily	CHINOOK Cum	SOCKEYE Daily	SOCKEYE Cum
14-Jul	4	3	3	554	554
17-Jul	1	2	5	13	567
23-Jul	1	4	9	5	572

2005 Set Gillnet

Date	No. of Deliveries	CHINOOK Daily	CHINOOK Cum	SOCKEYE Daily	SOCKEYE Cum
5-Jul	33	14	14	3,985	3,985
6-Jul	21	36	50	4,972	8,957
8-Jul	36	76	126	11,720	20,677
9-Jul	16	13	139	2,331	23,008
10-Jul	30	40	179	6,523	29,531
15-Jul	37	60	239	6,215	35,746
17-Jul	25	109	348	11,743	47,489
18-Jul	7	18	366	1,131	48,620
22-Jul	27	91	457	16,559	65,179
29-Jul	31	141	598	10,975	76,154
30-Jul	9	31	629	1,753	77,907

2005 Drift Gillnet

Date	No. of Deliveries	CHINOOK Daily	CHINOOK Cum	SOCKEYE Daily	SOCKEYE Cum
5-Jul	35	4	4	1,611	1,611
6-Jul	13	4	8	1,372	2,983
8-Jul	24	28	36	2,697	5,680
9-Jul	37	55	91	6,318	11,998
10-Jul	14	8	99	1,721	13,719
15-Jul	17	13	112	2,399	16,118
17-Jul	7	6	118	1,781	17,899
22-Jul	6	1	119	1,393	19,292

2006 Set Gillnet

Date	No. of Deliveries	CHINOOK Daily	CHINOOK Cum	SOCKEYE Daily	SOCKEYE Cum
27-Jun	3			108	108
28-Jun	45	38	38	13,117	13,225
4-Jul	19	12	50	2,252	15,477
5-Jul	42	48	98	13,497	28,974
9-Jul	42	55	153	7,214	36,188
11-Jul	33	44	197	3,187	39,375
12-Jul	22	32	229	2,013	41,388
15-Jul	16	22	251	5,936	47,324
16-Jul	37	62	313	28,916	76,240
17-Jul	26	18	331	10,046	86,286
18-Jul	34	67	398	6,562	92,848
19-Jul	19	24	422	1,519	94,367
20-Jul	28	64	486	12,091	106,458
21-Jul	33	41	527	14,030	120,488
22-Jul	43	147	674	10,287	130,775
23-Jul	45	104	778	24,954	155,729
24-Jul	51	54	832	68,098	223,827
25-Jul	77	103	935	51,199	275,026
26-Jul	62	87	1,022	24,510	299,536
27-Jul	70	132	1,154	21,393	320,929
29-Jul	59	111	1,265	17,226	338,155

2006 Drift Gillnet

Date	No. of Deliveries	CHINOOK Daily	CHINOOK Cum	SOCKEYE Daily	SOCKEYE Cum
27-Jun	20	10	10	3233	3233
28-Jun	12	16	26	2,429	5,662
4-Jul	20	8	34	1,535	7,197
5-Jul	43	49	83	12,486	19,683
9-Jul	25	5	88	4,260	23,943
11-Jul	31	5	93	1,134	25,077
12-Jul	9	2	95	299	25,376
15-Jul	16	17	112	2,944	28,320
16-Jul	46	372	484	17,158	45,478
17-Jul	51	21	505	11,048	56,526
18-Jul	73	97	602	5,270	61,796
19-Jul	46	33	635	3,132	64,928
20-Jul	110	134	769	24,184	89,112
21-Jul	100	149	918	24,103	113,215
22-Jul	94	74	992	11,642	124,857
23-Jul	71	86	1078	14,461	139,318
24-Jul	159	120	1198	118,160	257,478
25-Jul	198	214	1412	54,078	311,556
26-Jul	136	150	1,562	14,196	325,752
27-Jul	132	114	1,676	16,432	342,184
29-Jul	51	55	1,731	7,233	349,417

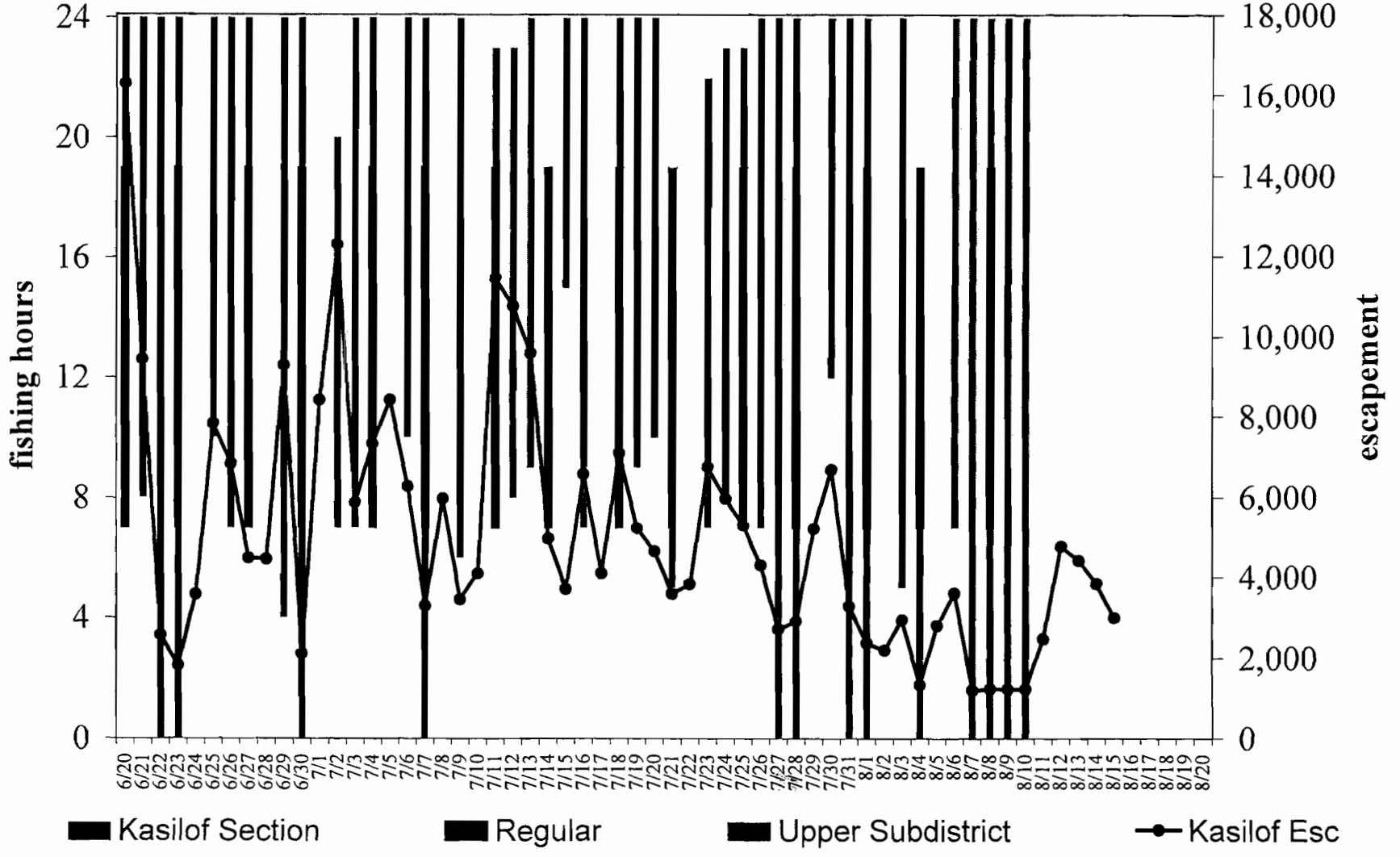
2007 Set Gillnet

Date	No. of Deliveries	CHINOOK Daily	CHINOOK Cum	SOCKEYE Daily	SOCKEYE Cum
27-Jul	18	8	8	979	979
28-Jul	25	27	35	2,304	3,283
29-Jul	24	21	56	2,102	5,385
3-Aug	23	38	94	2,385	7,770
4-Aug	18	21	115	2,605	10,375
5-Aug	13	16	131	1,853	12,228
9-Aug	5	3	134	246	12,474
10-Aug	14	30	164	3,157	15,631

2007 Drift Gillnet

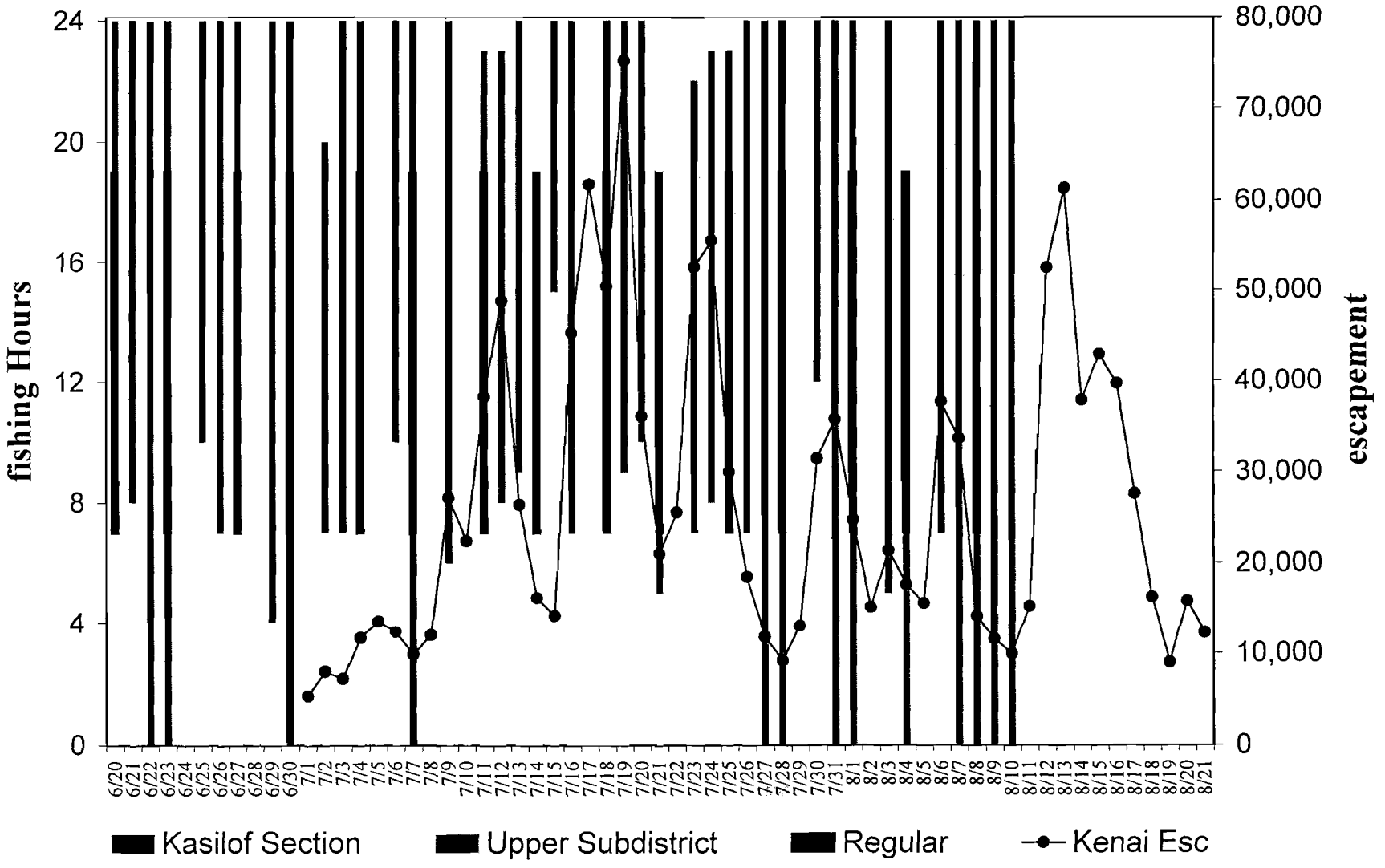
Date	No. of Deliveries	CHINOOK Daily	CHINOOK Cum	SOCKEYE Daily	SOCKEYE Cum
27-Jul	44	3	3	2689	2689
29-Jul	13	2	5	618	3,307
3-Aug	10	7	12	582	3,889
4-Aug	5	2	14	549	4,438
10-Aug	5	2	16	221	4,659

Proposal 169: Set Gill Net Fishing Hours in the Upper Subdistrict in 2005 and Kasilof River Sockeye Salmon Escapement



proposal 169 -ESSN fishing hours and sockeye esc.xls

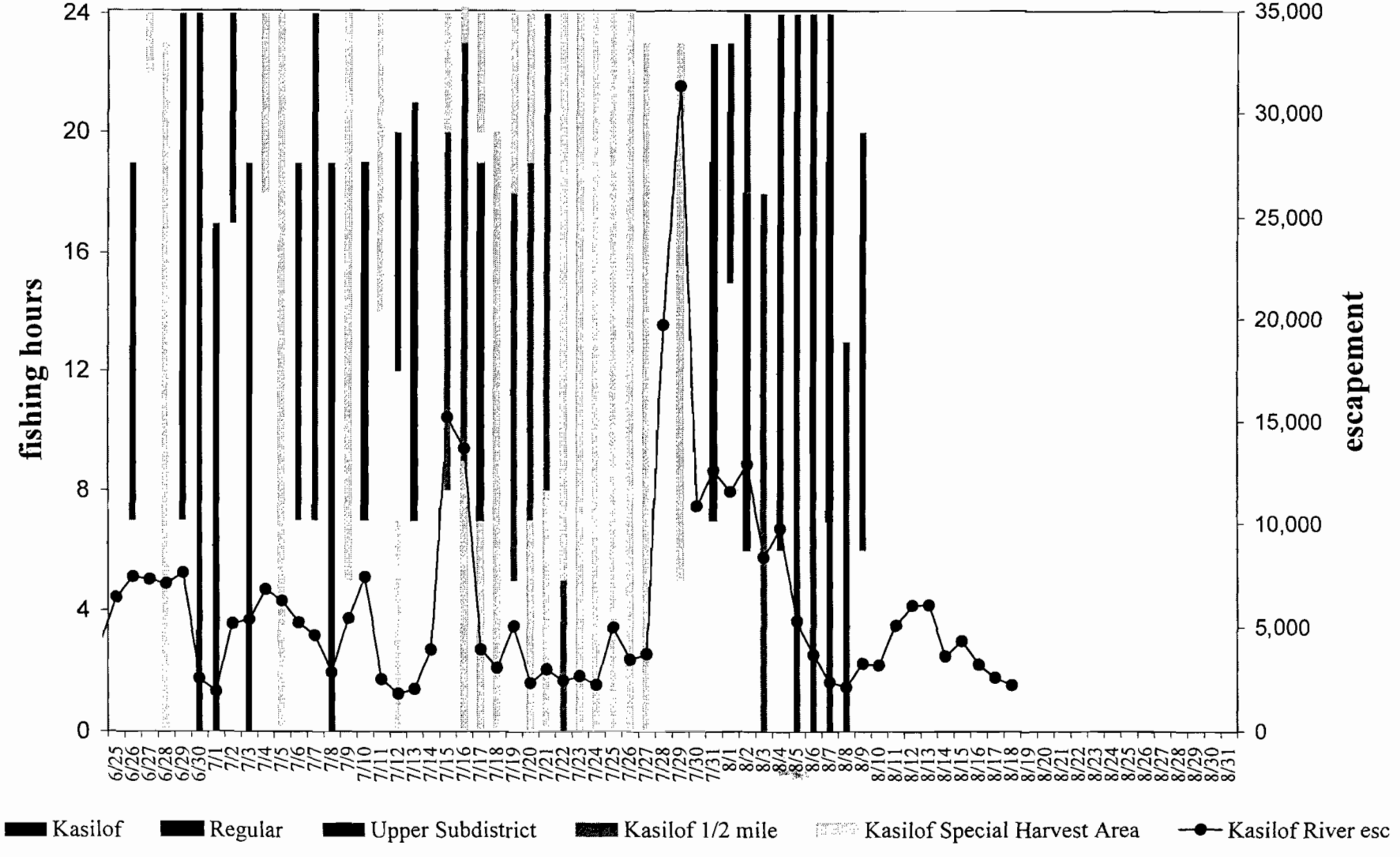
Proposal 169: Set Gillnet Fishing Hours in the Upper Subdistrict in 2005 and Kenai River Sockeye Salmon Esc



proposal 169 -ESSN fishing hours and sockeye esc.xls

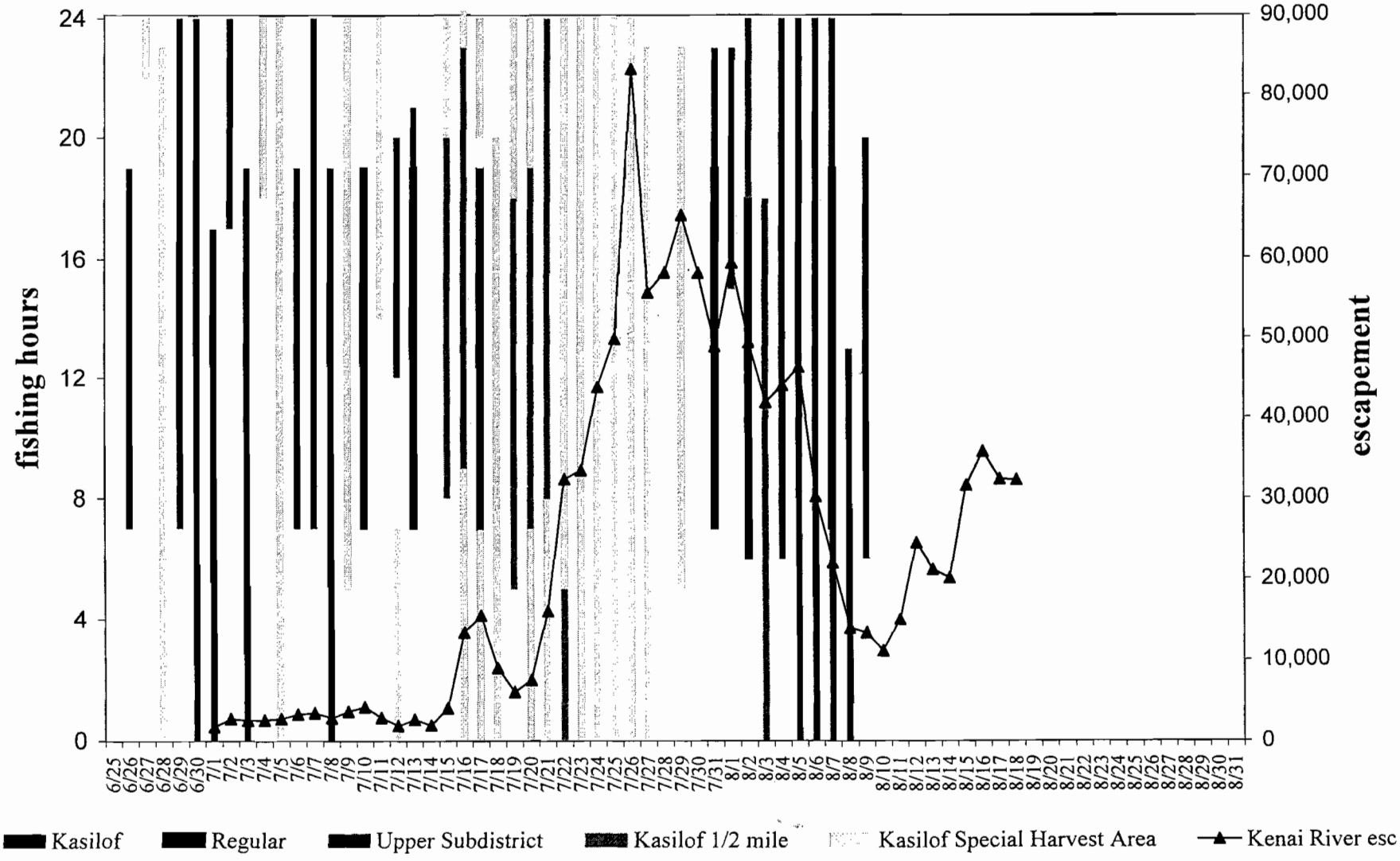
55

Set Gillnet Fishing Hours in the Upper Subdistrict in 2006 and Kasilof River sockeye salmon esc



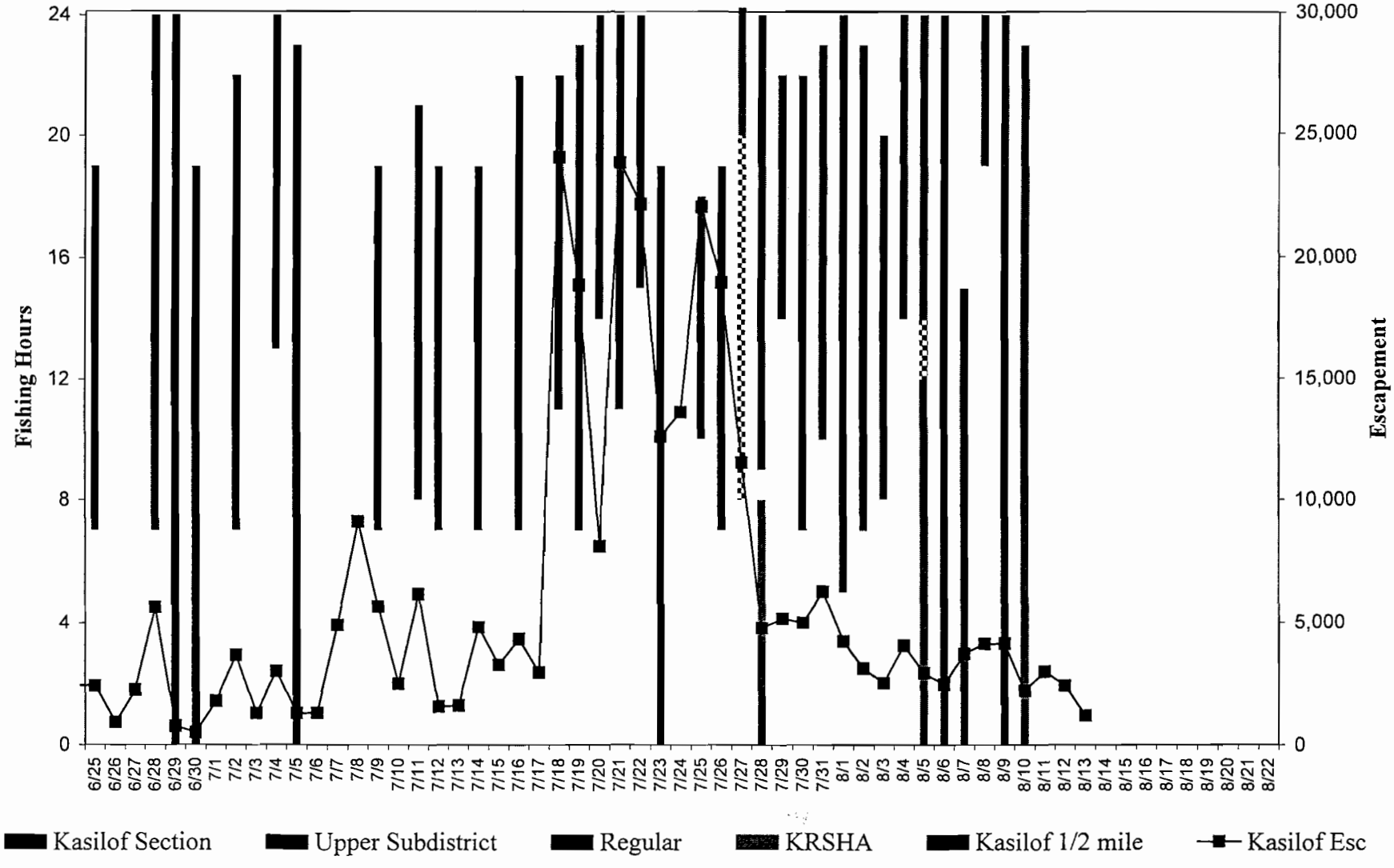
proposal 169 -ESSN fishing hours and sockeye esc.xls

Set Gillnet Fishing Hours in the Upper Subdistrict in 2006 and Kenai River sockeye salmon esc



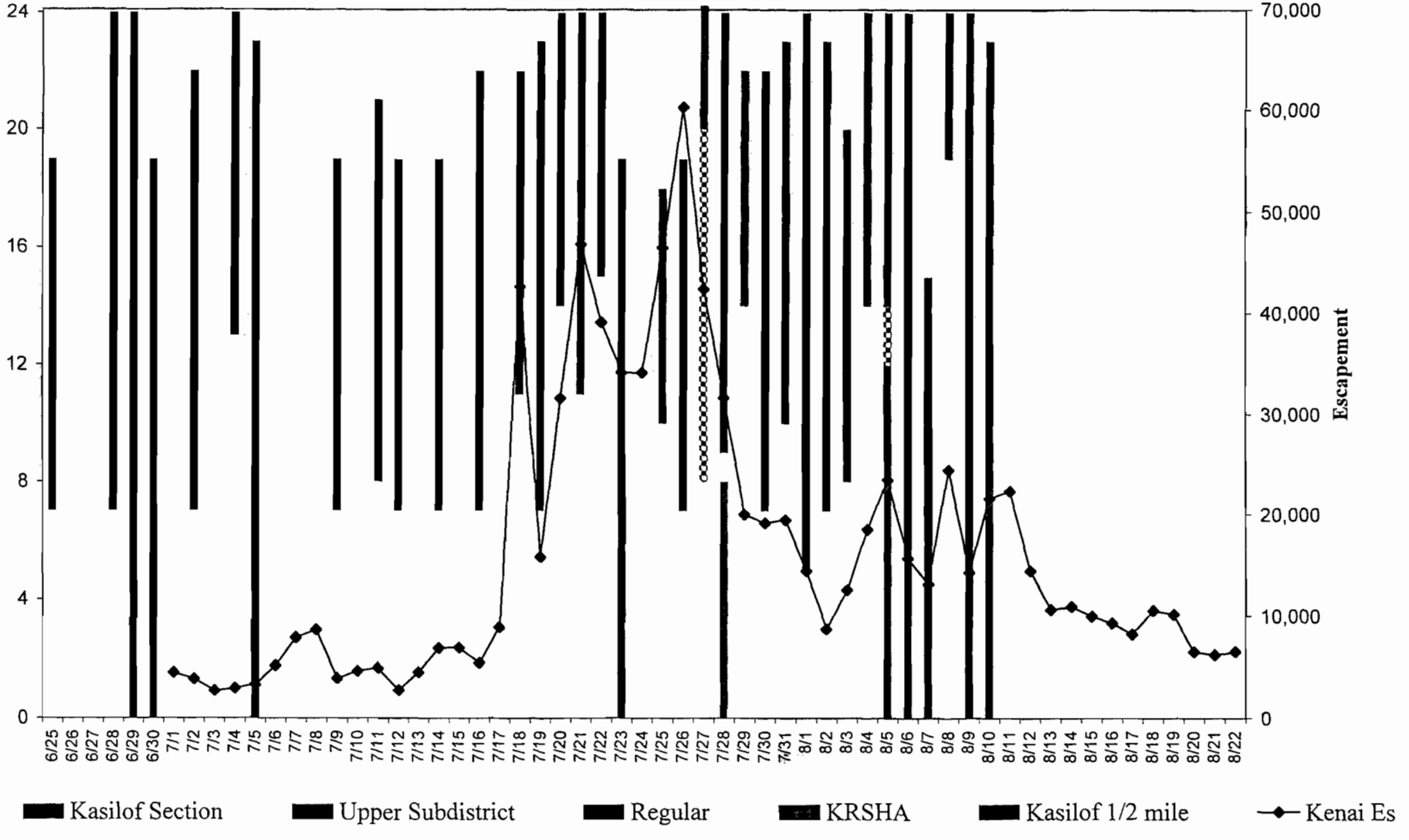
proposal 169 -ESSN fishing hours and sockeye esc.xls

Proposal 169: Set Gillnet Fishing Hours in the Upper Subdistrict in 2007 and Kasilof river sockeye salmon escapement



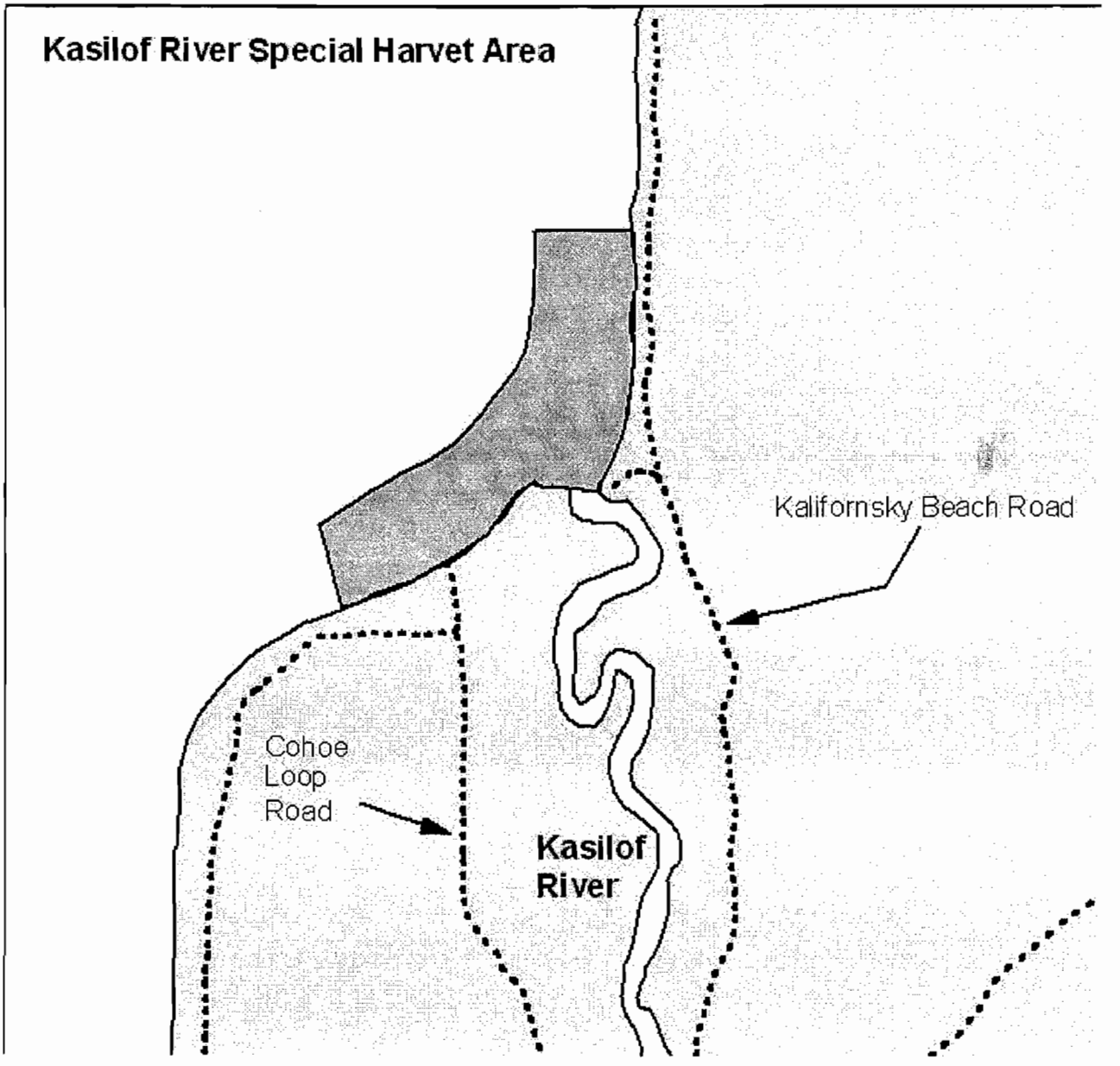
proposal 169 -ESSN fishing hours and sockeye esc.xls

Proposal 169: Set Gillnet Fishing Hours in the Upper Subdistrict in 2007 and Kenai River sockeye salmon escapement



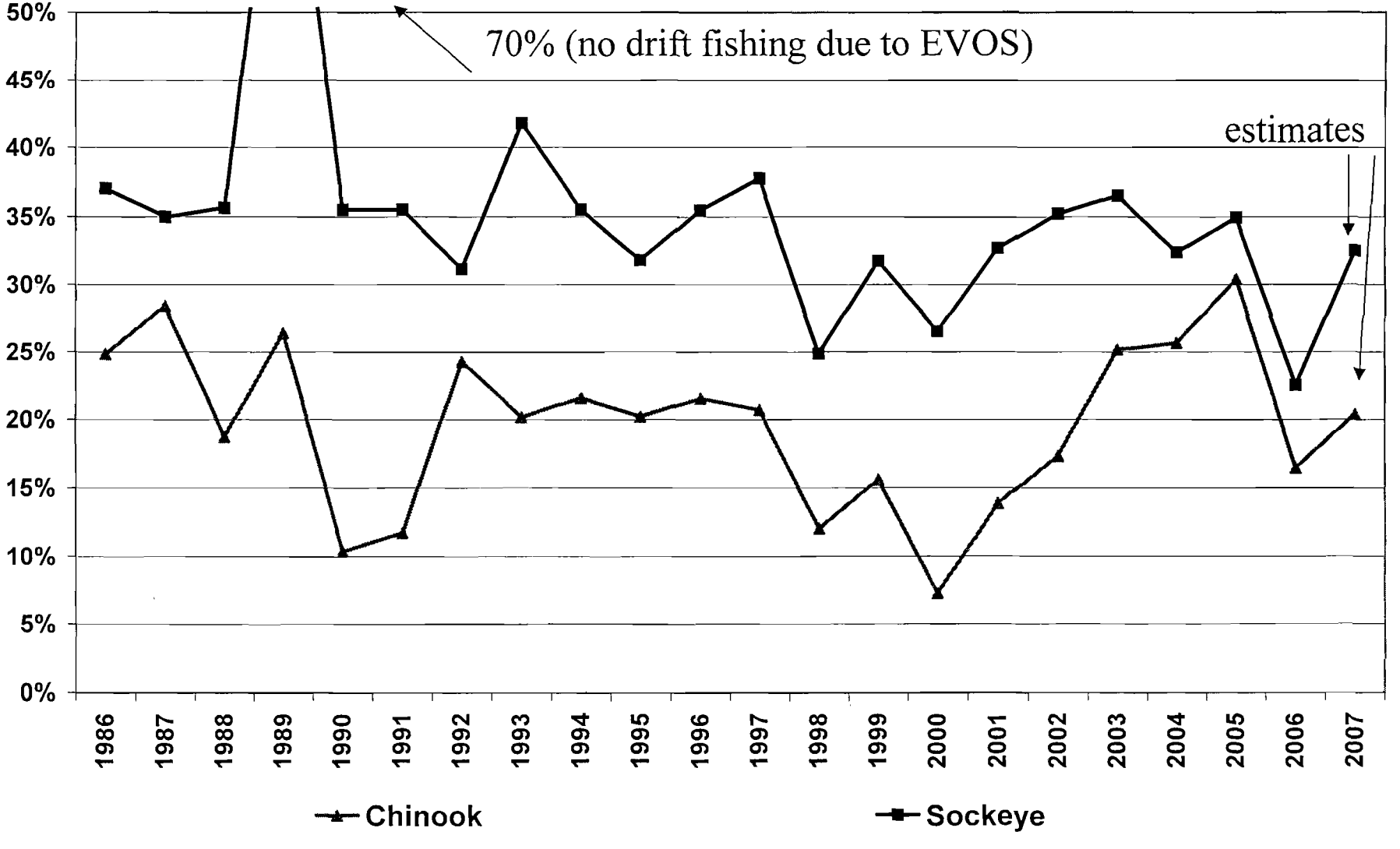
proposal 169 -ESSN fishing hours and sockeye esc.xls

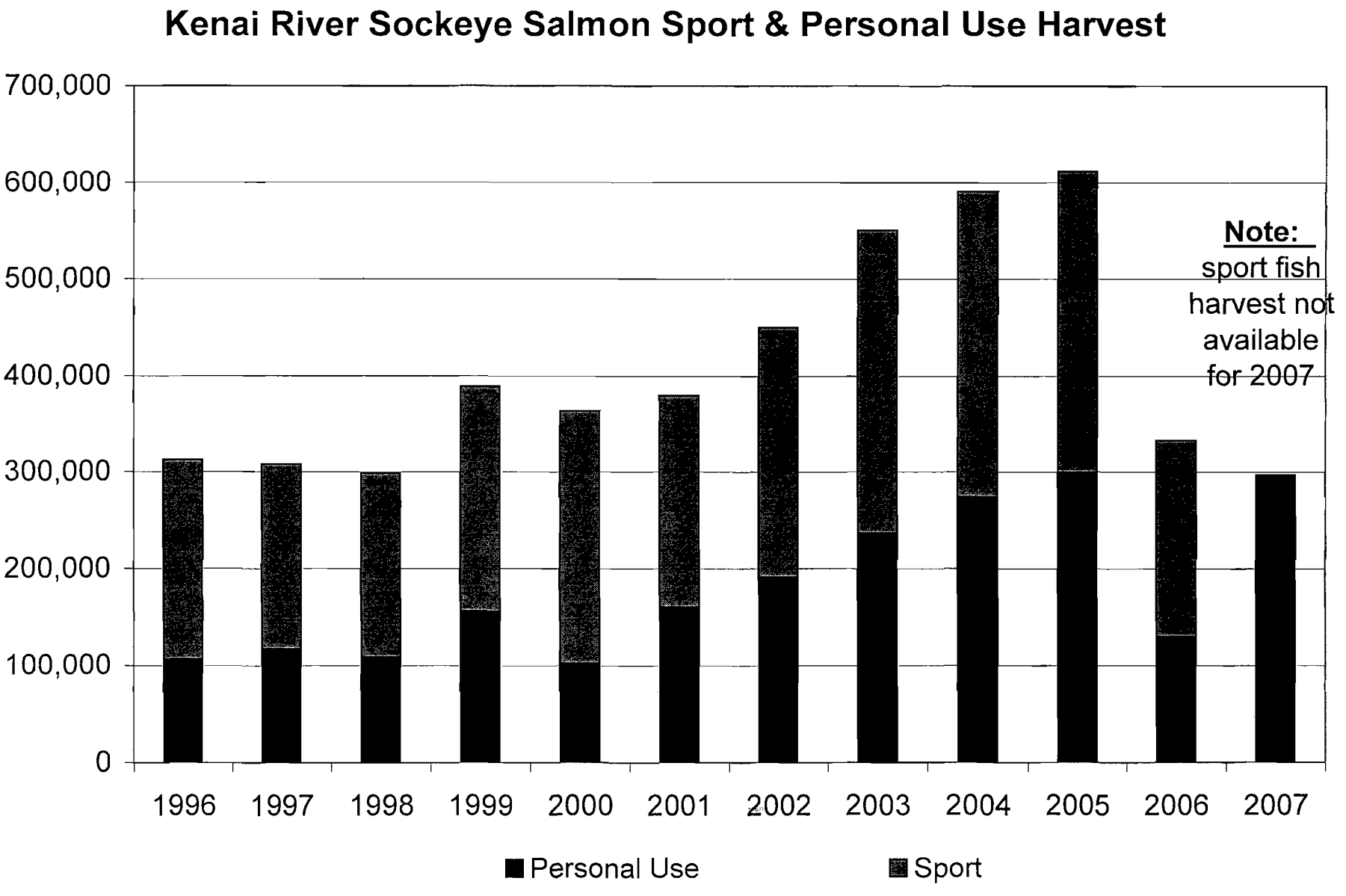
Proposal 181: Map of Kasilof River Terminal Harvest Area



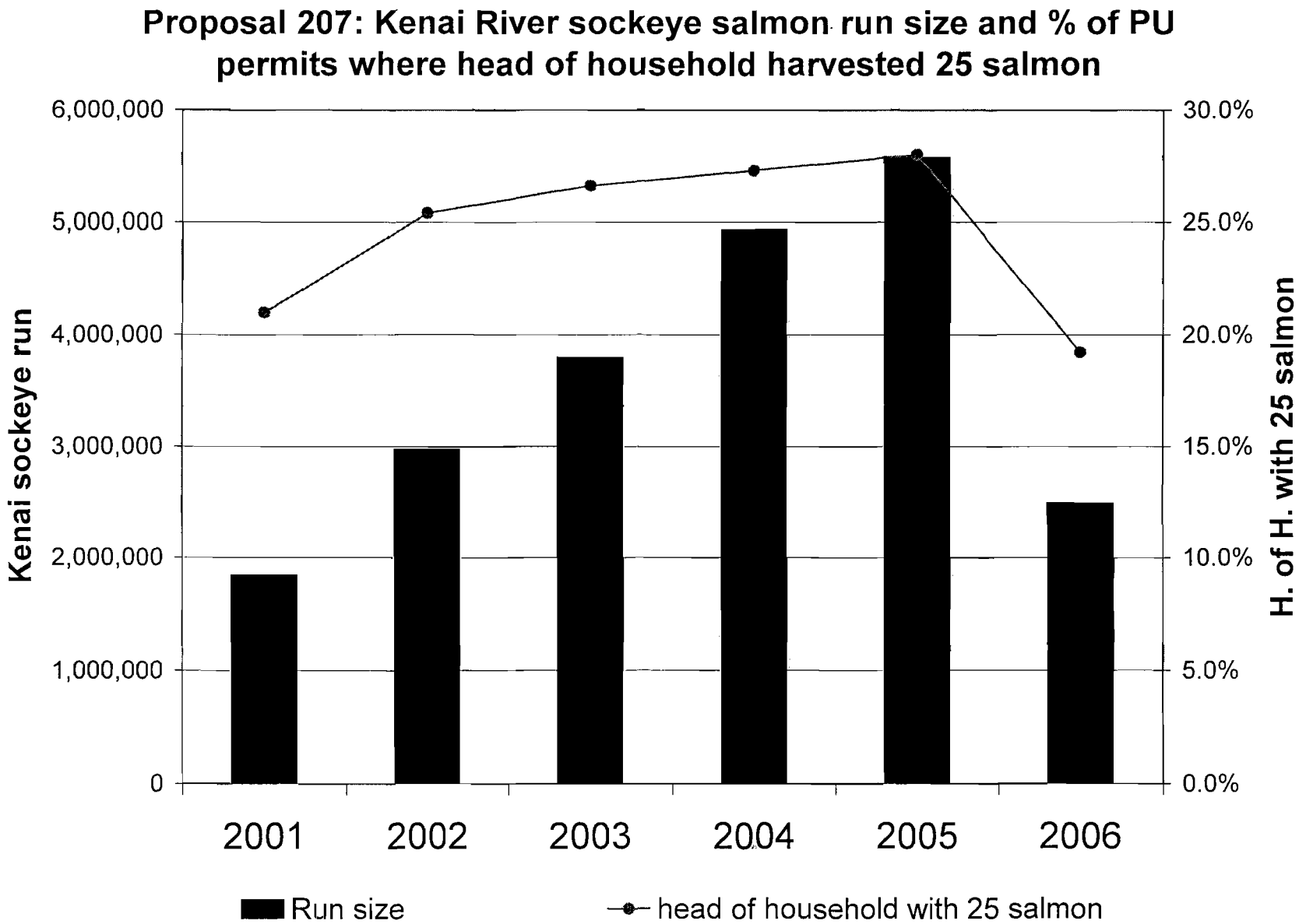
Proposal 202: ESSN Exploitation Rates on K.R. L.R. Chinook & Sockeye Salmon

(note: assumes all ESSN chinook harvest outside KRSHA are late-run Kenai stock)





proposal 202 - kenai sockeye sources of harvest.xls



proposal 207- personal use salmon fishery.xls

RC 84

February 1, 2008

State Of Alaska
Department of Fish and Game
Board Support Section
Chairman Mel Morris
Attn: Boar Comments
P.O. Box 115526
Juneau, AK 99811-5526

Chairman Morris,

South K-Beach Independent Fishermen's Alliance (SOKI), is an alliance of Cook Inlet south K-Beach (stat area 244-31) set-net fishing people. Formed in 2006 after the closure to our are area in harvesting Kasilof bound sockeye.

The Kasilof River Special Harvest Area (KRSHA) has had significant negative effects on our area since it was actuated in 2005. In 2006, a substantial closure period in the third week of July redirected the harvest of Kasilof bound sockeye to the KRSHA. The historical area which has targeted this return were excluded from this fishery. Non traditional gear types and set-net fishermen from other areas that normally did not have access to this fishery displaced the historical and traditional harvester in the immediate area. This caused discord in the fishery and constituted a "new and expanding" fishery.

SOKI submitted 9 proposals. The Board Support section published 5. They did not however publish 4 of our proposals. We have submitted the documentation that substantiates our faxed proposals. We also have enclosed the notice for the deadline of this meeting. We contacted the Board Supports Ex-Director at the October Work session. He acknowledged the omissions. It was our understanding that this issue would be addressed. We have included the proposals with this Record Copy.

Our Proposals:

Proposal 104 (pg 88) Monofilament restriction

Proposal 108 (pg 91) Gear equalization

Proposal 156 (pg 136) Pink Salmon plan

Proposal 168 (pg 147) Kasilof plan

Proposal 170 (pg 149) Opens 244-31 to fishing

Proposals Negated:

1. Weekly Fishing Periods - This would change weekly periods to 15 hours to allow for tide and weather.

2. Fishing Seasons - Opens an opportunity to harvest "high value" salmon in limited fishery.

3. Kenai River Late Run Sockeye Management Plan - Changes plan to one escapement goal.

4. Kenai River Late Run King Salmon Plan - Confusion in language.

We are available for questions and will continue to participate in this Upper Cook Inlet regulatory meeting. We will submit supporting material as necessary or requested.

Paul A. Shadura II
South K-Beach Independent Fishermen's Alliance, SOKI
P.O. Box 273, Kenai, AK 99669

Submitted by: Chris Brandt

Board Members
- Member Addresses
- Resumes/Bios
- Meeting Photos
- Become a member

Meeting Information
- Meeting Calendar
- Long-Term Cycle
- Proposal Book
- Agenda Change Requests
- Call for Proposals
- Legal Notices
- Future Call for Proposals
- Future Schedule
- Joint Boards Page
- BOF/NPFMC
- Salmon Industry Restructuring Panel
- BOF Committees

Meeting Summaries
- Summary of Actions

Regulations, Policies & Info
- Link to Regulations
- Policies and Findings
- Frequently Used Policies

Board of Fisheries Forms
- Proposal Form
- ACR Form
- Petition the Board

Board of Fisheries

Call for Proposals

THE ALASKA BOARD OF FISHERIES CALLS FOR PROPOSED CHANGES IN THE SUBSISTENCE, PERSONAL USE, SPORT, GUIDED SPORT, AND COMMERCIAL FINFISH REGULATIONS FOR THE COOK INLET, KODIAK, and CHIGNIK FINFISH AREAS, AND STATEWIDE (except Southeast and Yakutat areas) KING AND TANNER CRAB SHELLFISH REGULATIONS

PROPOSAL DEADLINE – TUESDAY, APRIL 10, 2007

The Alaska Board of Fisheries is accepting proposed changes to the subsistence, personal use, sport, guided sport, and commercial finfish regulations for the Cook Inlet, Kodiak and Chignik finfish management areas. Finfish includes: salmon, herring, trout, groundfish, char, burbot, northern pike, whitefish, etc.

In addition, the board is accepting proposed changes to the subsistence, personal use, sport, guided sport, and commercial king and Tanner crab shellfish regulations for all areas of the state (except Southeast and Yakutat areas). This includes regional king and Tanner crab management areas.

To insure that the proposed booklets are distributed well in advance of the board meetings and the fishing season, the board has set Tuesday, April 10, 2007 as the proposal deadline.

The following offices can officially receive proposals:

Shannon Stone
Southeast Region
PO Box 115526
Juneau, AK 99811-5526
Phone: (907) 465-6097
Fax: (907) 465-6094

Joe Chythlook
Southwest Region
PO Box 1030
Dillingham, AK 99576-1030
Phone: (907) 842-5142
Fax: (907) 842-5514

Charlie Gregg
Arctic Region
PO Box 689
Kotzebue, AK 99752-0689
Phone: (907) 442-1717
Fax: (907) 442-2847

Rita St. Louis
Interior Region
1300 College Road
Fairbanks, AK 99701
Phone: (907) 459-7263
Fax: (907) 474-8558

Sherry Wright
Southcentral Region
333 Raspberry Road
Anchorage, AK 99518-1599
Phone: (907) 267-2354
Fax: (907) 267-2489

Quick Picks

Go to....
Go!

Fisheries News


Board Member, Mel Morris

Front Page

BOF Teleconference on UCI Petition

Revised Upper Cook Inlet Management Issues Paper

ALASKA BOARD OF FISHERIES AND ALASKA BOARD OF GAME
REGULATION PROPOSAL FORM
PO BOX 115526, JUNEAU, ALASKA 99811-5526

BOARD OF FISHERIES REGULATIONS

☒ Fishing Area Cook Inlet

☐ Subsistence ☐ Personal Use

☐ Sport ☒ Commercial

JOINT BOARD REGULATIONS

☐ Advisory Committee ☐ Regional Council ☐ Rural

BOARD OF GAME REGULATIONS

Game Management Unit (GMU) _____

☐ Hunting ☐ Trapping

☐ Subsistence ☐ Other _____

☐ Resident

☐ Nonresident

Please answer all questions to the best of your ability. All answers will be printed in the proposal packets along with the proposer's name (address and phone numbers will not be published). Use separate forms for each proposal.

1. Alaska Administrative Code Number 5 AAC 21.360 Kenai River Late Run Sockeye Salmon Management Plan **Regulation Book Page No.** 88

2. What is the problem you would like the Board to address?

Management plan does not work and violates consistent high yield opportunities.

3. What will happen if this problem is not solved?

Loss of consistent high yield returns. Maximum Economic Yield (MEY) will be rarely accomplished by all users groups and there supporting industries.

4. What solution do you prefer? In other words, if the Board adopted your solution, what would the new regulation say?

(b) (1) [OPTIMUM ESCAPEMENT GOAL (OEG)] Biological Escapement Goal (BEG) ...[500,000-1,000,000] 400,000-700,000
(b) (2) [GOALS] goal...[;AND] of 600,000-800,000.
(b) (3) [OEG] BEG [RANGE, IN PROPORTION TO THE SIZE OF THE RUN.] range.
(c) DELETE .
(g) [OPTIMAL ESCAPEMENT GOAL] Biological Escapement Goal

5. Does your proposal address improving the quality of the resource harvested or products produced? If so, how?

Yes, more efficient fisheries.

6. Solutions to difficult problems benefit some people and hurt others:

A. Who is likely to benefit if your solution is adopted?

All users.

B. Who is likely to suffer if your solution is adopted?

No one as opportunity will increase for all with consistent high yields.

SOK1 7

7. List any other solutions you considered and why you rejected them.	DO NOT WRITE HERE
No other solutions.	

Submitted By:
Name / Signature SOKI (South K-Beach Independent Fishermen's Alliance)

Paul A. Shadura Jr.

Individual or Group

PO Box 273	Kenai, AK	99611
Address	**City, State**	**ZIP Code**

907-262-1771	907-252-1080	sabaka@ptialaska.net
Home Phone	**Work Phone**	**Email**

SOKI 7

TRANSMISSION VERIFICATION REPORT

TIME : 04/10/2007 06:00
NAME : KPFA/KEN PEN FISH AS
FAX : 9072622098
SER.# : BROK2N587335

DATE,TIME	04/10 05:59
FAX NO./NAME	19074656094
DURATION	00:00:43
PAGE(S)	03
RESULT	OK
MODE	STANDARD ECM

South K-Beach Independent Fishermen's Alliance, SOKI
PO Box 273, Kenai, AK 99611
(907) 252-1080

Fax Cover Sheet
(907) 262-1064

Date: April 10, 2007 **Pages:** 3
(Including Cover Sheet)

To: Fish & Game

Attn: Board Support Section

FAX: (907) 465-6094

Subject: Proposals for 2008 UCI

ALASKA BOARD OF FISHERIES AND ALASKA BOARD OF GAME
REGULATION PROPOSAL FORM
PO BOX 115526, JUNEAU, ALASKA 99811-5526

BOARD OF FISHERIES REGULATIONS

☒ Fishing Area Cook Inlet

☐ Subsistence ☐ Personal Use

☐ Sport ☒ Commercial

JOINT BOARD REGULATIONS

☐ Advisory Committee ☐ Regional Council ☐ Rural

BOARD OF GAME REGULATIONS

Game Management Unit (GMU) _____

☐ Hunting ☐ Trapping

☐ Subsistence ☐ Other _____

☐ Resident

☐ Nonresident

Please answer all questions to the best of your ability. All answers will be printed in the proposal packets along with the proposer's name (address and phone numbers will not be published). Use separate forms for each proposal.

1. Alaska Administrative Code Number 5 AAC 21.320 WEEKLY FISHING PERIODS **Regulation Book Page No.** 78

2. What is the problem you would like the Board to address?

Limited fishing periods. This proposal will allow a higher percentage of set net fishermen an opportunity to fish a full twelve hour tide series.

3. What will happen if this problem is not solved?

Fishing on low returns will result in fewer openings and will give an unequal opportunity for set gillnet fishermen in the Central District.

4. What solution do you prefer? In other words, if the Board adopted your solution, what would the new regulation say?

(a) (2) [7:00 p.m.] 10:00 p.m.

5. Does your proposal address improving the quality of the resource harvested or products produced? If so, how?

Yes, fish will not be pulled or round hauled with net. Full tide allows quality harvesting techniques. Easier on crews (safety) and equipment to work at the top or slack of the tides.

6. Solutions to difficult problems benefit some people and hurt others:

A. Who is likely to benefit if your solution is adopted?

All effected participants.

B. Who is likely to suffer if your solution is adopted?

No one.

SOK1 9

1 of 2

7. List any other solutions you considered and why you rejected them.	DO NOT WRITE HERE
No other solutions.	

Submitted By:
Name / Signature SOKI (South K-Beach Independent Fishermen's Alliance)

Paul A. Shadura Jr

Individual or Group

PO Box 273	Kenai, AK	99611
Address	**City, State**	**ZIP Code**

907-262-1771	907-252-1080	sabaka@ptialaska.net
Home Phone	**Work Phone**	**Email**

SOKI 9

2 of 2

TRANSMISSION VERIFICATION REPORT

TIME : 04/10/2007 06:57
NAME : KPFA/KEN PEN FISH AS
FAX : 9072622898
SER.# : BROK2N587335

DATE,TIME	04/10 06:56
FAX NO./NAME	19074656094
DURATION	00:00:41
PAGE(S)	03
RESULT	OK
MODE	STANDARD ECM

South K-Beach Independent Fishermen's Alliance, SOKI
PO Box 273, Kenai, AK 99611
(907) 252-1080

Fax Cover Sheet
(907) 262-1064

Date: April 10, 2007 **Pages:** 3
(Including Cover Sheet)

To: Fish + Game

Attn: Board Support Section

FAX: (907) 465-6094

Subject: Proposals for 2008 UCI

RC 85

February 3, 2008

State of Alaska
Department of Fish and Game
Board Support Section
Chairman Mel Morris
Attn: Boar Comments
P.O. Box 115526
Juneau, AK 99811-5526

Chairman Morris,

This RC is in conjunction, to the previous RC submitted by South K-Beach Independent Fishermen's Alliance, SOKI.

I have attached two of the proposals that were not published in the UCI proposal book. I ask you to please take a look at the 4 proposals that were not published and consider them for regulation

Respectfully,
Paul A. Shadura III
South K-Beach Independent Fishermen's Alliance, SOKI
P.O. Box 273, Kenai, AK 99669

Submitted By: Chris Brandt

ALASKA BOARD OF FISHERIES AND ALASKA BOARD OF GAME
REGULATION PROPOSAL FORM
PO BOX 115526, JUNEAU, ALASKA 99811-5526

BOARD OF FISHERIES REGULATIONS

☒ Fishing Area Cook Inlet

☐ Subsistence ☐ Personal Use

☐ Sport ☒ Commercial

JOINT BOARD REGULATIONS

☐ Advisory Committee ☐ Regional Council ☐ Rural

BOARD OF GAME REGULATIONS

Game Management Unit (GMU) _____

☐ Hunting ☐ Trapping

☐ Subsistence ☐ Other _____

☐ Resident

☐ Nonresident

Please answer all questions to the best of your ability. All answers will be printed in the proposal packets along with the proposer's name (address and phone numbers will not be published). Use separate forms for each proposal.

1. Alaska Administrative Code Number 5 AAC 21.310 FISHING SEASONS **Regulation Book Page No.** 78

2. What is the problem you would like the Board to address?

Restricted commercial fishing opportunities.

3. What will happen if this problem is not solved?

Lack of market availability and sales of salmon resource.

4. What solution do you prefer? In other words, if the Board adopted your solution, what would the new regulation say?

(b) (2) (C) (i) (XX) New Section would read: from June 1 to June 25th or season opening on or after June 20th, season may open for two days per week for a six hour duration(period) starting on the first Monday or Friday in June until regular season opens in (i). Fishery may not exceed XXXXX or 150 King Salmon.

(b) (2) (C) (i) [10] 20

(b) (2) (C) (ii) [10] 20

(b) (2) (C) (iii) DELETE SECTION

5. Does your proposal address improving the quality of the resource harvested or products produced? If so, how?

Yes, market for early season sockeye enjoy a considerable increase in value.

6. Solutions to difficult problems benefit some people and hurt others:

A. Who is likely to benefit if your solution is adopted?

The public.

SOKI 8

1 of 2

B. Who is likely to suffer if your solution is adopted?

No one.

7. List any other solutions you considered and why you rejected them.	**DO NOT WRITE HERE**
No other solutions.	

Submitted By:
Name / Signature SOKI (South K-Beach Independent Fishermen's Alliance) Paul A. Shadura Jr.

Individual or Group

PO Box 273	Kenai, AK	99611
Address	**City, State**	**ZIP Code**

907-262-1771	907-252-1080	sabaka@ptialaska.net
Home Phone	**Work Phone**	**Email**

TRANSMISSION VERIFICATION REPORT

TIME : 04/10/2007 06:37
NAME : KPFA/KEN PEN FISH AS
FAX : 9072622898
SER.# : BROK2N587335

DATE,TIME	04/10 06:36
FAX NO./NAME	19074656094
DURATION	00:00:42
PAGE(S)	03
RESULT	OK
MODE	STANDARD ECM

South K-Beach Independent Fishermen's Alliance, SOKI
PO Box 273, Kenai, AK 99611
(907) 252-1080

Fax Cover Sheet
(907) 262-1064

Date: April 10, 2007 **Pages:** 3
(Including Cover Sheet)

To: Fish & Game

Attn: Board Support Section

FAX: (907) 465-6094

Subject: Proposals for 2008 UCI

ALASKA BOARD OF FISHERIES AND ALASKA BOARD OF GAME
REGULATION PROPOSAL FORM
PO BOX 115526, JUNEAU, ALASKA 99811-5526

BOARD OF FISHERIES REGULATIONS

☒ Fishing Area Cook Inlet

☐ Subsistence ☐ Personal Use

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JOINT BOARD REGULATIONS

☐ Advisory Committee ☐ Regional Council ☐ Rural

BOARD OF GAME REGULATIONS

Game Management Unit (GMU) _____

☐ Hunting ☐ Trapping

☐ Subsistence ☐ Other _____

☐ Resident

☐ Nonresident

Please answer all questions to the best of your ability. All answers will be printed in the proposal packets along with the proposer's name (address and phone numbers will not be published). Use separate forms for each proposal.

1. Alaska Administrative Code Number 5 AAC 21.359 Kenai River Late-Run King Salmon Management Plan **Regulation Book Page No.** 87

2. What is the problem you would like the Board to address?

Does not make sense. Is this when the in river fishery is restricted? The subsection does not say closed.

3. What will happen if this problem is not solved?

Confusing regulations which could shut down the set net fishery.

4. What solution do you prefer? In other words, if the Board adopted your solution, what would the new regulation say?

(c) (4) DELETE

5. Does your proposal address improving the quality of the resource harvested or products produced? If so, how?

Not Applicable

6. Solutions to difficult problems benefit some people and hurt others:

A. Who is likely to benefit if your solution is adopted?

Set net fishermen.

B. Who is likely to suffer if your solution is adopted?

No one.

SOK1 6

192

7. List any other solutions you considered and why you rejected them.	DO NOT WRITE HERE
No other solutions.	

Submitted By:
Name / Signature SOKI (South K-Beach Independent Fishermen's Alliance)

Paul A. Shadura

Individual or Group

PO Box 273	Kenai, AK	99611
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SOKI 6

2 of 2

TRANSMISSION VERIFICATION REPORT

TIME : 04/10/2007 05:18
NAME : KPFA/KEN PEN FISH AS
FAX : 9072622898
SER.# : BROK2N587335

DATE,TIME	04/10 05:18
FAX NO./NAME	19074656094
DURATION	00:00:40
PAGE(S)	03
RESULT	OK
MODE	STANDARD ECM

South K-Beach Independent Fishermen's Alliance, SOKI
PO Box 273, Kenai, AK 99611
(907) 252-1080

Fax Cover Sheet
(907) 262-1064

Date: April 10, 2007 **Pages:** 3
(Including Cover Sheet)

To: Fish & Game

Attn: Board Support Section

FAX: (907) 465-6094

Subject: Proposals for 2008 UCI

To Alaska Board of Fisheries
Committee G - Northern Cook Inlet Sport Salmon Fisheries

RC86

Comments on Proposals 330,331,332,333,334. All referring to Alexander Creek

The less than optimum escapement levels of King Salmon at Alexander Creek is undisputed. The current proposals range from ADF&G's proposal to limit fishing to the weekends to just closing the creek totally. There is other ways to greatly reduce the pressure and still allow for a limited fishery. I suggest the following:

1) Limit fishing to 2 days a week...midweek, like Tuesday and Wednesday
2) Keep the 1 a day limit and put a seasonal limit of 1 or 2.
3) Limit fishing to the mouth. Allow fishing only in the first 1000 ft. of the creek. (a lot of the Kings caught at the mouth are just "stopping by" and are bound for streams further up the Susitna and Yentna River systems, by limiting fishing to the mouth, the Alexander Kings upstream won't have the pressure.)

I am speaking as a lifelong Alaskan who has fished at Alexander Creek since 1969 and own a cabin there. Thanks for the opportunity to comment on the proposed regulations,

Kirk McGee
16551 Chasewood
Anchorage Ak. 99516

RC 87

Mr. Chairman, Board of Fisheries Members my name Jeff Beaudoin, I reside in Kasilof, Alaska. My family and I have commercially fished in the Kasilof Section of Upper Cook Inlet over the course of 22 years. Some additional background I been on the board of Kenai Peninsula Fishermen's Association for the past 12 years. I authored the Upper Cook Inlet Management Plan and Kasilof River Management Plan petition brought last year, to the Board regarding Upper Cook Inlet management issues

5 AAC 39.222. Policy for the Management of Sustainable Salmon Fisheries (d) (2) (E) states: provide conservation and management measures that are necessary and appropriate to promote maximum or optimum sustained yield of the fishery resource.

The Alaska Department of Fish and Game's Upper Cook Inlet management Issues papers fully recognize that "windows" impede the ability of department to adapt and manage within established optimum or maximum sustained yield escapement goal ranges for the Kasilof River and Kenai River late-run sockeye salmon stocks. Windows Prevent conservation; to ensure, protect, and sustain Alaska's fishery resources' economic benefit to the State.

Importantly, the economic loss to the State in the near future is significant, especially to commercial fishing communities who depend on this resource.

Please Note: The result of prescribed limitations on Emergency Order authority of the commissioner (Windows): In 2004, a 48-hour window closure had significant adverse affect, and directed sockeye over escapement on the Kasilof River. Due to the 48 closure of E.O. authority use – 200,000 sockeye salmon went in escapement within a 24 hour event. Kasilof River sockeye salmon are managed for maximum sustained yield and the biological escapement goal range is 150,000 – 250,000 sockeye. Sonar escapement on the Kasilof River in 2004 realized 577,581 sockeye (historic record level). Spawning escapement (sonar minus sport harvest above sonar) was 575, 581 sockeye.

Cook Inlet Aquaculture Association has accomplished the age-1 and age-2 smolt out-migration from the 2004 Kasilof River sockeye escapement (brood-year) and states: "the 2004 brood-year may produce a projected return of 600,000 adults." This is a conservative adult return estimate and certainly represents mere replacement on the spawners to adults (recruitment). Windows directly caused a significant loss in yield, a loss of 500,000 sockeye salmon. The economic loss the Kasilof River fishing communities in the near future can be estimated at four million five hundred thousand dollars in ex-vessel value (approx. 3 million pounds of sockeye salmon).

Numerous Sportfishing groups and associations' proposals attempt to increase window emergency order and/or increase escapement goals. I strongly oppose such proposals which have and will result in lost yield for all user-groups in the future. Adaptive fishery management is the essential element to accomplish the department's mission to achieve and distribute salmon escapement within established ranges on various sockeye management plans.

Submitted by: Chris Brandt

Finally, I strongly support proposal 130 under the Upper Cook Inlet Salmon Management Plan.

Proposal 155, addressing the Cook Inlet Pink Salmon Management Plan.

Proposal 189, regarding the Kenai Late-run Sockeye Salmon Management Plan; and

Proposal 166, Kasilof Sockeye Salmon Management Plan. Thank you Mr. Chairman.

Jeff Beaudoin
P.O. Box 75
Kasilof, Alaska 99610

Submitted By: Chris Brandt

RC 88

Submitted by: Andy Szczensy

Committee F

Requirements for 4 stroke or direct fuel injection motors on the Kenai River

- Proposal 292
- Press Release from Division of Parks Feb 1, 2008
- 11 AAC 20.860 - New Regulations

Submitted by Mac MINARD

PROPOSAL 292 - 5 AAC 57.xxx. New section. Require 4-stroke or direct fuel injection motors on the Kenai River as follows:

Adopt requirement that all boats operated in personal use or sport fisheries on the lower Kenai River be operated with motors that are either **four-stroke or direct fuel injection, two stroke motors, or any future engines that meet EPA manufacturing standards for US sale, and that are built after adoption of this regulation.** Phase in the effective date or period in order to provide the opportunity for people with the older motors to schedule a replacement.

ISSUE: Elevated hydrocarbon levels have been measure in the lower Kenai River during several peak use days and hours in July. This finding led to a impaired water quality listing by the Department of Environmental Conservation under the federal Clean Water Act. Studies have determined that most of the hydrocarbon pollution is caused by older, inefficient two stroke boat motors and that use of the newer IPA-compliant motors will resolve the problem. Action to require use of the newer motors has been delayed by agency process and jurisdiction complications. For instance the Department of Natural Resources has authority to regulate boat motor use in the Kenai River Special Management Area but this area does not include lower river areas where the personal use fishery is concentrated. The cities of Kenai and Soldotna and the Borough can regulate use of their launch facilities. The Board of Fisheries has the authority to regulate fishing activities that impact on fish habitat.

WHAT WILL HAPPEN IF NOTHING IS DONE? Effective action to reduce hydrocarbon pollution will be delayed.

WILL THE QUALITY OF THE RESOURCE HARVESTED OR PRODUCTS PRODUCED BE IMPROVED? Not applicable.

WHO IS LIKELY TO BENEFIT? The resource and all users will benefit from improved water quality.

WHO IS LIKELY TO SUFFER? Persons with old motors will incur the costs of a new motor in order to continue participation in the fishery.

OTHER SOLUTIONS CONSIDERED? A variety of alternatives were considered but were rejected because they will significantly affect the problem. More drift-only days merely concentrate use and increase peak pollution levels on the remaining days. Additional guide restrictions provide no significant benefit since guides moors are almost universally the newer EPA-compliant type, the majority of the hydrocarbon inputs are from nonguided sport and personal use boats, and some of the highest water quality exceedances are seen on Sundays when guides do not operated. Time and area use limits merely move the problem around but do not solve it.

PROPOSED BY: Andy Szczensy (HQ-07F-217)

****

DIVISION OF PARKS & OUTDOOR RECREATION **CONTACT: Chris Degernes**

RELEASE DATE: February. 1, 2008 **PHONE: (907) 269-8702**

SUBJECT: Kenai River Motor Regulations Finalized

DNR Commissioner Tom Irwin has announced that on January 31, Lt. Governor Parnell approved the regulations that implement changes for boats and motors on the Kenai River. The new regulations that will be effective on March 1, 2008 will permit the use of 50 horsepower motors, as long as any motor that is larger than 35 horsepower is one of the cleaner burning four-stroke or Direct Fuel Injected (DFI) two-stroke motors. Additionally, all motors used within the Kenai River Special Management Area during the month of July must also be either four-stroke or DFI two-stroke motors. The proposed full phase out of all older two-stroke engines that was to go into effect in 2010 has been removed from the approved regulations.

In recognition that most of the hydrocarbon pollution problems have been concentrated in July, and that a good many Alaskans do not have the immediate resources to transition to the new cleaner burning motors right away, the decision was made to remove the date by which all older two-stroke motors would be banned. DNR plans to re-propose the year-round ban on older two-stroke motors with a 2013 effective date to give river users a longer period to complete this transition.

In addition to the changes on motors, the approved regulations also limit overall boat size to no more than 21 feet long and 106 inches wide, with a limited provision to allow owners of larger boats to be permitted to use their boats until 2010.

Commissioner Irwin stated: "The Kenai River is a tremendously important resource. It is critical to the personal enjoyment of residents and visitors, to the commercial and sport fishing industries, and to the economic health of the Kenai Peninsula. Any threat to the Kenai River requires our serious attention."

Water samples collected over the last several years from the Kenai River show high levels of petroleum hydrocarbons during peak fishing periods. The levels of hydrocarbons have sometimes exceeded safe levels for fish, as established by state water quality regulations. Most of the hydrocarbons appear to be coming from unburned gasoline released from older, two-stroke boat motors, which are heavily used during the month of July's peak sport fishery.

According to Division of Parks and Outdoor Recreation Director James King, "It is important to note that these new regulations will only apply within the Kenai River Special Management Area that includes Kenai and Skilak Lakes and all of the Kenai River except for the lower four miles. Those lower four miles are also critical to the health of the Kenai River's fishery resources. We encourage the Alaska Board of Fish to take appropriate action in their current meeting to adopt similar protection for water quality in that lower four mile stretch of the River."

Those state agencies with primary responsibilities for the health of the Kenai River will continue to monitor the river to see that the transition to the cleaner-burning motors is having the result we all want – a clean, healthy river environment.

11 AAC 20.860 is repealed and readopted to read:

11 AAC 20.860. Boat motor use. (a) Except as prohibited by 11 AAC 20.865, and subject to the limitations and restrictions set out in this section, the operation of a boat by the use of a boat motor is allowed in the Kenai River Special Management Area.

(b) On or after January 1, 2008, a person may not operate a boat in the Kenai River Special Management Area by use of a motor or combination of motors with a total propshaft horsepower rating greater than 50 horsepower. These horsepower rating limitations do not apply to the following:

(1) the operation of a boat on Kenai Lake, on Skilak Lake, and on the Kenai River between the Kenai Lake Bridge and river mile 80.7;

(2) the operation of a boat by a federal, state, or local governmental agency for the purpose of law enforcement or search and rescue, or for the purpose of fish and game management under a special park use permit issued under 11 AAC 18.010.

(c) On or after January 1, 2008, a person may not operate a boat in the Kenai River Special Management Area by the use of a motor that has been altered or disguised with respect to the manufacturer's propshaft horsepower rating, manufacturer cowling decals, or the model or serial numbers to produce more than 50 propshaft horsepower.

(d) A person may not operate a boat in the Kenai River Special Management Area by the use of a motor unless the original propshaft horsepower rating of a motor is clearly labeled by the manufacturer or a factory authorized dealer mechanic in the form of cowling decals appropriate to the propshaft horsepower rating. The original propshaft horsepower rating of the motor may be further indicated by a stamp marking embossed in the metal or as part of the model number of the motor.

Provision Withdrawn by department 1/31/08 DEB

(e) On or after January 1, 2008, ~~but before January 1, 2010,~~ a person may not operate a boat in the Kenai River Special Management Area by the use of a motor as follows:

(1) with a total propshaft horsepower rating greater than 35 horsepower, unless the motor is a four-stroke motor or a direct fuel injection two-stroke motor, as described in Attachment A of the Department of Natural Resources, Division of Parks and Outdoor Recreation, Director's Decision on Reduction of Hydrocarbon Pollution from Motorized Boats on the Kenai River, signed November 16, 2006, and adopted by reference;

(2) during the month of July, unless the motor is a four-stroke motor or a direct fuel injection two-stroke motor, as described in Attachment A of the Department of Natural Resources, Division of Parks and Outdoor Recreation, Director's Decision on Reduction of Hydrocarbon Pollution from Motorized Boats on the Kenai River, signed November 16, 2006, and adopted by reference;

(3) without displaying on the motor cowling a decal issued by the department that certifies that the motor complies with the requirements of this subsection.

(h) On or after January 1, 2010, a person may not operate a boat in the Kenai River Special Management Area by the use of a motor as follows:

Withdrawn by Department 1/31/08 DEB

(1) unless the motor is a four-stroke motor or a direct fuel injection two-stroke motor, as described in Attachment A of the Department of Natural Resources, Division of Parks and Outdoor Recreation, Director's Decision on Reduction of Hydrocarbon Pollution from Motorized Boats on the Kenai River, signed November 16, 2006, and adopted by reference;

(2) without displaying on the motor cowling a decal issued by the department that certifies that the motor complies with the requirements of this subsection.

(f)

(i) In this section,

DEB 1/31/08

(1) "direct fuel injected two-stroke motor" means a motor whose fuel is directly injected into the top of the cylinder of an internal combustion engine whose cycle is completed in two piston strokes;

(2) "four-stroke motor" means an internal combustion engine whose cycle is completed in four piston strokes; "four-stroke motor" includes a suction stroke, compression stroke, expansion stroke, and exhaust stroke;

(3) "propshaft horsepower rating" means the boat motor's original manufacturer rated and labeled horsepower; however, the addition of a jet drive unit to a boat motor does not change the propshaft horsepower rating of the motor powerhead and driveshaft configuration for the purposes of this section. (Eff. 5/11/85, Register 94; am 4/25/86, Register 98; am 7/1/89, Register 110; am 7/1/98, Register 146; am 3/1/2008, Register 185)

Authority: AS 41.21.020 AS 41.21.506

11 AAC 20 is amended by adding a new section to read:

11 AAC 20.861. Boat specifications. (a) A person may not operate a motorized boat in the Kenai River Special Management Area that exceeds 21 feet in overall length and 106 inches in overall width. This restriction does not apply to boats operated in accordance with 11 AAC 20.860(b)(1) and (2).

(b) Notwithstanding (a) of this section, the director shall authorize a person to use a motorized boat that exceeds 21 feet in overall length or 106 inches in overall width, if the person provides proof satisfactory to the division that the person owned the boat before the effective date of these regulations. If the director provides an authorization under this subsection, the director shall issue a nontransferable permit under 11 AAC 18. A permit issued by the director

under this subsection expires on a date that is specified by the director, but it is no later than December 31, 2009.

(c) In this section,

(1) "outboard motor" means a boat engine that, when properly mounted on a boat in the position to operate, houses the engine and drive unit external to the hull of the boat;

(2) "overall length" means the straight-line measurement between the extremities of the boat, but does not include trim tabs or outboard motors;

(3) "overall width" means the straight-line measurement between the two widest extremities of the boat, measured at a right angle to the overall length measurement;

(4) "trim tabs" means an extension of the bottom of a boat, at the transom, that is no more than 18 inches long at its longest point and whose sole function is to provide trim to a boat while underway; "trim tabs" do not include an extension that provides increased floatation.

(Eff. 3/1/2008, Register 185)

Authority: AS 41.21.020 AS 41.21.506

11 AAC 20.865(b) is repealed:

(b) Repealed 3/1/2008.

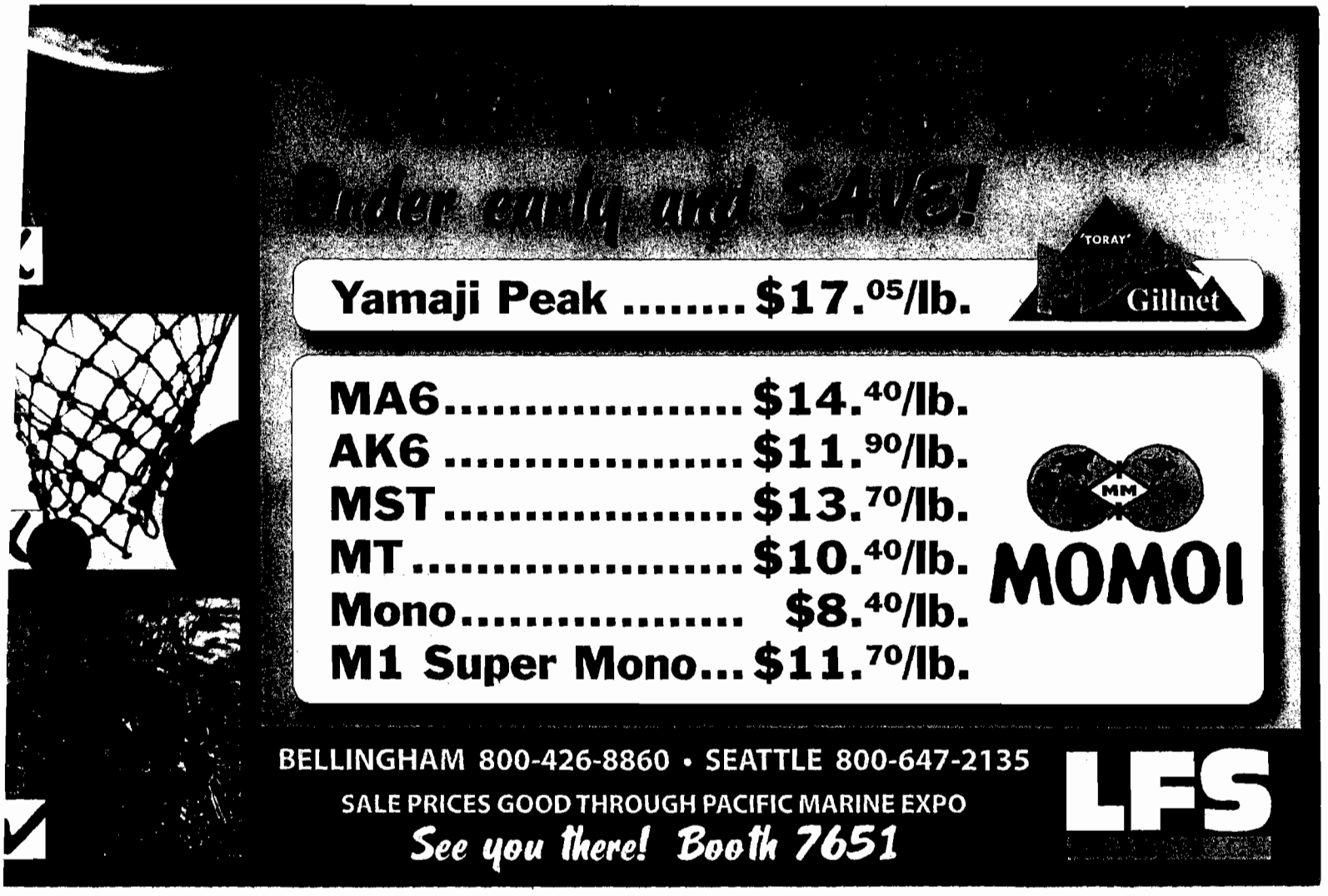
(Eff. 4/25/86, Register 98; am 2/3/88, Register 105; am 7/1/98, Register 146; am 5/3/2001, Register 158; am 3/1/2008 Register 185)

Authority: AS 41.21.020 AS 41.21.506

RC 89
Greg Gabriel
Submitted
by
Chris
Brand

RC 90

Bruce Gabrys



RC 91

2/04/08

Members of the BOF,

I am trying to get more fishing time in the Kenai sections for set netters. I equate are dilemma to Tom Brady's performance in yesterdays super bowl. He is ranked as one of the best quarterbacks in the NFL. North Kalifonsky Beach was once thought of as being some of the best setnet locations in Cook Inlet. Yesterday Tom Terrific was a loser, much like the high powered sites on North K-Beach have become, due to changes in the Upper Cook Inlet Management Plan.

In 2005 and like yesterday Tom had a touchdown as did N-K-Beach. In three years "he" completed passes for gains, 2002, 2003, 2004.

In four years he completed passes for losses, 1998, 1999, 2006, 2007. In two years he was sacked for HUGE losses, 2000, 2001.

This is how the fishery on North K-Beach as has been the last ten years. 50% of the time it is an economic loss.

There is a harvestable surplus of Kasilof Stocks available the first week of July. 45% of the escapement is in the Kasilof River by July 10. Genetic data shows that these stocks are on Upper K-Beach early in July.

Almost 300,000 sockeye have passed the Kenai sonar counter after August 10 since 2004. This is a huge harvestable surplus of sockeye stocks that the ESSN fishery should have an opportunity to harvest.

Proposals for more time from July1-7 and extending the season till August 15 would certainly help the Kenai section become an average "NFL team" in the East-side Set-net Fishery.

Thank you,

Gary Hollier
Soldotna, Ak.

RC 92

Yentna Sockeye: Stock of Yield Concern

Proposal 119 recommends listing Susitna River sockeye as stocks of concern under the Sustainable Salmon Policy.

- ✓ Yentna sockeye meet the criteria for listing as a stock of concern under the definition of a yield concern [5 AAC 39.222]
- ✓ "*Yield concern*" means a concern arising from a chronic inability, despite the use of specific management measures, to maintain expected yields, or harvestable surpluses, above a stock's escapement needs; a yield concern is less severe than a management concern, which is less severe than a conservation concern [5 AAC 39.222 (f)(42)]. "*Chronic inability*" means the continuing or anticipated inability to meet escapement thresholds over a four to five year period, which is approximately the generation time of most salmon species.
- ✓ The average northern district sockeye harvest during the 10-year period 1980-1989 was 177,500 fish. The most recent 5-year average for the Northern District was only 26,400. This represents a massive 85% drop from the historical value.
- ✓ The decline in sockeye harvest in the Northern District is mirrored by a decline in harvest of Susitna sockeye in all Upper Cook Inlet Commercial Fisheries (Figure 1).

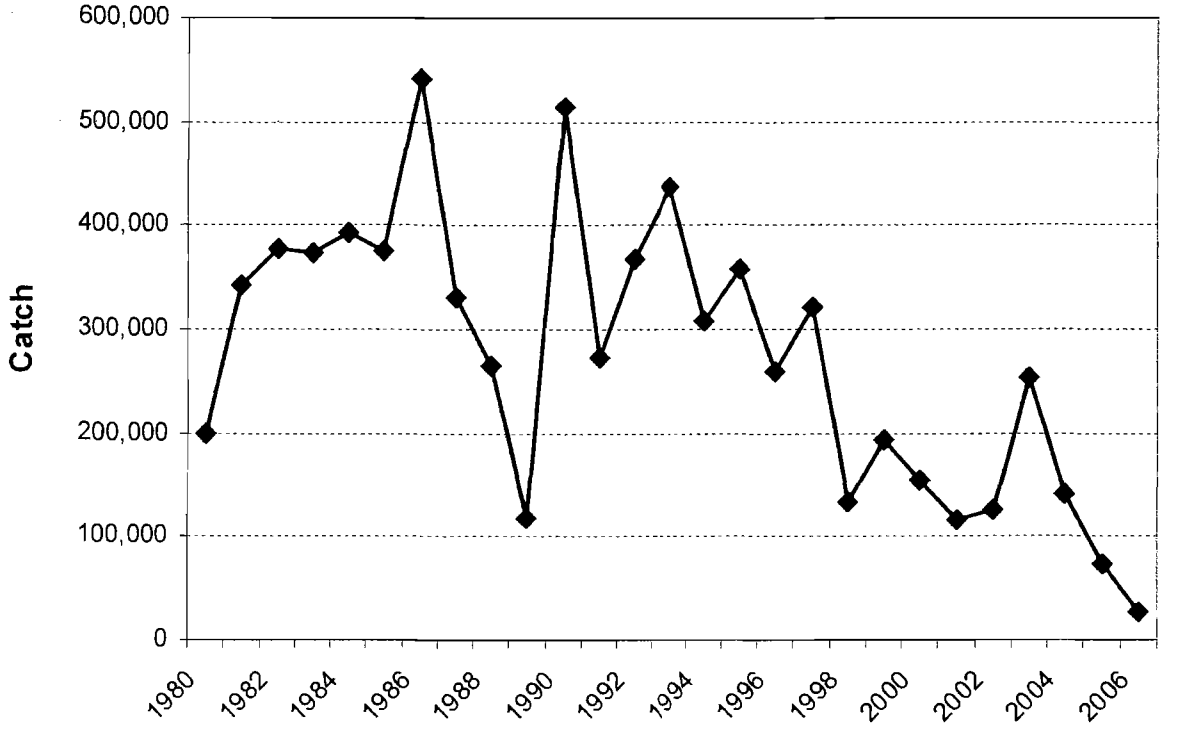


Figure 1. **Trend in total harvest of Susitna sockeye in all UCI commercial fisheries (data from Tobias and Willette 2004).**

Other Stock-of-Concern Listings

- ✓ The Cook Inlet approach to stock of concern differs sharply from the rest of the state.
- ✓ Much smaller declines in yield have led to listings of a number of other stocks.
- ✓ The Yentna sockeye would be undoubtedly be identified as a stock of concern if judged by the same standards as these other stocks.
- ✓ To simply imply that the issues associated with Yentna sockeye are being addressed by harvest restrictions and by implementing a series of research studies is inconsistent with the SSFP.

Table 1. Examples of stock previously and currently identified as stocks of concern.

Stock	Concern	Current Status	Basis for designation
Yentna Sockeye	Yield	Proposed	85% decline in yield Escapement met in 2 of 7 years
Yukon Kings	Yield	Still designated	42% decline in yield
Kvichak sockeye	Yield (2001) Management (2003)	Still designated	57% decline in yield Escapement met in 2 of 7 years
Kuskokwim kings	Yield	Not designated	27% decline in yield
Norton Sound Kings	Yield	Still designated	73% below average
Norton sound chums	Yield	Still designated	Escapement met but low yield

Escapements

- ✓ Yentna sockeye have failed to reach minimum escapement goals in five of the last seven years (Figure 2).
- ✓ Recent research on Yentna sockeye indicates that current sonar counts underestimated actual escapement in 2006 and 2007. Results were confirmed by both weir counts of a sample of the sockeye rearing lakes in the system and mark-recapture population estimates.
- ✓ Date presented in the staff report by Mark Willette indicates that the Yentna sonar is an accurate index of the relative abundance of sockeye escaping into the Yentna. He found that total juvenile sockeye abundance in rearing rates is significantly correlated with Yentna sonar counts (Figure 3).

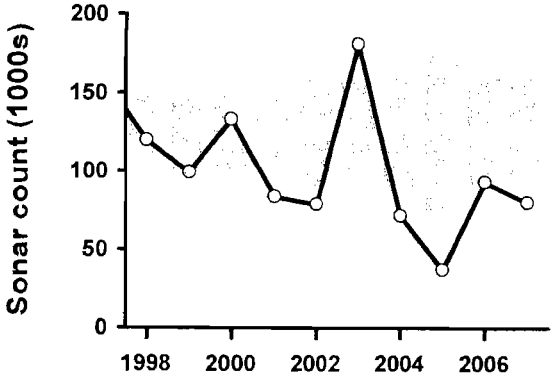


Figure 2. Recent Yentna sockeye escapements relative to goals.

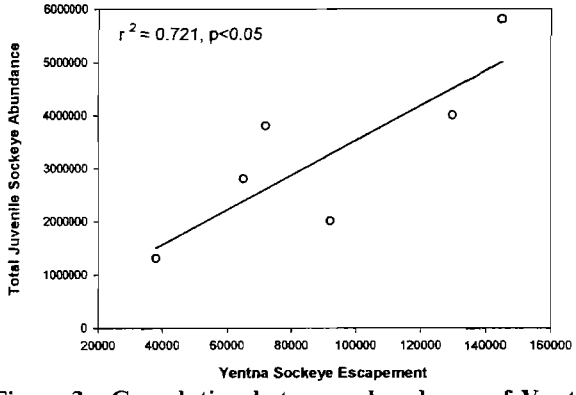


Figure 3. Correlation between abundance of Yentna sockeye juvenile abundance and escapement (Willette & Fandrei, RC 4 Tab 8).

Fishery Effects on Escapements

- ✓ Low Yentna escapements correspond to large sockeye catches in Central District commercial fisheries.
- ✓ Low Yentna sonar counts are negatively and significantly correlated ($p = 0.007$) with high sockeye harvests in combined Central District set net and drift net fisheries (Figure 4). Negative correlations were significant for the set net ($p = 0.019$) and drift net fisheries $p = 0.026$) when analyzed separately.

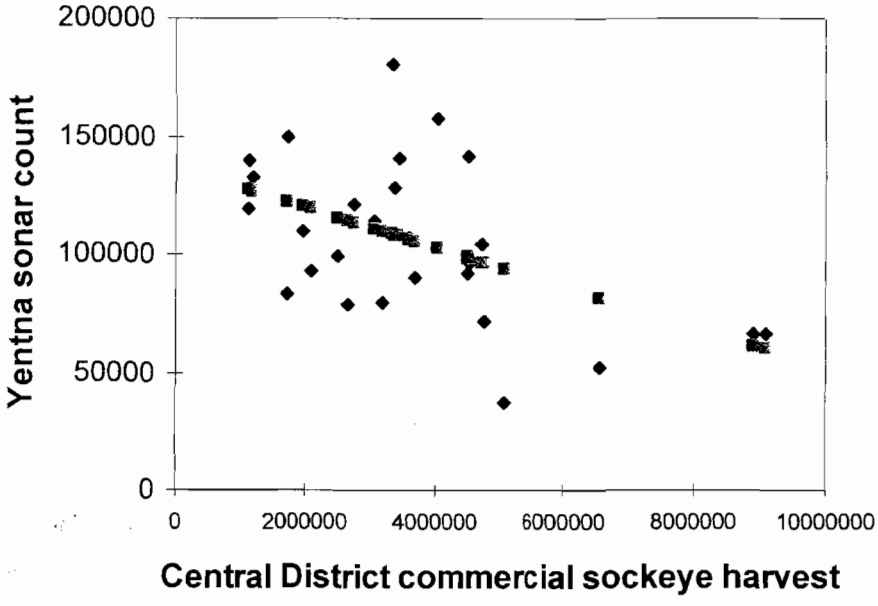


Figure 4. **Negative correlation between Yentna sockeye sonar counts and harvest of sockeye in Central District drift and set net fisheries (data from Shields 2007).**

Genetic Study Results

- ✓ Considerable numbers of Susitna sockeye are harvested in both Drift Net and Set Net commercial fisheries in some years. Estimates are minimums because not all fishery dates were analyzed.
- ✓ Catches are lowest in years where commercial fisheries are limited during late June and early July when Susitna sockeye are moving through the inlet.

Table 2. **Extrapolated harvest of Yentna and Susitna sockeye in Central District commercial fisheries based on recent genetic studies (Habicht et al. 2007).**

	Central District Drift			East Side Set Net			Combined		
	Yentna	Susitna	Total	Yentna	Susitna	Total	Yentna	Susitna	Total
2005[a]	18,595	1,559	20,154	7,277	3,270	10,547	25,872	4,829	30,701
2006[b]	8,725	1,693	10,418	4,108	24	4,132	12,833	1,717	14,550
2007	141,160	18,633	159,793	59,903	4,828	64,731	201,063	23,461	224,524

[a] *Sampling limited to one processor, no early season samples.*

[b] *Fishery was largely closed during Yentna/Susitna timeframe due to late Kenai run.*

5 AAC 39.222. Policy for the Management of Sustainable Salmon Fisheries

(d) The principles and criteria for sustainable salmon fisheries shall be applied, by the department and the board using the best available information, as follows:

(3) in the course of review of the salmon stock status reports and management plans described in (1) and (2) of this subsection, the board, in consultation with the department, will determine if any new fisheries or expanding fisheries, stock yield concerns, stock management concerns, or stock conservation concerns exist; if so, the board will, as appropriate, amend or develop salmon fishery management plans to address these concerns; the extent of regulatory action, if any, should be commensurate with the level of concerns and range from milder to stronger as concerns range from new and expanding salmon fisheries through yield concerns, management concerns, and conservation concerns;

(4) in association with the appropriate management plan, the department and the board will, as appropriate, collaborate in the development and periodic review of an action plan for any new or expanding salmon fisheries, or stocks of concern; action plans should contain goals, measurable and implementable objectives, and provisions, including

(A) measures required to restore and protect salmon habitat, including necessary coordination with other agencies and organizations;

(B) identification of salmon stock or population rebuilding goals and objectives;

(C) fishery management actions needed to achieve rebuilding goals and objectives, in proportion to each fishery's use of, and hazards posed to, a salmon stock;

(D) descriptions of new or expanding salmon fisheries, management concern, yield concern, or conservation concern; and

(E) performance measures appropriate for monitoring and gauging the effectiveness of the action plan that are derived from the principles and criteria contained in this policy;

(5) each action plan will include a research plan as necessary to provide information to address concerns; research needs and priorities will be evaluated periodically, based on the effectiveness of the monitoring described in (4) of this subsection;

(6) where actions needed to regulate human activities that affect salmon and salmon's habitat that are outside the authority of the department or the board, the department or board shall correspond with the relevant authority, including the governor, relevant boards and commissions, commissioners, and chairs of appropriate legislative committees, to describe the issue and recommend appropriate action.

(f) In this section, and in implementing this policy,

(5) "chronic inability" means the continuing or anticipated inability to meet escapement thresholds over a four to five year period, which is approximately the generation time of most salmon species;

(6) "conservation concern" means concern arising from a chronic inability, despite the use of specific management measures, to maintain escapements for a stock above a sustained escapement threshold (SET); a conservation concern is more severe than a management concern;

(21) "management concern" means a concern arising from a chronic inability, despite use of specific management measures, to maintain escapements for a salmon stock within the bounds of the SEG, BEG, OEG, or other specified management objectives for the fishery; a management concern is not as severe as a conservation concern;

(42) "yield concern" means a concern arising from a chronic inability, despite the use of specific management measures, to maintain expected yields, or harvestable surpluses, above a stock's escapement needs; a yield concern is less severe than a management concern, which is less severe than a conservation concern;

References

Habicht, C. and five coauthors. 2007. Post-season stock composition analysis of upper Cook Inlet sockeye salmon harvest, 2005-2007.

Shields, P. 2007. Upper Cook Inlet commercial fisheries annual management report, 2007. Fishery Management Report 07-64.

Tobias, T., and M. Willette. 2004. An estimate of the total return of sockeye salmon to Upper Cook Inlet, Alaska 1976-2003. ADFG Commercial Fisheries Division Regional Information Report No. 2A04-11.

RC 93

KENAI AREA FISHERMAN'S COALITION

PO Box 375 Kenai, Ak. 99611 * (907) 283-1054 * dwimar@gci.net

Ref. Proposal 285

Proposal 285 - To allow a Thur. drift boat day for both guided and unguided anglers.

This proposal has the support of:

- **Kenai / Soldotna AC**
- **Central Peninsula AC**
- **Cooper Landing AC**

Advantages:

- Resource friendly – No hydrocarbons, turbidity or bank erosion
- Will help distribute fish up-river for succeeding days
- Will offer a new niche fishery for guides who wish to provide a more enjoyable, relaxing trip for their clients at a premium price.

Oral testimony misinformation:

- **Drift boat days cause auto emission related green-house gases:**
  Not *valid.*

- **Boats will drag anchors:**
  False impression - The Monday drift fishery has been in effect for approximately 10 years and this concern has never been elevated with a proposed regulation change. There is no evidence that this practice is widespread in the Monday drift fishery or that it will become problematic when guide boats are added. There is already a DNR regulation in effect that prohibits anchoring, "that obstructs primary traffic or the drift fishing channel".

- **Inadequate boat launch facilities:**
  There are at least 10 launch facilities that allow public launching between the Moose River and the mouth of the Kenai. Most have

lavatory facilities. These same facilities have shown the ability to accommodate up to 500 power boats on crowded July days above the Warren Ames Bridge.

- **Another drift day will compound crowding on other power boat days:** *Conjecture – may or may not occur and at what level?*

We feel the reluctance to accept this proposal on the part of the guides is based on the fact that it is easier to run two trips per day with four clients each in a power boat rather than row a drift boat. To accommodate this concern we have made this a 24hr fishery for the guided fishery so they have the capability of running multiple trips with staggered starts to avoid ramp crowding.

Respectfully Submitted,

Dwight Kramer
KAFC Chairman

The Commercial Alaska Salmon Fisheries Managed by the Alaska Department of Fish and Game A 5-Year Re-Assessment Based on the Marine Stewardship Council Program

Contract Number: IHP-05-069

Version: SCS_Final Draft Assessment Report for Posting

Date: 30 October 2007

Client: Alaska Department of Fish and Game (ADF&G)

MSC reference standards:

MSC Accreditation Manual Issue 4,
MSC Fisheries Certification Methodology (FCM) Version 5,
MSC TAB Directives (All)
MSC Chain of Custody Certification Methodology (CoC CM) Version 6.

Accredited Certification Body:
Scientific Certification Systems, Inc.
Marine Fisheries Conservation Program
2200 Powell Street, Suite 725
Emeryville, CA 94608, United States

Assessment Team
Dr. Chet Chaffee, Project Manager, SCS
Dr. Greg Ruggerone (Natural Resources Consultants, Seattle, Washington, USA)
Mr. Ray Beamesderfer (Cramer Fish Sciences, Gresham, Oregon, USA)
Dr. Louis W. Botsford (University of California, Davis, California, USA)

8.1.8 Upper Cook Inlet Gillnet

All five species of Pacific salmon are subject to commercial harvest in upper Cook Inlet set net and drift net fisheries (Fox and Shields 2005). Sockeye are the primary target species. Recent 10-year harvests have averaged 3.1 million sockeye, 221,000 coho, 194,000 pink, 168,000 chum, and 15,700 chinook (Fox 2005). Chinook, sockeye, and coho are also subject to significant sport and personal use fisheries (Pappas and Marsh 2004).

Management of directed sockeye fisheries is based on production from the five largest sockeye salmon producing drainages (Kenai, Kasilof, Susitna, and Crescent rivers and Fish Creek) (ADFG 2005). Chinook return to a number of large rivers and streams with the largest runs into the Kenai, Deshka, and Kasilof rivers (ADFG 2005). Coho are found in approximately 1,100 streams and rivers in UCI (Lafferty et al. 2005). Chum return to rivers and streams throughout the inlet. Pink salmon return in even years to rivers and streams throughout the Inlet. Escapement goals have been identified for 8 sockeye, 21 chinook, 3 coho, 1 chum, and 0 pink stocks (Hasbrouck and Edmundson 2005).

Commercial fisheries are regulated in two districts and 8 subdistricts encompassing about 3,400 square miles (Fox and Shields 2005). A series of species and area management plans provide detailed guidance on goals, allocations, and fishery implementation in upper Cook Inlet. Enhancement activities include limited releases of sockeye in the Kenai River, chinook in the Kasilof River and Ship Creek, and coho in Ship Creek (Eggertsen-Goff 2004, White 2005). Enhancement of Kasilof and Fish Creek sockeye has been discontinued.

Summary Assessment

The upper Cook Inlet commercial fishery passes Principle I criteria based on a weighted average score exceeding 80. However, scores for several specific indicators fell between 60 and 80.

Upper Cook Inlet		Criteria @ 100							Criteria @ 80								Criteria @ 60					Score	Weight
		1	2	3	4	5	6	7	1	2	3	4	5	6	7	8	1	2	3	4	5	0-100	
PRINCIPLE I - Fishery Management for Target Populations																							
Criterion 1.1 - Maintain high productivity of target population & associated ecological community																							0.8
Subcriterion 1.1.1 - Stock units																							0.4
Indicator 1.1.1.1	Stock management units defined	1	0.5						1	1							1	1				95	0.317
Indicator 1.1.1.2	Scientific agreement on units	1	0.5	na					1	1							1					95	0.194
Indicator 1.1.1.3	Geographic distribution known								1	0.5	na						1					75	0.108
Indicator 1.1.1.4	Indicator Stocks	0.5	1	0.5	0.5				1	1							1	1				93	0.064
Indicator 1.1.1.5	Enhanced Stocks		0.5	1					1	1							1	1				95	0.317
Subcriterion 1.1.2 - Monitoring and assessment																							0.4
Indicator 1.1.2.1	Reliable estimates of removals	0.5	1	1	1				1	1	1	1					1	1	1			98	0.274
Indicator 1.1.2.2	Reliable estimates of escapement								0.5	na	1	1					1	1	1			77	0.369
Indicator 1.1.2.3	Information on fish age and size	0.5							1	1							1					90	0.112
Indicator 1.1.2.4	Productivity estimates	0.5	0.5						1	na	na						1	1				90	0.246
Subcriterion 1.1.3 - Management goals																							0.2
Indicator 1.1.3.1	Limit reference points								1	1							1					80	0.667
Indicator 1.1.3.2	Target reference points	1	0.5	0.5					1	1							1	1	1			93	0.333
Criterion 1.2 - Fishery allows for the recovery of depleted stocks (Target Stocks)																							0.136
Indicator 1.2.1	Well-defined and effective strategy																1	1				60	0.5
Indicator 1.2.2	Stocks not depleted and harvest rates are sustainable																1	1				60	0.5
Criterion 1.3 - Fishing does not impair reproductive capacity																							0.07
Indicator 1.3.1	Age, sex and genetic structure are monitored								0.5	0.5	1						1	1	1			74	1

1.1 Productivity / 1.1.1 Stock Units.

1.1.1.1: Stock units defined. - There is a description of each stock unit, including: its geographic location, run timing, details on all the component stocks, and rationale for its definition. The rationale for sockeye and chinook stock units is generally clear with regard to conservation, fisheries management and stock assessment requirements. Coho, pink, and chum stock units combine component stocks for management purposes. The conservation and stock assessment rationale for this aggregate species approach is sometimes unclear. These species are generally harvested at a significantly lower rate than sockeye and chinook.

1.1.1.2: Scientific agreement on units. - Review of stock units has been primarily limited to within the management system. The stock units have been reviewed and found to be scientifically defensible by ADFG. The degree of review by other management authorities such as NMFS and the USFW is unclear although we are not aware of any significant objections from those quarters. A focused review of stock units by regional fisheries scientists outside the management system might not produce a consensus on aggregate stock units for coho, pink, and chum, particularly in the face of evidence for significant genetic differences among many populations (Seeb et al. 2000, Spearman 2000). There are no non-target species of salmon in upper Cook Inlet by our working definition as species that are actively avoided by management.

1.1.1.3: Geographic distribution known. - Harvest of Upper Cook Inlet salmon occurs within a known geographic range which is primarily upper Cook Inlet with limited interception of some species in Peninsula and Kodiak fisheries. Current information appears generally adequate to ensure that escapement goals for all stocks are met in most but not all years. In-season assessments of stock composition in mixed stock commercial fisheries of Cook Inlet are generally based on assumed time and area patterns inferred from post-season analysis of scale patterns for sockeye and historical tag recovery data for selected chinook and coho populations. In-river escapement estimates also provide some indication of relative run size and stock contribution. Time and area patterns may or may not be accurate in any given year. Previous attempts to infer sockeye stock composition in-season from scale patterns have been discontinued. Questions have been raised within the management system regarding the accuracy of historical stock composition data and an extensive sockeye GSI program is being implemented in 2006 for the Upper Cook Inlet commercial fisheries. The lack of accurate in-season information on sockeye stock composition can confound attempts to manage mixed stock commercial sockeye fisheries for stock-specific escapement goals, particularly in years of disparate returns of different stocks.

In-season information is not available on chinook and or stock composition although stock structure of Chinook in particular is less complex than that of sockeye during periods of intensive commercial salmon fisheries. ADFG believes that the need for improved stock composition data for Chinook salmon is minor in comparison with sockeye. UCI chinook salmon stocks are well known based on geographic and temporal proximity of fishing to spawning aggregates. The early run stocks (Susitna, early-run Kenai and a few relatively smaller stocks e.g. Anchor, Kasilof) have not been subjected to significant commercial fishing since the 1970s when the early run period was closed by regulation in face of low Chinook runs. Because of the lack of early run sockeye, ADFG notes that the early run period commercial fisheries have and will likely continue to be restricted for allocative reasons. The Kenai stock is the primary late-run stock and the UCI fishery management plan has many provisions to protect this stock, and expressly limits the interceptions of late run Kenai Chinook in face of strong Kenai late run

sockeye returns. There have been numerous radio telemetry studies of the Kenai (to verify sonar counts, etc), and the components of the early and late run Kenai Chinook are well known. However, significant questions remain regarding the status of late run Chinook in the Kasilof River and ADFG has initiated an assessment of that stock. With the advent in recent years of intensive fisheries for large returns of Kasilof sockeye, the relative contribution of late run Kasilof and Kenai Chinook stocks in Kasilof area fisheries has come into question. The fishery did not meet the 80 scoring guidepost for monitoring of the geographic range of all target stocks during the fishing season sufficient to prevent over harvest. Significant questions are remain for sockeye and to a lesser extent Kasilof Chinook.

Condition 35. Complete evaluations of sockeye and assess Kasilof chinook stock composition in fisheries to ensure accuracy of post-season analyses and clarify effectiveness of in-season time and area management. [Upper Cook Inlet]

1.1.1.4: Indicator stocks. - The status of the indicator stocks is somewhat but not entirely correlated with the stocks that are most at risk from a conservation point of view. The stocks used have been reviewed by ADFG although it is unclear how much outside review has been made. Formal analyses of the relationships between stocks and stocks of interest are not assessed every three to five years for all species. Management decisions in Upper Cook Inlet are heavily influenced by a subset of stocks, particularly the large productive Kenai and Kasilof sockeye runs. It is unclear to what degree current indicator stocks are representative of other unrepresented stocks for all species. Some information is available on the relationships among stocks of sockeye and chinook. Information is lacking on how representative the index stocks are of the larger groups of stocks in the region for coho, pink, and chum although fishery risks are somewhat ameliorated by reduced fishery interest in those species.

1.1.1.5: Enhanced stocks. - Enhancement activities are limited in upper Cook Inlet relative to Southeast Alaska and Prince William Sound. The scale of salmon enhancement of Upper Cook Inlet stocks is minor particularly since the elimination of the Tustamena Lake (Kasilof) sockeye program, which produced the majority of enhanced returns to UCI. Small Chinook and coho enhancement projects directed primarily at providing additional sport harvest opportunities for urban anglers while deflecting fishing effort from small wild stocks. Contribution estimates of UCI hatchery coho projects to commercial and sport harvests and stocked stream escapements during 1999-2001 have been evaluated by Bosch and Evans (2006). Sockeye salmon enhancement in UCI is now limited to fry plants into Hidden Lake (Kenai) and Big Lake (Fish Creek). Simpson and Edmundson (1999) have evaluated potential impacts of the Hidden Lake program. Litchfield and Willette (2002) provide a technical review of Fish Creek sockeye production. All enhancement programs are reviewed annually by ADF&G through the hatchery annual management plan process for the respective facilities, and must comply with department policies, including the genetics policy. The Cook Inlet Regional Salmon Enhancement Plan is currently being updated to provide direction for future salmon enhancement throughout the Cook Inlet area. Fisheries harvest both enhanced and wild (un-enhanced) stocks at the same time but harvest guidelines are generally based on the goals and objectives established for the wild (un-enhanced) stocks. No obvious hatchery problems have been reported. Given the limited scale of hatchery releases in this area, data and analyses appear to be adequate for evaluating the effects of enhanced fish in the management units on the wild (un-enhanced) fish stocks. Mark and recovery programs are operated for specific systems where enhanced: wild interactions are a potential concern.

1.1 Productivity / 1.1.2 Monitoring and Assessment.

1.1.2.1: Reliable estimates of removals. – Accurate and timely catch estimates are available for commercial fisheries based on daily in-season reporting. Catch estimates of sport and personal use fisheries that also affect escapement rely on in-season indices and post season estimates. Salmon are not released or discarded by the commercial fishery. Significant harvests of upper Cook Inlet salmon do not occur outside U.S. waters. Catch estimates are available for enhanced (e.g., hatchery) fish.

1.1.2.2: Reliable estimates of escapement. – Estimates are available for the annual escapement of most significant sockeye and chinook stocks harvested in the fishery. However, the reliability of sockeye sonar escapement estimates, particularly in the Susitna, has been called into question and is subject to an evaluation by the management system. Chinook escapement data is lacking for the Kasilof. In-season escapement data is collected for key sockeye and chinook stocks and used to regulate the fishery. Escapement estimates, particularly fishery independent in-season estimators, are lacking or limited for other species including coho, pink and chum although these species are not currently subject to intensive target fisheries. Estimates are available for the annual escapement and natural spawning of enhanced (e.g., hatchery) sockeye in the Kenai but not the Kasilof although the latter program has been discontinued. The fishery did not meet the 80 scoring guidepost for estimates of annual escapement of each target stock harvested in the fishery. New Susitna sockeye and Kasilof Chinook escapement assessment programs are in the process of being implemented.

Condition 36. Develop appropriately reliable estimates or indices of escapement for Susitna sockeye and Kasilof Chinook and incorporate into fishery management practices. [Upper Cook Inlet]

1.1.2.3: Information on age and size. - Annual monitoring programs collect data on the age and size of the catch and escapement for some but not all species and stocks. Extensive age, size, and length (ASL) data is collected from the commercial fishery catch. Annual ASL data is also collected from the escapement of most key sockeye and chinook stocks. This data used to reconstruct stock-recruitment relationships and to forecast future run sizes. Periodic monitoring programs have collected ASL data from the escapement of additional stocks although the scientific basis for sampling frequency of non-driver stocks is unclear.

1.1.2.4: Productivity estimates. – Scientifically defensible productivity estimates have been derived for some but not all target stocks. Stock-recruitment data based on run reconstructions is adequate to identify biological or sustainable escapement goals for most sockeye and chinook stocks. However, information is incomplete or lacking on the productivity of some key stocks including Susitna sockeye, Kasilof chinook, and coho. Risk assessments have considered uncertainty in productivity but formal assessments have concentrated on key fishery stocks. For instance, management considerations in recent years have included a substantial focus on productivity concerns associated with exceeding the upper end of Kenai and Kasilof sockeye escapement goals.

1.1 Productivity / 1.1.3 Management Goals.

1.1.3.1: Limit Reference Points. – For the purposes of this evaluation, sustainable and biological escapement goals (SEGs and BEGs) established for indicator stocks are treated as the operational equivalent of limit reference points. These goals are defined in Alaska's policy for the management of sustainable salmon fisheries (5 AAC 39.222). LRPs are defined as a state of the fishery that is not considered desirable where management action should severely curtail or stop

the fishery if it is reached. The LRP definition would appear to more closely fit the sustainable escapement threshold definition in Alaska's Sustainable Salmon Policy but no technical basis for establishing an SET has been established by ADFG and no SETs have been adopted. ADFG has recently defined a sustainable escapement goal threshold (SEGT) which is analogous to the lower end of an SEG range rather than an SET. The lack of SETs has been driven by the lack of an empirical basis for application of this theoretical concept as well as a belief system within the management agency that conservation risks of overfishing are practically nil for salmon stocks where the habitat is intact. Conditioned on this operational definition, there is some scientific basis for the LRP's for target stocks, these LRP's are defined to protect the stocks harvested by the fisheries, and there is no significant scientific disagreement regarding the LRP's used by the management system to formulate management decision for the fishery. Use of this operational definition will have implications for interpretation of other indicators that reference the LRP.

1.1.3.2: Target Reference Points. – Escapement goal ranges (SEGs and BEGs) established for indicator stocks clearly fit the definition of a Target Reference Point (TRP) as the desirable fishery level that management action should aim at maintaining. Escapement goals provide TRP's for the dominant fishery stocks and a subset of the other stocks in upper Cook Inlet. These goals have undergone extensive review and found to be scientifically defensible by ADFG. The extent of review and agreement among regional fisheries scientist outside the management system is unclear.

1.2 Recovery of Depleted Stocks

1.2.1: Recovery strategy and plan. – Under the operational definition of an LRP used in the evaluation, this evaluation identified depleted stocks based on a consistent failure to meet the lower end of the prescribed escapement goal range. This is equivalent to the definition of a "stock of concern" in Alaska's sustainable fisheries policy (SSFP) where yield, management, or conservation concerns are identified based on a chronic inability to meet escapement thresholds over a four to five year period. The SSP defines a "depleted salmon stock" based on identification of a conservation concern which is a chronic inability, despite the use of specific management measures, to maintain escapements for a stock above a sustained escapement threshold (SET). However, SETs have not been established for any Alaska stock and so conservation concerns have never been formally recognized by the management system. Lacking definition of specific SETs, application of sustainability criterion relative to LRPs and identification of depleted stocks was based on designated SEGs and BEGs.

No stocks of concern have been formally designated by the board of Fisheries for Upper Cook Inlet. Fish Creek sockeye were previously designated as a species of management concern but this designation has been removed based on new information and the response to management actions. However, Yentna sockeye met our operational definition of a depleted stock based on failure to meet escapement goals in 4 of last 5 years. Failure to meet the minimum escapement goal for this stock is particularly concerning because goals have been reduced on two previous occasions.

According to ADFG, escapement goals and stock status of Cook Inlet sockeye stocks were reviewed during the 2004 Board of Fisheries cycle. At that time, the Yentna stock had not met the Sustainable Escapement Goal for the stock for 3 of the previous 5 years. It was not considered by ADF&G or the BOF as a SOC. The escapement goal for the Yentna was again not reached in 2005. An agenda change request for designation of Yentna sockeye as a stock of concern was rejected by the BOF at its fall work session. Comments submitted to the BOF on the ACR stated that ADF&G did not believe the sustainability of this stock, as defined by the SSFP

is jeopardized despite failure to reach escapement goals. ADF&G has expressed concerns with regard to Susitna River sockeye (for which the Yentna has served as an index). Time and area management actions were taken in Northern and Central Districts to limit harvest of Susitna sockeye based on low in-season returns in 2005. ADF&G has also implemented major stock assessment research including a genetic stock identification program that will provide information of where, when and in what numbers Susitna sockeye (and other Cook Inlet stocks) are harvested in Upper Cook Inlet, and a large mark-recapture program to estimate escapement to the Susitna River.

Our qualitative assessment of the management response to stock depletion suggests that planned time and area restrictions under existing management plans adopted by the Board of Fisheries and intensive stock assessments that have been implemented, provide a reasonable expectation for significant improvements in Yentna sockeye escapements within the scale and time period prescribed at the 60 scoring guidepost. However, recovery plans do not rise to the standard of the 80 scoring guidepost due to the lack of a formal stock of concern designation contrary to the SSFP definition based on chronic inability to meet escapement thresholds over a four or five year period, lack of a written action or recovery plan, absence of specific targets consistent with recovery within 3 reproductive cycles, and absence of specific fishery closure triggers consistent with the intent of a true limit reference point.

Yentna sockeye have failed to meet minimum escapement goals in 4 of the last 5 years and are a depleted stock based on our operational definition of limit reference points. ADF&G reviews stock status relative to identification of stocks of concern for consideration by the Board of Fisheries. Final content of action plans is determined in an open public process by ADF&G and the Board. However, the BOF did not elect to designate Yentna sockeye as a stock of concern at the 2005 meeting. The management response to depletion of Yentna sockeye does not meet the requirements of the 80 scoring guidepost with respect development and implementation of a specific plan for recovery within 3 reproductive cycles and or limitations of the fishery which allow the stock to recover to more than 150% of the LRP for abundance before any fisheries are permitted that target these stocks.

Condition 37. Review stock status of Susitna sockeye and develop an action plan intended to ensure achievement of Susitna sockeye escapement goals. Action plan should provide specific goals and an anticipated timeline for achieving the goals (see condition under Principle 3 for Indicator 3.4.1.2 [Upper Cook Inlet]

1.2.2: Stocks not depleted. - There is general agreement among regional fisheries scientist inside the management system that the methods of estimating escapements and exploitation rates for the majority of target stocks are scientifically defensible. Management actions have reduced fishing as the target stocks approach the LRP (i.e. escapement goals) and fisheries have only resulted in escapements that approach or are below the LRP escapement goal in no more than two years in a period of the most recent 5 consecutive years, for the majority of the target stocks. This fishery fails the 80 scoring guidepost for this indicator which is based on any rather than most target stocks. Yentna sockeye have failed to reach escapement goals in 4 of 5 recent years and significant questions exist regarding the accuracy of methods for estimating escapement and exploitation rates of this stock. The fishery did not meet the 80 scoring guidepost for this indicator due to failure of Yentna sockeye to reach escapement goals in 4 of 5 recent years and significant questions exist regarding the accuracy of methods for estimating escapement and exploitation rates of this stock. ADF&G is improving its assessment program for Yentna/Susitna sockeye salmon, and is taking management actions to limit commercial harvests of these fish in

2006. Improved management tools and performance are expected from improved assessment programs.

Application of this criterion recognizes that salmon management agencies cannot ensure ALL target stock escapements will meet goals four out of every five consecutive years given the variable nature of salmon returns. For instance, short-term declines in productivity as a result of environmental conditions can result in escapement goals not being met even when a management agency has closed fisheries in response to low returns. This is not the case for Yentna sockeye. Significant sockeye fisheries have been prosecuted in Cook Inlet despite a chronic failure to meet the Yentna escapement goal. Continuing strong returns of other sockeye stocks in Cook Inlet and other portions of Alaska indicate favorable environmental conditions for ocean rearing and maturation. The fact that Yentna sockeye have apparently declined during a period of favorable ocean productivity could be indicative of changes in local productivity in the Susitna system, problems with the assessment methods, a fishery effect. Any of these causes could be construed as a basis for significant concern from the standpoint of stock sustainability.

Condition 38. Develop a method for specifically setting an LRP that is comparable to the SET (Sustainable Escapement Threshold) outlined in the Sustainable Escapement Goal Policy (see Condition under Principle 3, Indicator 3.1.1) [Upper Cook Inlet]

1.3 Reproductive capacity

1.3.1: Age, size, sex and genetic considerations. – Extensive information on biological characteristics such as the age, size, sex and component stocks provides a reasonable basis for detection of fishing threats to the reproductive capacity of the target stocks. The management system includes provisions to minimize any adverse impacts to the genetic structure of wild (un-enhanced) stocks that may be due to the enhancement of other stocks. The significance of these considerations is specifically identified in the SSFP. Fishery management plans include specific actions aimed at protecting diversity and reproductive capacity.

ADFG believes its existing management and assessment programs are adequate to assure the long-term biological characteristics and reproductive capacity of UCI salmon stocks. Important elements include distributing escapements temporally across runs through use of time and area fishery restrictions, establishing and managing for escapement goals, and extensive age, sex and size sampling of runs. ADFG is unaware of no demonstrated detrimental effects of selective fishing that have occurred in salmon populations managed to maintain escapements, including several sockeye stocks from different areas of Alaska that have been harvested extensively with size selective gillnets for over a century "without measurable effects".

However, given the intensive nature of UCI fisheries, it is unclear whether management actions are adequate for the health of all target stocks relative to biological characteristics such as age, size, sex and genetic structure. Fishery assessments have considered potential selective fishery impacts on some species such as early run Kenai chinook which is primarily a sport fishery species. It is unclear whether similar assessments have been completed for other species and stocks, particularly in large systems like the Kenai, Susitna, and Kasilof where genetic data has identified significant genetic substock structure. The fishery did not completely meet the 80 scoring guidepost for this indicator with respect to the consistency of management actions with maintaining healthy biological characteristics such as age, size, sex, and genetic structure of all target stocks.

Harvest rates in many of these fisheries are high. High harvest rates have the potential for differential harvest of stock components. Genetic studies using ever-advancing techniques are

documenting high diversity among and within subcomponents of a stock. Salmon conservationists have increasingly recognized the close relationship between diversity and productivity. All of this adds up to a real, albeit theoretical risk that intensive fisheries could exert a directional selective pressure which, over a period of time, could alter the genetic composition and performance of a stock. Of particular concern to the reviewers has been a prevailing belief in the management system that fisheries cannot pose a significant risk to salmon sustainability where habitats are intact. Until this belief has been thoroughly vetted, documented, and published in the scientific literature, this review must continue to treat this view as an untested hypothesis. Further, precautionary management requires that the burden of proof fall on demonstration that selective fisheries do not jeopardize diversity.

Condition 39. Evaluate appropriate existing age-sex-size information to determine if fisheries are exerting significant selectivity; continue ASL sampling in fisheries and several spawning stocks to continue a database for long-term evaluation of potential fishery selectivity. [Upper Cook Inlet]

Norton Sound	80.56	82.12	92.73
Kodiak	82.48	82.12	92.73
Chignik	87.55	82.12	92.73
Peninsula	80.13	82.12	92.73

12 Requirements for Continued Certification

To be awarded an MSC certificate for a fishery, the applicants or client must agree in written contract to develop an action plan for meeting the required 'Conditions'; a plan that must provide specific information on what actions will be taken, who will take the actions, and when the actions will be completed. An Action Plan has been submitted by ADF&G and approved by SCS (see Appendix 6).

As the applicant, ADF&G must also provide proof to SCS that a written contract is in place that obligates ADF&G to be both financially and technically responsible for annual surveillance visits by an MSC accredited certification body. The contract must also specify that ADF&G will endeavor to meet all specific "Conditions" and that evidence of not meeting the "Conditions" specified in the original assessment report is cause for the revocation of the MSC certificate.

The MSC allows fishery clients to switch Certification Bodies from the original CB and its assessment team to one with little background in the fisheries that have been assessed, and with no requirement to use any of the original assessment team members to ensure consistency of quality with the original assessment and original Conditions. Stakeholders in this process have identified to SCS some concern that switching CBs may, at a minimum, provide the potential for unintentional gaps in performance against the original assessment team's intent in the Conditions placed on each fishery. To ensure this is not a problem, any future review of the Conditions in this report requires that the CB of record for all future surveillance audits contact the team leader and team members of the original assessment team and provide the opportunity for both to comment on the management of the fisheries, as well as the opportunity to review and comment on the level of performance identified by Moody Marine and ADF&G in answering each Condition.

The contract for future annual surveillance audits is in place prior to certification being awarded.

12.1.1 General Requirements for Continued Certification

Surveillance audits will be comprised in general of (1) checking on compliance with the agreed action plan for meeting pre-specified 'Conditions', and (2) sets of selected questions that allow the certifier to determine whether the fishery is being maintained at a level of performance similar to or better than the performance recognized during the initial assessment.

The general 'Conditions' set for the Alaska salmon fisheries are:

- ADF&G must recognize that MSC standards require regular monitoring inspections at least once a year, focusing on compliance with the 'Conditions' set forth in this report (as outlined below) and continued conformity with the standards of certification.
- ADF&G must agree by contract to be responsible financially and technically for compliance with required surveillance audits by an accredited MSC certification body, and a contract must be signed and verified by SCS prior to certification being awarded.
- ADF&G must recognize that MSC standards require a full re-evaluation for certification (as opposed to yearly monitoring for update purposes) every five years.
- Prior to receiving final certification, ADF&G shall develop an 'Action Plan for Meeting the Condition for Continued Certification' and have it approved by SCS.

12.1.2 Specific Requirements (Conditions) for Continued Certification

ADF&G must agree in a written contract with an accredited MSC certification body to meet the specific conditions as described in Section 8 of this report (within the agreed timelines that will be agreed in the ' Action Plan for Meeting the Condition for Continued Certification' to be approved by SCS).

An Action Plan has been submitted by ADF&G and reviewed by SCS. A contract for future surveillance audits has been signed between Alaska Department of Fish and Game and Moody Marine for surveillance audits beginning in 2008.

As stated above, the MSC allows fishery clients to switch Certification Bodies from the original CB and its assessment team to one with little background in the fisheries that have been assessed, and with no requirement to use any of the original assessment team members to ensure consistency of quality with the original assessment and original Conditions. Stakeholders in this process have identified to SCS some concern that switching CBs may, at a minimum, provide the potential for unintentional gaps in performance against the original assessment team's intent in the Conditions placed on each fishery. To ensure this is not a problem, any future review of the Conditions in this report requires that the CB of record for all future surveillance audits (Moody Marine) contact the team leader and team members of the original SCS assessment team and provide the opportunity for all to comment on the management of the fisheries, as well as on any information provided or summary reports on the level of performance identified by Moody Marine and ADF&G in answering each Condition.

13 MSC Logo Licensing Responsibilities

As the "applicant" for certification of the Alaska salmon fisheries, ADF&G is the only entity that has the right to apply for a license to use the MSC logo. It is also the case that ADF&G has the right to approve the use of the logo for others associated with the fishery at its discretion.

TOM Kluberton
MAT-Su MAYOR's Blue Ribbon Sportsmen's Comm. Hee

Alaska State Legislature

RC 95

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February 1, 2008

The Honorable Sarah Palin
Governor
State of Alaska
Alaska State Capitol
Juneau, Alaska 99801

Dear Governor Palin:

In the past decade the drainages in the Mat-Su valley have experienced historically low salmon runs and some species have not met escapement goals in five of the last seven years. For example, in 2005 only 36,921 sockeye returned to the Yentna River, a shortage of more than 50,000 fish at the lower end of the escapement goal, and more than 120,000 under the upper objective. Fish Creek (Big Lake system) is even in worse shape. Minimum escapement goals have not been achieved in the past four years, despite enhancement from hatchery fish.

The problem with not meeting escapement goals for Northern District bound salmon are two-fold; it is unacceptable biologically, and it presents serious challenges to local economies.

If adequate escapement goals are not met, the state may soon be facing both biological as well as economic problems in the Cook Inlet area. Without adequate escapement, salmon stocks may decline throughout enough of their historic range to induce actions by various groups that could be harmful to both local and state economic interests.

Although allocation issues exist between fishing groups, biological issues could lead to restrictions or curtailment of fishing activities across the board. If that were to happen, the economic benefits derived from both the commercial and sport fish effort may be lost. Such an outcome would be devastating to many of the Inlet's local economies and would almost certainly impact the state's economy as well.

We are, however, encouraged by the heightened awareness toward this issue by local businesses. The recent actions of the Mat-Su Borough and the Willow Chamber of Commerce highlight the importance of adequate salmon returns to our local economies.

We are committed to working with you, local fishing groups, local businesses impacted by returns or the lack thereof, and the Alaska Department of Fish and Game to find a meaningful solution to this growing problem. We must give our biologists the tools they need to discover the root causes of declining returns, as well as the resources necessary to rebuild our failing salmon stocks.

Sincerely,

Senator Lyda Green
President of the Senate

Representative John Harris
Speaker of the House

cc: Denby Lloyd, Commissioner, Department of Fish and Game
Emil Notti, Commissioner, Department of Commerce, Community and Economic Development
Mel Morris, Chairman, Alaska Board of Fisheries

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Kenai River Data is sorted by Year, Section of the River, and Week of Activity.

Freshwater Logbook data summaries for the Kenai River, 2005-2007

P50001 - Kenai River - Cook Inlet to Soldotna Bridge
P50002 - Kenai River - Soldotna Bridge to Moose River
P50003 - Kenai River - Moose River to Skilak Outlet
P50004 - Kenai River - Skilak Inlet to Kenai Lake
P50184 - Kenai River - guided, reach not specified

			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2005								
2005	Kenai River - Cook Inlet to Soldotna Bridge	5/2/2005	1	5	0	0	0	0
2005	Kenai River - Cook Inlet to Soldotna Bridge	5/9/2005	11	19	0	0	0	0
2005	Kenai River - Cook Inlet to Soldotna Bridge	5/16/2005	48	68	7	0	0	0
2005	Kenai River - Cook Inlet to Soldotna Bridge	5/23/2005	98	75	3	0	2	0
2005	Kenai River - Cook Inlet to Soldotna Bridge	5/30/2005	228	184	2	0	2	1
2005	Kenai River - Cook Inlet to Soldotna Bridge	6/6/2005	415	317	0	0	7	1
2005	Kenai River - Cook Inlet to Soldotna Bridge	6/13/2005	530	408	0	0	10	1
2005	Kenai River - Cook Inlet to Soldotna Bridge	6/20/2005	519	449	0	0	34	0
2005	Kenai River - Cook Inlet to Soldotna Bridge	6/27/2005	1,024	849	2	1	26	2
2005	Kenai River - Cook Inlet to Soldotna Bridge	7/4/2005	1,658	1,167	2	1	32	1
2005	Kenai River - Cook Inlet to Soldotna Bridge	7/11/2005	2,930	2,099	10	3	214	90
2005	Kenai River - Cook Inlet to Soldotna Bridge	7/18/2005	2,634	1,613	3	2	524	267
2005	Kenai River - Cook Inlet to Soldotna Bridge	7/25/2005	2,753	1,496	12	2	343	64
2005	Kenai River - Cook Inlet to Soldotna Bridge	8/1/2005	7	313	397	22	1,058	137
2005	Kenai River - Cook Inlet to Soldotna Bridge	8/8/2005	47	175	1,330	58	843	298
2005	Kenai River - Cook Inlet to Soldotna Bridge	8/15/2005	52	111	1,832	197	315	126
2005	Kenai River - Cook Inlet to Soldotna Bridge	8/22/2005	50	58	2,006	204	64	66
2005	Kenai River - Cook Inlet to Soldotna Bridge	8/29/2005	15	9	1,032	108	34	54
2005	Kenai River - Cook Inlet to Soldotna Bridge	9/5/2005	4	6	558	69	7	0
2005	Kenai River - Cook Inlet to Soldotna Bridge	9/12/2005	0	1	375	23	7	0
2005	Kenai River - Cook Inlet to Soldotna Bridge	9/19/2005	16	3	184	14	0	0
2005	Kenai River - Cook Inlet to Soldotna Bridge	9/26/2005	0	0	67	3	0	0
2005	Kenai River - Soldotna Bridge to Moose River	5/16/2005	10	3	0	0	1	0
2005	Kenai River - Soldotna Bridge to Moose River	5/23/2005	1	4	0	0	0	0
2005	Kenai River - Soldotna Bridge to Moose River	5/30/2005	5	12	0	0	2	0
2005	Kenai River - Soldotna Bridge to Moose River	6/6/2005	10	16	0	0	0	0
2005	Kenai River - Soldotna Bridge to Moose River	6/13/2005	44	42	0	0	1	3
2005	Kenai River - Soldotna Bridge to Moose River	6/20/2005	124	102	0	0	12	6
2005	Kenai River - Soldotna Bridge to Moose River	6/27/2005	77	54	0	0	14	2

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Kenai River Data is sorted by Year, Section of the River, and Week of Activity.

Freshwater Logbook data summaries for the Kenai River, 2005-2007

P50001 - Kenai River - Cook Inlet to Soldotna Bridge
P50002 - Kenai River - Soldotna Bridge to Moose River
P50003 - Kenai River - Moose River to Skilak Outlet
P50004 - Kenai River - Skilak Inlet to Kenai Lake
P50184 - Kenai River - guided, reach not specified

			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2005	Kenai River - Soldotna Bridge to Moose River	7/4/2005	78	75	0	0	13	0
2005	Kenai River - Soldotna Bridge to Moose River	7/11/2005	133	91	0	0	62	8
2005	Kenai River - Soldotna Bridge to Moose River	7/18/2005	127	77	0	0	274	60
2005	Kenai River - Soldotna Bridge to Moose River	7/25/2005	91	41	0	0	300	44
2005	Kenai River - Soldotna Bridge to Moose River	8/1/2005	0	17	22	1	840	210
2005	Kenai River - Soldotna Bridge to Moose River	8/8/2005	0	20	92	7	679	220
2005	Kenai River - Soldotna Bridge to Moose River	8/15/2005	0	10	177	23	287	233
2005	Kenai River - Soldotna Bridge to Moose River	8/22/2005	0	6	163	19	40	32
2005	Kenai River - Soldotna Bridge to Moose River	8/29/2005	0	2	112	31	1	4
2005	Kenai River - Soldotna Bridge to Moose River	9/5/2005	0	3	134	41	0	13
2005	Kenai River - Soldotna Bridge to Moose River	9/12/2005	0	0	69	6	1	22
2005	Kenai River - Soldotna Bridge to Moose River	9/19/2005	0	0	40	7	1	40
2005	Kenai River - Soldotna Bridge to Moose River	9/26/2005	0	0	69	96	0	0
2005	Kenai River - Soldotna Bridge to Moose River	10/3/2005	0	0	4	4	0	0
2005	Kenai River - Soldotna Bridge to Moose River	10/10/2005	0	0	6	7	0	0
2005	Kenai River - Soldotna Bridge to Moose River	10/24/2005	0	0	0	3	0	0
2005	Kenai River - Moose River to Skilak Outlet	4/25/2005	0	0	0	0	0	0
2005	Kenai River - Moose River to Skilak Outlet	5/2/2005	0	0	0	0	0	0
2005	Kenai River - Moose River to Skilak Outlet	5/9/2005	0	0	0	0	0	0
2005	Kenai River - Moose River to Skilak Outlet	5/16/2005	0	0	0	0	0	0
2005	Kenai River - Moose River to Skilak Outlet	5/23/2005	0	1	0	0	0	0
2005	Kenai River - Moose River to Skilak Outlet	5/30/2005	2	4	0	0	0	0
2005	Kenai River - Moose River to Skilak Outlet	6/6/2005	3	4	0	0	18	2
2005	Kenai River - Moose River to Skilak Outlet	6/13/2005	8	7	0	0	52	62
2005	Kenai River - Moose River to Skilak Outlet	6/20/2005	18	11	0	0	19	12
2005	Kenai River - Moose River to Skilak Outlet	6/27/2005	8	8	0	0	15	0
2005	Kenai River - Moose River to Skilak Outlet	7/4/2005	23	6	0	0	53	6
2005	Kenai River - Moose River to Skilak Outlet	7/11/2005	26	14	0	0	94	32
2005	Kenai River - Moose River to Skilak Outlet	7/18/2005	23	24	1	0	334	97
2005	Kenai River - Moose River to Skilak Outlet	7/25/2005	25	24	0	0	219	60

Kenai River Data is sorted by Year, Section of the River, and Week of Activity.

Freshwater Logbook data summaries for the Kenai River, 2005-2007

P50001 - Kenai River - Cook Inlet to Soldotna Bridge
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P50184 - Kenai River - guided, reach not specified

			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2005	Kenai River - Moose River to Skilak Outlet	8/1/2005	0	6	25	3	1,041	593
2005	Kenai River - Moose River to Skilak Outlet	8/8/2005	0	13	43	5	1,058	706
2005	Kenai River - Moose River to Skilak Outlet	8/15/2005	0	13	238	19	586	597
2005	Kenai River - Moose River to Skilak Outlet	8/22/2005	0	9	407	85	148	172
2005	Kenai River - Moose River to Skilak Outlet	8/29/2005	0	12	325	80	26	132
2005	Kenai River - Moose River to Skilak Outlet	9/5/2005	0	4	318	66	2	148
2005	Kenai River - Moose River to Skilak Outlet	9/12/2005	7	0	223	46	0	145
2005	Kenai River - Moose River to Skilak Outlet	9/19/2005	0	0	146	35	0	61
2005	Kenai River - Moose River to Skilak Outlet	9/26/2005	0	2	80	67	0	5
2005	Kenai River - Moose River to Skilak Outlet	10/3/2005	0	0	44	23	0	1
2005	Kenai River - Moose River to Skilak Outlet	10/10/2005	0	0	14	14	0	0
2005	Kenai River - Skilak Inlet to Kenai Lake		0	0	0	0	0	0
2005	Kenai River - Skilak Inlet to Kenai Lake	4/18/2005	0	0	0	0	0	0
2005	Kenai River - Skilak Inlet to Kenai Lake	4/25/2005	0	0	0	0	0	0
2005	Kenai River - Skilak Inlet to Kenai Lake	5/30/2005	0	0	0	0	7	3
2005	Kenai River - Skilak Inlet to Kenai Lake	6/6/2005	0	0	0	0	36	6
2005	Kenai River - Skilak Inlet to Kenai Lake	6/13/2005	5	0	4	10	558	275
2005	Kenai River - Skilak Inlet to Kenai Lake	6/20/2005	4	78	0	0	483	200
2005	Kenai River - Skilak Inlet to Kenai Lake	6/27/2005	0	0	0	0	255	97
2005	Kenai River - Skilak Inlet to Kenai Lake	7/4/2005	1	1	0	0	170	118
2005	Kenai River - Skilak Inlet to Kenai Lake	7/11/2005	3	4	0	0	725	495
2005	Kenai River - Skilak Inlet to Kenai Lake	7/18/2005	11	7	0	0	636	363
2005	Kenai River - Skilak Inlet to Kenai Lake	7/25/2005	1	0	0	0	763	642
2005	Kenai River - Skilak Inlet to Kenai Lake	8/1/2005	0	1	0	0	249	310
2005	Kenai River - Skilak Inlet to Kenai Lake	8/8/2005	0	0	1	1	61	261
2005	Kenai River - Skilak Inlet to Kenai Lake	8/15/2005	0	0	5	1	5	159
2005	Kenai River - Skilak Inlet to Kenai Lake	8/22/2005	0	3	51	23	15	336
2005	Kenai River - Skilak Inlet to Kenai Lake	8/29/2005	0	24	170	79	0	364
2005	Kenai River - Skilak Inlet to Kenai Lake	9/5/2005	0	0	170	142	0	146
2005	Kenai River - Skilak Inlet to Kenai Lake	9/12/2005	0	0	148	119	5	158

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Freshwater Logbook data summaries for the Kenai River, 2005-2007

P50001 - Kenai River - Cook Inlet to Soldotna Bridge
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			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2005	Kenai River - Skilak Inlet to Kenai Lake	9/19/2005	0	0	33	43	0	149
2005	Kenai River - Skilak Inlet to Kenai Lake	9/26/2005	0	0	25	30	0	76
2005	Kenai River - Skilak Inlet to Kenai Lake	10/3/2005	0	0	1	32	0	11
2005	Kenai River - Skilak Inlet to Kenai Lake	10/10/2005	0	0	15	17	0	4
2005	Kenai River - Skilak Inlet to Kenai Lake	10/17/2005	0	0	0	0	0	0
2005	Kenai River - guided, reach not specified	5/9/2005	0	0	0	0	0	0
2005	Kenai River - guided, reach not specified	5/16/2005	4	0	0	0	0	0
2005	Kenai River - guided, reach not specified	5/23/2005	7	2	0	0	0	0
2005	Kenai River - guided, reach not specified	5/30/2005	5	3	0	0	3	0
2005	Kenai River - guided, reach not specified	6/6/2005	6	2	0	0	15	6
2005	Kenai River - guided, reach not specified	6/13/2005	16	13	0	0	67	9
2005	Kenai River - guided, reach not specified	6/20/2005	24	30	0	0	60	22
2005	Kenai River - guided, reach not specified	6/27/2005	34	17	0	0	40	1
2005	Kenai River - guided, reach not specified	7/4/2005	57	18	0	0	5	0
2005	Kenai River - guided, reach not specified	7/11/2005	90	27	0	0	12	12
2005	Kenai River - guided, reach not specified	7/18/2005	73	35	0	0	61	4
2005	Kenai River - guided, reach not specified	7/25/2005	74	46	0	0	71	0
2005	Kenai River - guided, reach not specified	8/1/2005	0	68	23	1	159	20
2005	Kenai River - guided, reach not specified	8/8/2005	0	49	51	0	49	18
2005	Kenai River - guided, reach not specified	8/15/2005	0	13	90	1	61	23
2005	Kenai River - guided, reach not specified	8/22/2005	0	0	160	0	0	0
2005	Kenai River - guided, reach not specified	8/29/2005	0	0	102	2	14	0
2005	Kenai River - guided, reach not specified	9/5/2005	0	0	89	6	0	0
2005	Kenai River - guided, reach not specified	9/12/2005	0	0	18	2	0	0
2005	Kenai River - guided, reach not specified	9/19/2005	0	0	12	1	0	0
2006								
2006	Kenai River - Cook Inlet to Soldotna Bridge		0	0	8	0	0	0
2006	Kenai River - Cook Inlet to Soldotna Bridge	1/16/2006	0	0	0	0	0	0
2006	Kenai River - Cook Inlet to Soldotna Bridge	5/1/2006	0	3	0	0	0	0
2006	Kenai River - Cook Inlet to Soldotna Bridge	5/8/2006	2	0	0	0	0	0

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Freshwater Logbook data summaries for the Kenai River, 2005-2007

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P50184 - Kenai River - guided, reach not specified

			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2006	Kenai River - Cook Inlet to Soldotna Bridge	5/15/2006	10	17	6	0	1	0
2006	Kenai River - Cook Inlet to Soldotna Bridge	5/22/2006	23	12	0	0	0	0
2006	Kenai River - Cook Inlet to Soldotna Bridge	5/29/2006	82	91	0	0	0	0
2006	Kenai River - Cook Inlet to Soldotna Bridge	6/5/2006	358	253	0	3	6	12
2006	Kenai River - Cook Inlet to Soldotna Bridge	6/12/2006	613	435	0	0	92	5
2006	Kenai River - Cook Inlet to Soldotna Bridge	6/19/2006	454	360	8	23	28	15
2006	Kenai River - Cook Inlet to Soldotna Bridge	6/26/2006	650	561	4	1	39	5
2006	Kenai River - Cook Inlet to Soldotna Bridge	7/3/2006	1,027	848	1	1	41	2
2006	Kenai River - Cook Inlet to Soldotna Bridge	7/10/2006	1,028	739	17	2	31	16
2006	Kenai River - Cook Inlet to Soldotna Bridge	7/17/2006	1,756	1,197	29	5	72	11
2006	Kenai River - Cook Inlet to Soldotna Bridge	7/24/2006	2,028	1,050	132	34	12	86
2006	Kenai River - Cook Inlet to Soldotna Bridge	7/31/2006	16	115	679	29	454	138
2006	Kenai River - Cook Inlet to Soldotna Bridge	8/7/2006	15	86	923	52	279	60
2006	Kenai River - Cook Inlet to Soldotna Bridge	8/14/2006	17	10	1,733	114	138	17
2006	Kenai River - Cook Inlet to Soldotna Bridge	8/21/2006	14	7	591	62	12	1
2006	Kenai River - Cook Inlet to Soldotna Bridge	8/28/2006	6	3	428	50	2	4
2006	Kenai River - Cook Inlet to Soldotna Bridge	9/4/2006	0	2	310	29	0	0
2006	Kenai River - Cook Inlet to Soldotna Bridge	9/11/2006	0	0	384	9	3	16
2006	Kenai River - Cook Inlet to Soldotna Bridge	9/18/2006	0	0	119	23	0	1
2006	Kenai River - Cook Inlet to Soldotna Bridge	9/25/2006	0	1	43	9	0	1
2006	Kenai River - Cook Inlet to Soldotna Bridge	10/2/2006	0	0	7	2	0	0
2006	Kenai River - Soldotna Bridge to Moose River	1/16/2006	4	10	0	0	0	0
2006	Kenai River - Soldotna Bridge to Moose River	5/29/2006	7	15	0	0	0	0
2006	Kenai River - Soldotna Bridge to Moose River	6/5/2006	17	21	0	0	0	0
2006	Kenai River - Soldotna Bridge to Moose River	6/12/2006	93	84	7	0	44	38
2006	Kenai River - Soldotna Bridge to Moose River	6/19/2006	151	120	0	1	2	2
2006	Kenai River - Soldotna Bridge to Moose River	6/26/2006	77	57	1	0	1	0
2006	Kenai River - Soldotna Bridge to Moose River	7/3/2006	19	15	0	1	3	0
2006	Kenai River - Soldotna Bridge to Moose River	7/10/2006	23	16	0	0	19	4
2006	Kenai River - Soldotna Bridge to Moose River	7/17/2006	37	18	1	0	145	47

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			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2006	Kenai River - Soldotna Bridge to Moose River	7/24/2006	38	21	2	3	10	55
2006	Kenai River - Soldotna Bridge to Moose River	7/31/2006	5	2	63	24	262	210
2006	Kenai River - Soldotna Bridge to Moose River	8/7/2006	2	9	82	17	276	166
2006	Kenai River - Soldotna Bridge to Moose River	8/14/2006	0	8	126	4	250	185
2006	Kenai River - Soldotna Bridge to Moose River	8/21/2006	2	24	231	32	108	182
2006	Kenai River - Soldotna Bridge to Moose River	8/28/2006	0	2	99	14	1	30
2006	Kenai River - Soldotna Bridge to Moose River	9/4/2006	0	2	31	2	0	35
2006	Kenai River - Soldotna Bridge to Moose River	9/11/2006	0	0	63	22	0	5
2006	Kenai River - Soldotna Bridge to Moose River	9/18/2006	0	0	36	44	0	0
2006	Kenai River - Soldotna Bridge to Moose River	9/25/2006	0	0	24	25	0	0
2006	Kenai River - Soldotna Bridge to Moose River	10/2/2006	0	0	6	6	0	0
2006	Kenai River - Soldotna Bridge to Moose River	10/9/2006	0	0	20	0	0	0
2006	Kenai River - Soldotna Bridge to Moose River	10/16/2006	0	0	8	5	0	0
2006	Kenai River - Moose River to Skilak Outlet	1/16/2006	0	0	0	0	0	0
2006	Kenai River - Moose River to Skilak Outlet	5/8/2006	0	0	0	0	0	0
2006	Kenai River - Moose River to Skilak Outlet	5/15/2006	0	0	0	0	0	0
2006	Kenai River - Moose River to Skilak Outlet	5/22/2006	0	0	0	0	0	0
2006	Kenai River - Moose River to Skilak Outlet	5/29/2006	2	0	0	0	0	0
2006	Kenai River - Moose River to Skilak Outlet	6/5/2006	11	13	0	0	1	0
2006	Kenai River - Moose River to Skilak Outlet	6/12/2006	15	12	0	0	0	0
2006	Kenai River - Moose River to Skilak Outlet	6/19/2006	13	11	0	0	12	0
2006	Kenai River - Moose River to Skilak Outlet	6/26/2006	5	17	2	0	7	8
2006	Kenai River - Moose River to Skilak Outlet	7/3/2006	14	13	14	6	6	0
2006	Kenai River - Moose River to Skilak Outlet	7/10/2006	9	14	0	0	5	1
2006	Kenai River - Moose River to Skilak Outlet	7/17/2006	9	2	0	0	13	2
2006	Kenai River - Moose River to Skilak Outlet	7/24/2006	8	4	9	2	4	31
2006	Kenai River - Moose River to Skilak Outlet	7/31/2006	0	3	83	50	383	279
2006	Kenai River - Moose River to Skilak Outlet	8/7/2006	0	16	153	40	576	300
2006	Kenai River - Moose River to Skilak Outlet	8/14/2006	1	6	197	23	400	211
2006	Kenai River - Moose River to Skilak Outlet	8/21/2006	4	4	337	103	124	135

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			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2006	Kenai River - Moose River to Skilak Outlet	8/28/2006	0	4	219	114	10	106
2006	Kenai River - Moose River to Skilak Outlet	9/4/2006	0	2	108	21	0	120
2006	Kenai River - Moose River to Skilak Outlet	9/11/2006	0	0	59	29	0	113
2006	Kenai River - Moose River to Skilak Outlet	9/18/2006	0	0	86	51	0	16
2006	Kenai River - Moose River to Skilak Outlet	9/25/2006	0	0	72	24	0	7
2006	Kenai River - Moose River to Skilak Outlet	10/2/2006	9	6	38	17	0	0
2006	Kenai River - Moose River to Skilak Outlet	10/9/2006	0	0	6	1	0	0
2006	Kenai River - Moose River to Skilak Outlet	10/16/2006	0	0	31	17	0	0
2006	Kenai River - Moose River to Skilak Outlet	10/23/2006	0	0	4	5	0	0
2006	Kenai River - Skilak Inlet to Kenai Lake		0	0	0	0	0	0
2006	Kenai River - Skilak Inlet to Kenai Lake	5/8/2006	2	0	0	0	6	0
2006	Kenai River - Skilak Inlet to Kenai Lake	5/29/2006	0	0	0	0	0	0
2006	Kenai River - Skilak Inlet to Kenai Lake	6/5/2006	0	0	0	0	35	6
2006	Kenai River - Skilak Inlet to Kenai Lake	6/12/2006	0	0	0	0	320	142
2006	Kenai River - Skilak Inlet to Kenai Lake	6/19/2006	0	0	0	0	527	284
2006	Kenai River - Skilak Inlet to Kenai Lake	6/26/2006	4	0	0	2	571	350
2006	Kenai River - Skilak Inlet to Kenai Lake	7/3/2006	0	0	0	0	215	122
2006	Kenai River - Skilak Inlet to Kenai Lake	7/10/2006	1	2	0	0	82	11
2006	Kenai River - Skilak Inlet to Kenai Lake	7/17/2006	1	1	0	0	83	33
2006	Kenai River - Skilak Inlet to Kenai Lake	7/24/2006	4	2	1	1	131	111
2006	Kenai River - Skilak Inlet to Kenai Lake	7/31/2006	2	16	17	0	400	682
2006	Kenai River - Skilak Inlet to Kenai Lake	8/7/2006	2	0	4	2	277	774
2006	Kenai River - Skilak Inlet to Kenai Lake	8/14/2006	0	0	8	3	51	189
2006	Kenai River - Skilak Inlet to Kenai Lake	8/21/2006	0	0	18	4	11	101
2006	Kenai River - Skilak Inlet to Kenai Lake	8/28/2006	0	0	40	10	0	170
2006	Kenai River - Skilak Inlet to Kenai Lake	9/4/2006	0	0	24	21	0	178
2006	Kenai River - Skilak Inlet to Kenai Lake	9/11/2006	0	0	35	68	0	195
2006	Kenai River - Skilak Inlet to Kenai Lake	9/18/2006	0	0	10	9	0	103
2006	Kenai River - Skilak Inlet to Kenai Lake	9/25/2006	0	0	14	8	0	27
2006	Kenai River - Skilak Inlet to Kenai Lake	10/2/2006	0	0	1	0	0	0

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			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2006	Kenai River - Skilak Inlet to Kenai Lake	10/9/2006	0	0	0	0	0	0
2006	Kenai River - Skilak Inlet to Kenai Lake	10/16/2006	0	0	4	0	0	0
2006	Kenai River - guided, reach not specified	6/12/2006	0	0	0	0	0	0
2006	Kenai River - guided, reach not specified	6/19/2006	2	0	0	0	6	2
2006	Kenai River - guided, reach not specified	6/26/2006	4	0	0	0	0	0
2006	Kenai River - guided, reach not specified	7/3/2006	4	2	0	0	0	0
2006	Kenai River - guided, reach not specified	7/10/2006	1	1	0	0	0	0
2006	Kenai River - guided, reach not specified	7/17/2006	18	8	0	0	0	0
2006	Kenai River - guided, reach not specified	7/24/2006	19	10	0	0	0	0
2006	Kenai River - guided, reach not specified	7/31/2006	0	0	0	3	0	3
2006	Kenai River - guided, reach not specified	8/7/2006	0	0	5	0	48	0
2006	Kenai River - guided, reach not specified	8/14/2006	0	1	14	0	69	0
2006	Kenai River - guided, reach not specified	8/21/2006	0	1	0	1	7	1
2006	Kenai River - guided, reach not specified	8/28/2006	0	0	0	0	0	0
2006	Kenai River - guided, reach not specified	9/4/2006	0	0	0	0	0	0
2006	Kenai River - guided, reach not specified	9/11/2006	0	0	0	0	0	0
2006	Kenai River - guided, reach not specified	9/25/2006	0	0	1	0	0	0
2007								
2007	Kenai River - Cook Inlet to Soldotna Bridge	5/7/2007	3	0	0	0	0	0
2007	Kenai River - Cook Inlet to Soldotna Bridge	5/14/2007	3	0	0	0	0	0
2007	Kenai River - Cook Inlet to Soldotna Bridge	5/21/2007	19	4	0	0	0	21
2007	Kenai River - Cook Inlet to Soldotna Bridge	5/28/2007	47	27	0	0	2	14
2007	Kenai River - Cook Inlet to Soldotna Bridge	6/4/2007	65	42	0	0	4	1
2007	Kenai River - Cook Inlet to Soldotna Bridge	6/11/2007	549	389	2	0	20	1
2007	Kenai River - Cook Inlet to Soldotna Bridge	6/18/2007	457	230	0	0	5	0
2007	Kenai River - Cook Inlet to Soldotna Bridge	6/25/2007	363	247	0	0	25	2
2007	Kenai River - Cook Inlet to Soldotna Bridge	7/2/2007	536	311	24	1	41	4
2007	Kenai River - Cook Inlet to Soldotna Bridge	7/9/2007	1,085	727	5	0	31	11
2007	Kenai River - Cook Inlet to Soldotna Bridge	7/16/2007	1,619	1,050	6	3	205	29
2007	Kenai River - Cook Inlet to Soldotna Bridge	7/23/2007	1,473	967	25	6	373	46

Kenai River Data is sorted by Year, Section of the River, and Week of Activity.

Freshwater Logbook data summaries for the Kenai River, 2005-2007

P50001 - Kenai River - Cook Inlet to Soldotna Bridge
P50002 - Kenai River - Soldotna Bridge to Moose River
P50003 - Kenai River - Moose River to Skilak Outlet
P50004 - Kenai River - Skilak Inlet to Kenai Lake
P50184 - Kenai River - guided, reach not specified

			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2007	Kenai River - Cook Inlet to Soldotna Bridge	7/30/2007	280	247	202	5	190	13
2007	Kenai River - Cook Inlet to Soldotna Bridge	8/6/2007	21	156	1,070	46	300	24
2007	Kenai River - Cook Inlet to Soldotna Bridge	8/13/2007	42	46	1,808	66	48	11
2007	Kenai River - Cook Inlet to Soldotna Bridge	8/20/2007	33	34	1,165	39	15	1
2007	Kenai River - Cook Inlet to Soldotna Bridge	8/27/2007	1	6	598	31	10	5
2007	Kenai River - Cook Inlet to Soldotna Bridge	9/3/2007	7	2	391	17	0	1
2007	Kenai River - Cook Inlet to Soldotna Bridge	9/10/2007	0	0	166	2	2	4
2007	Kenai River - Cook Inlet to Soldotna Bridge	9/17/2007	0	0	83	12	0	0
2007	Kenai River - Cook Inlet to Soldotna Bridge	9/24/2007	0	0	28	0	0	0
2007	Kenai River - Cook Inlet to Soldotna Bridge	10/1/2007	0	0	0	0	0	0
2007	Kenai River - Soldotna Bridge to Moose River	5/14/2007	3	0	0	0	0	0
2007	Kenai River - Soldotna Bridge to Moose River	5/21/2007	1	0	0	0	0	0
2007	Kenai River - Soldotna Bridge to Moose River	5/28/2007	4	4	0	0	0	0
2007	Kenai River - Soldotna Bridge to Moose River	6/4/2007	22	16	0	2	0	0
2007	Kenai River - Soldotna Bridge to Moose River	6/11/2007	84	144	0	0	0	0
2007	Kenai River - Soldotna Bridge to Moose River	6/18/2007	114	92	1	0	0	0
2007	Kenai River - Soldotna Bridge to Moose River	6/25/2007	88	99	0	0	5	0
2007	Kenai River - Soldotna Bridge to Moose River	7/2/2007	43	35	0	0	7	0
2007	Kenai River - Soldotna Bridge to Moose River	7/9/2007	37	18	0	4	31	32
2007	Kenai River - Soldotna Bridge to Moose River	7/16/2007	26	20	3	0	102	29
2007	Kenai River - Soldotna Bridge to Moose River	7/23/2007	46	25	2	0	263	70
2007	Kenai River - Soldotna Bridge to Moose River	7/30/2007	17	14	6	1	364	203
2007	Kenai River - Soldotna Bridge to Moose River	8/6/2007	0	4	113	7	461	253
2007	Kenai River - Soldotna Bridge to Moose River	8/13/2007	0	7	261	57	260	198
2007	Kenai River - Soldotna Bridge to Moose River	8/20/2007	0	1	253	21	53	35
2007	Kenai River - Soldotna Bridge to Moose River	8/27/2007	0	2	105	18	0	2
2007	Kenai River - Soldotna Bridge to Moose River	9/3/2007	0	0	45	5	0	0
2007	Kenai River - Soldotna Bridge to Moose River	9/10/2007	0	0	51	6	0	0
2007	Kenai River - Soldotna Bridge to Moose River	9/17/2007	0	0	78	53	0	14
2007	Kenai River - Soldotna Bridge to Moose River	9/24/2007	0	0	42	24	0	9

Kenai River Data is sorted by Year, Section of the River, and Week of Activity.

Freshwater Logbook data summaries for the Kenai River, 2005-2007

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P50004 - Kenai River - Skilak Inlet to Kenai Lake
P50184 - Kenai River - guided, reach not specified

			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2007	Kenai River - Soldotna Bridge to Moose River	10/1/2007	0	0	16	0	0	0
2007	Kenai River - Soldotna Bridge to Moose River	10/8/2007	0	0	18	0	0	0
2007	Kenai River - Soldotna Bridge to Moose River	10/15/2007	0	0	8	0	0	0
2007	Kenai River - Soldotna Bridge to Moose River	10/22/2007	0	0	0	0	0	0
2007	Kenai River - Moose River to Skilak Outlet	5/7/2007	0	0	0	0	0	0
2007	Kenai River - Moose River to Skilak Outlet	5/14/2007	0	0	0	0	0	0
2007	Kenai River - Moose River to Skilak Outlet	5/21/2007	0	0	0	0	0	0
2007	Kenai River - Moose River to Skilak Outlet	5/28/2007	0	0	0	1	0	0
2007	Kenai River - Moose River to Skilak Outlet	6/4/2007	7	2	0	0	0	1
2007	Kenai River - Moose River to Skilak Outlet	6/11/2007	12	5	0	0	1	0
2007	Kenai River - Moose River to Skilak Outlet	6/18/2007	17	5	0	0	0	0
2007	Kenai River - Moose River to Skilak Outlet	6/25/2007	5	2	0	0	0	3
2007	Kenai River - Moose River to Skilak Outlet	7/2/2007	14	9	0	0	24	38
2007	Kenai River - Moose River to Skilak Outlet	7/9/2007	12	9	0	0	6	8
2007	Kenai River - Moose River to Skilak Outlet	7/16/2007	15	5	0	4	57	18
2007	Kenai River - Moose River to Skilak Outlet	7/23/2007	20	3	0	0	457	168
2007	Kenai River - Moose River to Skilak Outlet	7/30/2007	9	13	2	0	595	196
2007	Kenai River - Moose River to Skilak Outlet	8/6/2007	2	9	60	12	628	273
2007	Kenai River - Moose River to Skilak Outlet	8/13/2007	2	19	247	54	210	188
2007	Kenai River - Moose River to Skilak Outlet	8/20/2007	8	14	413	113	56	63
2007	Kenai River - Moose River to Skilak Outlet	8/27/2007	0	22	209	80	1	10
2007	Kenai River - Moose River to Skilak Outlet	9/3/2007	0	1	137	65	0	15
2007	Kenai River - Moose River to Skilak Outlet	9/10/2007	0	1	135	21	0	39
2007	Kenai River - Moose River to Skilak Outlet	9/17/2007	0	0	152	38	2	13
2007	Kenai River - Moose River to Skilak Outlet	9/24/2007	0	0	135	23	0	16
2007	Kenai River - Moose River to Skilak Outlet	10/1/2007	1	0	52	44	0	0
2007	Kenai River - Moose River to Skilak Outlet	10/8/2007	0	0	9	11	0	0
2007	Kenai River - Moose River to Skilak Outlet	10/15/2007	0	0	1	2	0	0
2007	Kenai River - Skilak Inlet to Kenai Lake	5/28/2007	0	0	0	0	0	0
2007	Kenai River - Skilak Inlet to Kenai Lake	6/4/2007	0	0	0	0	4	0

Kenai River Data is sorted by Year, Section of the River, and Week of Activity.

Freshwater Logbook data summaries for the Kenai River, 2005-2007

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P50184 - Kenai River - guided, reach not specified

			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2007	Kenai River - Skilak Inlet to Kenai Lake	6/11/2007	0	4	0	0	349	130
2007	Kenai River - Skilak Inlet to Kenai Lake	6/18/2007	0	0	0	0	564	244
2007	Kenai River - Skilak Inlet to Kenai Lake	6/25/2007	0	0	0	0	198	51
2007	Kenai River - Skilak Inlet to Kenai Lake	7/2/2007	0	0	0	0	70	3
2007	Kenai River - Skilak Inlet to Kenai Lake	7/9/2007	0	0	0	0	44	32
2007	Kenai River - Skilak Inlet to Kenai Lake	7/16/2007	2	1	0	0	57	75
2007	Kenai River - Skilak Inlet to Kenai Lake	7/23/2007	0	1	0	0	415	506
2007	Kenai River - Skilak Inlet to Kenai Lake	7/30/2007	0	2	4	0	330	462
2007	Kenai River - Skilak Inlet to Kenai Lake	8/6/2007	1	0	1	7	104	294
2007	Kenai River - Skilak Inlet to Kenai Lake	8/13/2007	0	0	0	0	9	74
2007	Kenai River - Skilak Inlet to Kenai Lake	8/20/2007	7	0	20	3	0	59
2007	Kenai River - Skilak Inlet to Kenai Lake	8/27/2007	0	0	17	4	0	37
2007	Kenai River - Skilak Inlet to Kenai Lake	9/3/2007	0	0	15	3	0	51
2007	Kenai River - Skilak Inlet to Kenai Lake	9/10/2007	0	0	13	17	0	0
2007	Kenai River - Skilak Inlet to Kenai Lake	9/17/2007	0	0	2	0	0	28
2007	Kenai River - Skilak Inlet to Kenai Lake	9/24/2007	0	0	5	0	0	7
2007	Kenai River - Skilak Inlet to Kenai Lake	10/1/2007	0	0	8	3	1	0
2007	Kenai River - Skilak Inlet to Kenai Lake	10/8/2007	0	0	0	1	0	4
2007	Kenai River - Skilak Inlet to Kenai Lake	10/15/2007	0	0	1	0	0	0
2007	Kenai River - Skilak Inlet to Kenai Lake	10/22/2007	0	0	0	0	0	0
2007	Kenai River - Skilak Inlet to Kenai Lake	10/29/2007	0	0	0	0	0	0
2007	Kenai River - guided, reach not specified	5/7/2007	0	0	0	0	0	0
2007	Kenai River - guided, reach not specified	5/14/2007	0	0	0	0	0	0
2007	Kenai River - guided, reach not specified	5/21/2007	0	0	0	0	0	0
2007	Kenai River - guided, reach not specified	5/28/2007	4	0	0	0	0	0
2007	Kenai River - guided, reach not specified	6/4/2007	1	0	0	0	1	0
2007	Kenai River - guided, reach not specified	6/11/2007	13	1	0	0	17	2
2007	Kenai River - guided, reach not specified	6/18/2007	6	2	0	0	16	15
2007	Kenai River - guided, reach not specified	6/25/2007	8	6	0	0	11	20
2007	Kenai River - guided, reach not specified	7/2/2007	5	0	0	0	5	0

Kenai River Data is sorted by Year, Section of the River, and Week of Activity.

Freshwater Logbook data summaries for the Kenai River, 2005-2007

P50001 - Kenai River - Cook Inlet to Soldotna Bridge
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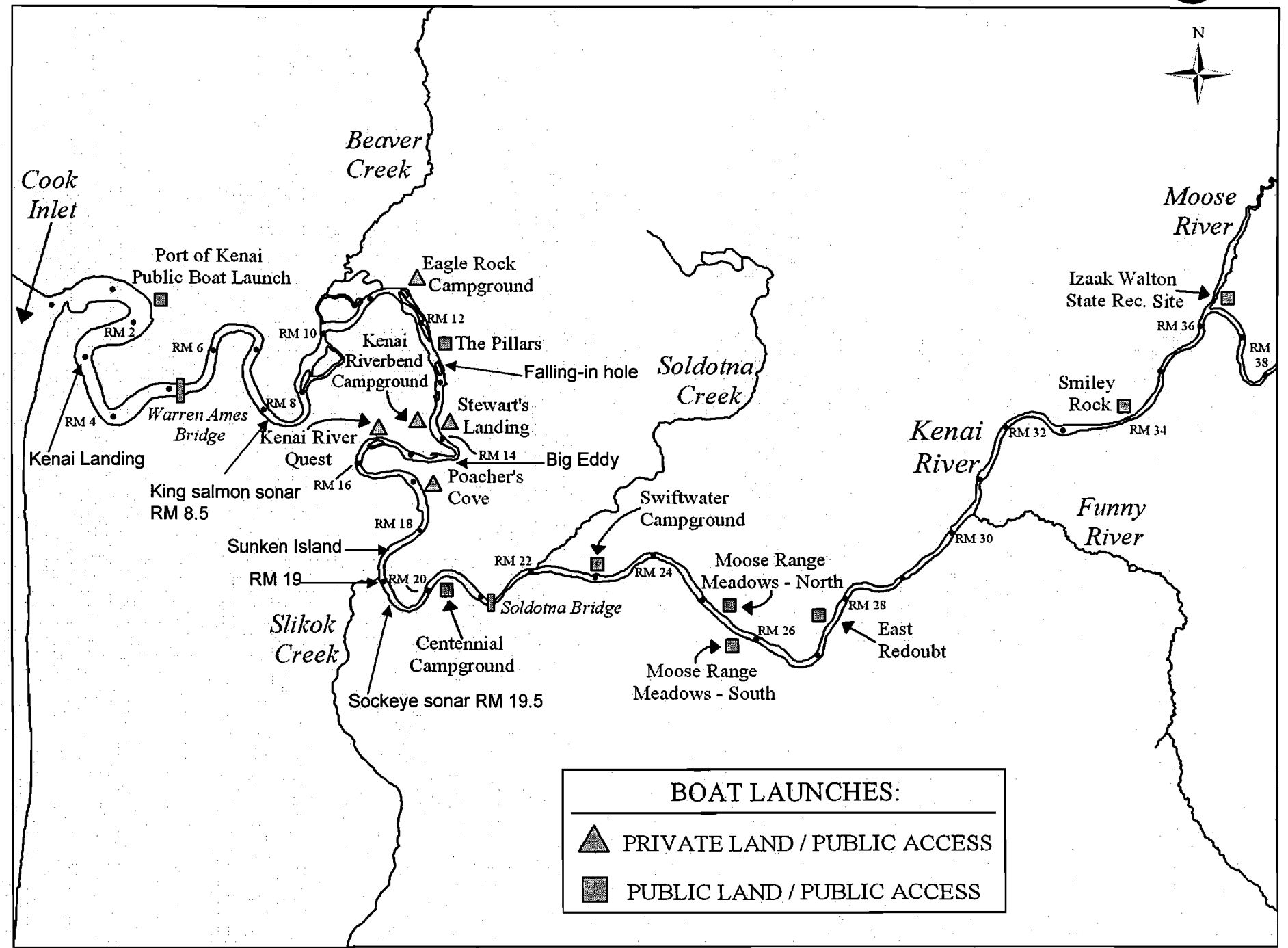
P50004 - Kenai River - Skilak Inlet to Kenai Lake
P50184 - Kenai River - guided, reach not specified

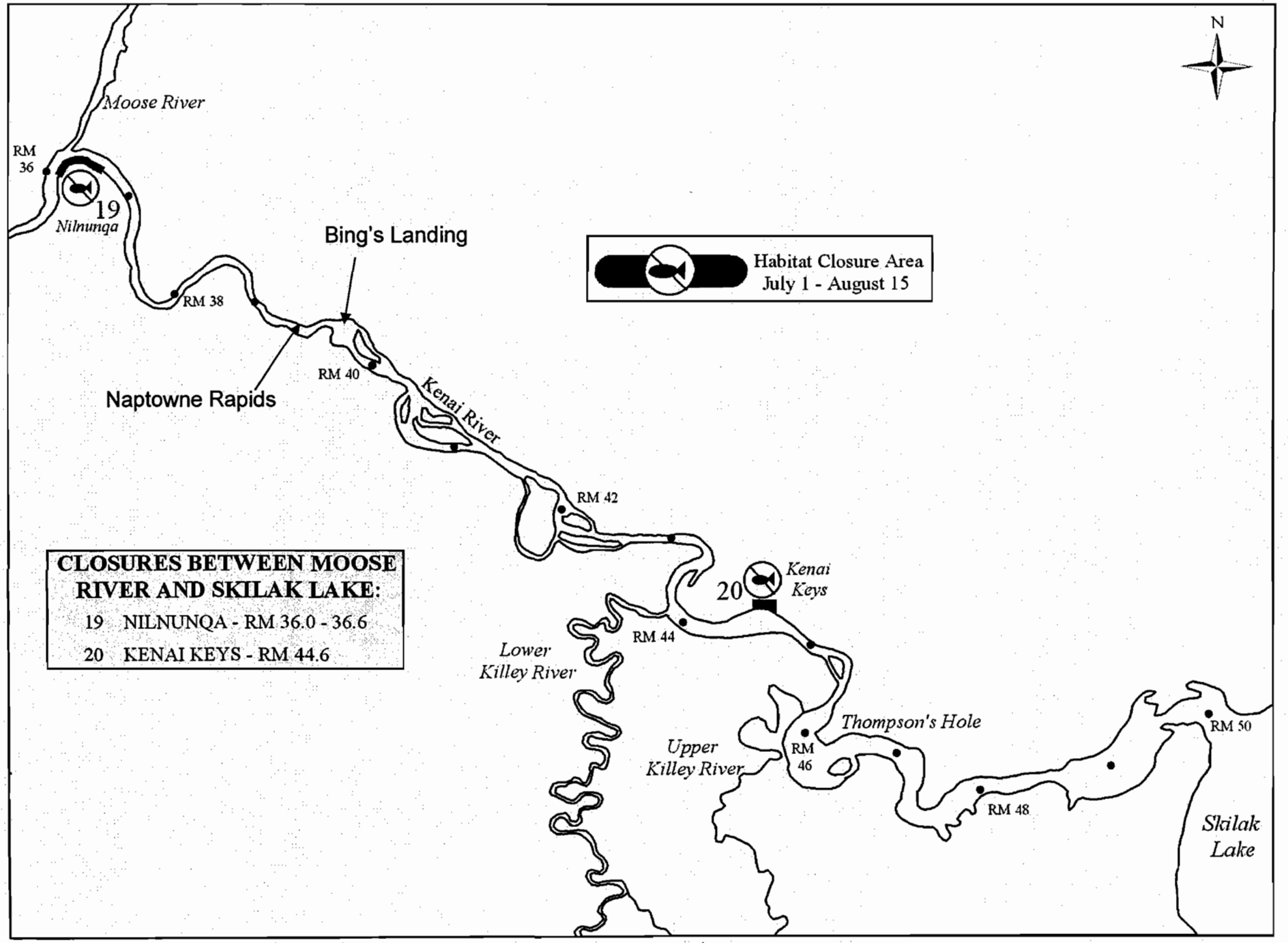
			King		Coho		Sockeye	
Year	Site	Week	Kept	Rele	Kept	Rele	Kept	Rele
2007	Kenai River - guided, reach not specified	7/9/2007	28	12	0	0	2	1
2007	Kenai River - guided, reach not specified	7/16/2007	42	42	0	0	14	5
2007	Kenai River - guided, reach not specified	7/23/2007	47	37	2	0	101	55
2007	Kenai River - guided, reach not specified	7/30/2007	9	7	8	1	137	30
2007	Kenai River - guided, reach not specified	8/6/2007	0	8	32	0	72	34
2007	Kenai River - guided, reach not specified	8/13/2007	0	8	90	6	30	17
2007	Kenai River - guided, reach not specified	8/20/2007	0	0	55	4	27	17
2007	Kenai River - guided, reach not specified	8/27/2007	0	0	46	7	0	3
2007	Kenai River - guided, reach not specified	9/3/2007	0	0	27	1	0	20
2007	Kenai River - guided, reach not specified	9/10/2007	0	0	20	0	0	1
2007	Kenai River - guided, reach not specified	9/17/2007	0	0	8	0	0	0
2007	Kenai River - guided, reach not specified	9/24/2007	0	0	1	0	0	0
2007	Kenai River - guided, reach not specified	10/1/2007	0	0	4	0	0	0

R 97



Kenai River Cook Inlet to Moose River →

RC 97



Kenai River: Moose River to Skilak Lake.

RC 98

KENAI AREA FISHERMAN'S COALITION
PO Box 375 Kenai, Ak. 99611 * (907) 283-1054 * dwimar@gci.net

Dear Board Members,

KAFC would like to withdraw proposals 222 and 223. We forwarded these proposals as place holders for the hydrocarbon discussions below the Warren Ames Bridge.

We are supporting the ADF&G proposal 221 with amended language to read, "Beginning in 2008, only vessels powered by 4 stroke or 2 stroke DFI motors may participate in the Kenai River motorized personal use dip net fishery".

Dwight Kramer
KAFC Chairman

RC99

KENAI AREA FISHERMAN'S COALITION

PO Box 375 Kenai, Ak. 99611 * (907) 283-1054 * dwimar@gci.net

Ref: Proposal 215 - To increase the household and individual personal use limits on the Kenai River when the run strengths exceed 850,000

KAFC is **OPPOSED** to this proposal for the following reasons:

- Households that presently participate in this fishery average about 15 fish per household and we believe the present limits are appropriate. Only about 11% take a full limit.

- This fishery is running at capacity for the City of Kenai to administer for. Even though the city experienced record revenues in 2007 they expect to lose between $30,000 – 50,000 on dip net related activities.

- The City is encountering problems with police protection, carcass removal, trash removal, inadequate toilet facilities, and habitat destruction. Unless the City receives legislative funding for protective fencing they expect to lose more vegetation on their grass lands and dunes areas and they will have to become more restrictive.

- Between 2004 – 2007 King harvest in the PU fishery doubled and this will continue to increase if limits are liberalized to attract more dip netters.

- We have already heard a lot of testimony about false expectations of folks traveling all the way to Kenai and expecting to have great fishing only to be disappointed when they get here and find it isn't as good as they expected. This will only worsen the problem.

Please see attached City of Kenai 2007 Kenai River Dipnet Fishery report.

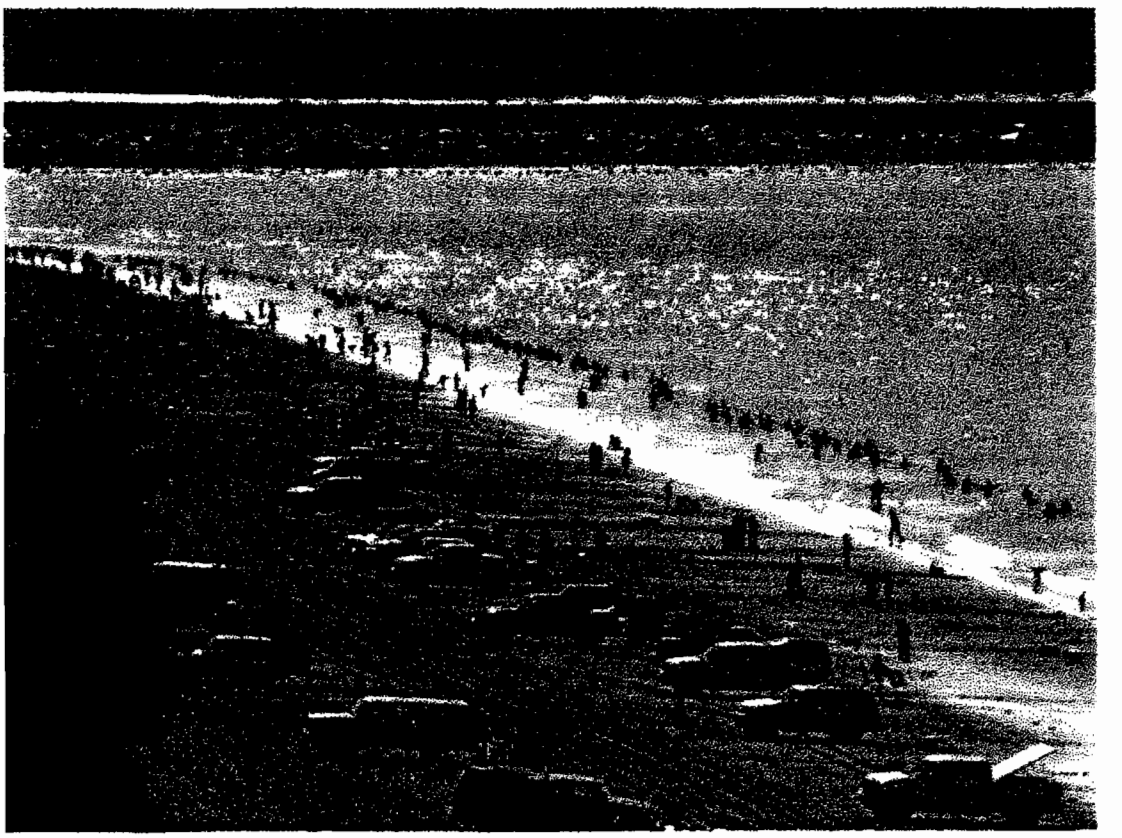
Respectfully Submitted,

Dwight Kramer, Chairman KAFC

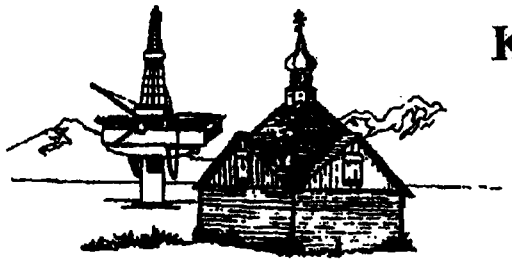
Item 6-a.

2007

Kenai River Dipnet Fishery



July 10 - 31



KENAI POLICE DEPARTMENT

107 SOUTH WILLOW STREET KENAI, AK 99611
Telephone (907) 283-7879
Fax (907) 283-2267

TO: Rick Koch, City Manager September 19, 2007

FM: Lt. Kim Wannamaker

THRU: Chuck Kopp, Chief of Police

RE: 2007 Kenai River Personal Use Dipnet Fishery

The Annual Dipnet Report is presented for your review. It includes reports from the Police, Public Works, and Parks and Recreation Departments. You will find a summary overview of Police Department activity specific to the Kenai River Dipnet Fishery to include observations, statistics, problems encountered, and recommendations for improvement. The Seasonal Enforcement Officer report is also attached.

The Kenai River Dipnet Fishery opened at 6am on Tuesday 7-10-07, and closed at midnight Tuesday 7-31-07. The 2007 Dipnet Fishery saw the largest number of State resident participation since the fishery opened in 1996. City departments prepared for anticipated & historical Dipnet Fishery-related challenges, resulting in effective overall management of the fishery.

Two part-time Seasonal Enforcement Officers (SEOs) spent the majority of their July shifts engaged in Dipnet Fishery related activity, with parking and camping violations being the significant portion of their enforcement/management focus.

The Police Department handled 153 Dipnet Fishery-related calls for service this year; 89 by sworn officers and 64 by SEOs. The majority of calls for service were cash pick-ups from the 4 pay shacks, followed by Parking complaints/violations, Citizen Assists (lockouts, lost children or pets), Noise/Disorderly Conduct, Trespassing on private property, Campfires in unauthorized areas, and several complaints each of Theft, Drunkenness, Vandalism, and vehicle collisions.

There were 18 vehicles impounded, nearly all for parking violations, and 4 people were arrested for various crimes, including one DUI on an ATV. There were no deaths or serious injuries this year.

Of the 90 hours spent by SEOs on the Dipnet Fishery, 75 were spent at the North Beach (S. Spruce). Police Officers spent 34.5 hrs on Dipnet Fishery-related activity. SEOs spent a lot of time patrolling the S. Beach on the Dept. 4-wheeler, which is a very practical manner to cover that large and often very congested area.

State Fish & Wildlife Troopers were a visible presence at the City Dock, N. Beach, and on the water in a patrol vessel this year. They kept a relatively low profile but were very active enforcing various Fish & Game laws.

The greatest managerial challenge this season, as in years before, was parking. For the North Beach, overflow parking at the designated parking lot off S. Spruce Street, and motor vehicle/pedestrian traffic congestion on Kenai Avenue presented the most serious difficulties.

South Beach problem areas involved illegal parking and heavy traffic congestion on Dunes Road near the pay shack, and illegal operation of off-road vehicles on dunes and vegetated wetland areas. The Dunes Road parking is troublesome because it is on Borough land, in which the Alaska State Troopers have jurisdiction for enforcing traffic & criminal offenses (parking, trespass). The Police Department will work with Troopers to provide a better collective response to Dunes Road this next season.

Four pay shacks to collect user fees were placed in the same locations as previous years: S. Spruce Street at the beachfront parking lot, Boat Launch Road at the City Dock, Dunes Road and Old Cannery Road. No pay shacks were run over this year, or otherwise incurred damage.

Police Department Labor, Equipment and Fuel Expenses

Police Officers (34.5 hrs)	$1030
S.E.O. (90 hrs)	1260
Pre & Post season meetings/planning (Chief, Lt, SEO)	1000
Equipment & Fuel costs*	1300
Total	**$4590**

* Patrol cars & the Dept. pickup, and the 4-wheeler were equipment expenditures for the fishery. The costs included would reflect fuel consumption relative to driving to/from pay shacks, City Hall, police station, Kenai Ave, and up & down the beaches on the ATV, and idling during stops at these locations. Fuel was more expensive this year than last.

2007 Observations

Signage deficiencies were documented. On the South Beach, SEOs responded to frequent complaints of ATVs and other vehicles in the vegetated areas. There is just one sign at the very end of the beach (river mouth) prohibiting operation of vehicles in wetland/grassy areas. On the North Beach at the end of Kenai Avenue there is an absence of signs requiring "5 minute loading/unloading" which contributed to traffic congestion.

Other signage improvement needs are addressed in the SEO report. On the whole, public awareness has improved with respect to parking, camping, campfires, and bathrooms due to good signage posted at/near all the pay shacks and pay/parking areas.

Public Information was available via commercial media, online sites such as the City of Kenai and Alaska Dept of Fish & Game, printed brochures distributed by the City, and radio public service announcements. This information included answers to FAQs for parking, fees, camping, campfires, dunes & grassy areas, restroom facilities, and contact information for State and City management entities.

Parking & Camping fees were the same as last year. The manned pay shacks contributed significantly to compliance, as did aggressive presence by police and SEO personnel. SEOs issued hundreds of written warnings for parking & non-payment, or for not displaying the parking permit.

On Saturday July 21, the busiest day in the history of the fishery, vehicles filled the N. Beach, S. Spruce parking lot, S. Spruce, the little league parking lots, N. Spruce nearly all the way to 4th Ave, and commercial parking lots along KSR near S. Spruce.

Restroom (port-a-potty) service was hindered due to traffic congestion along Kenai Avenue, and on South Beach due to vehicles parked in close proximity to the toilets. This interfered with the service provider being able to maneuver beside them for change-outs.

Off-Road Vehicles and associated violations are a recurring issue. Police & SEOs responded to multiple complaints of ATVs causing late night noise, racing, youth operators w/o helmets, and speeding on the beaches and access roads.

Dumpster service was overall satisfactory. There were several instances of traffic congestion at the end of Kenai Avenue, which prevented or slowed the garbage truck from getting to the dumpsters.

Litter and Trash collection and management needs are significant for the three weeks of the Fishery. The possibility of providing more trash and fish waste collection points should be reviewed.

Traffic congestion on Kenai Avenue was severe, and the improved wide areas often were illegally used for extended parking along the "loading/unloading only" area. Kenai Avenue is a narrow one-lane dirt road with No Parking allowed at any point. During the Fishery, by necessity it becomes a 2-lane road with motor traffic and pedestrians. Vehicles often have objects hanging out the back or off the sides, and pedestrians are generally pushing or pulling objects, all of which takes more room than merely driving or walking. Couple this with numerous vehicles loading/unloading along the road and traffic congestion happens quickly.

Recommendations

The recommendations and suggestions for improvement here are based on initial assessment. We expect to further refine our ideas for improvement following a multi-department debriefing in late September.

Coordinate with Little League to allow North Beach overflow parking in the Little League ball field lots on South Spruce Street. Some years there are post-season tournaments and the parking lot is needed for those involved with baseball. However, when there are no post-season baseball activities, that parking lot would be ideal for overflow dip netter parking.

Signage Improvements for the North Beach call for two (2) more signs at the Kenai Avenue turnaround stating "5 minutes loading/unloading", and for a more clearly marked Iron Ranger for self-pay participants. On the South Beach three (3) additional signs are needed that prohibit operation of vehicles in the wetland areas. Regulatory signs stating "No parking/stopping within 30 feet of restrooms" would help facilitate Restroom service.

Orange Barrier Fencing (along with improved signage) will help prevent South Beach wetlands and dune destruction. This fencing has been installed in previous years with the assistance of the Borough, but not for the past two seasons. Assistance with fencing should again be sought from the Kenai Watershed Forum.

Additional Public Safety Officer resources, beyond what is currently budgeted, are needed to effectively address the significant management needs of the Dipnet Fishery. The intensity of the issues highlighted in this report, would each be considerably lessened with 24-hour coverage of the fishery by public safety resources. Administration will discuss this internally to prepare a recommendation.

RC 100

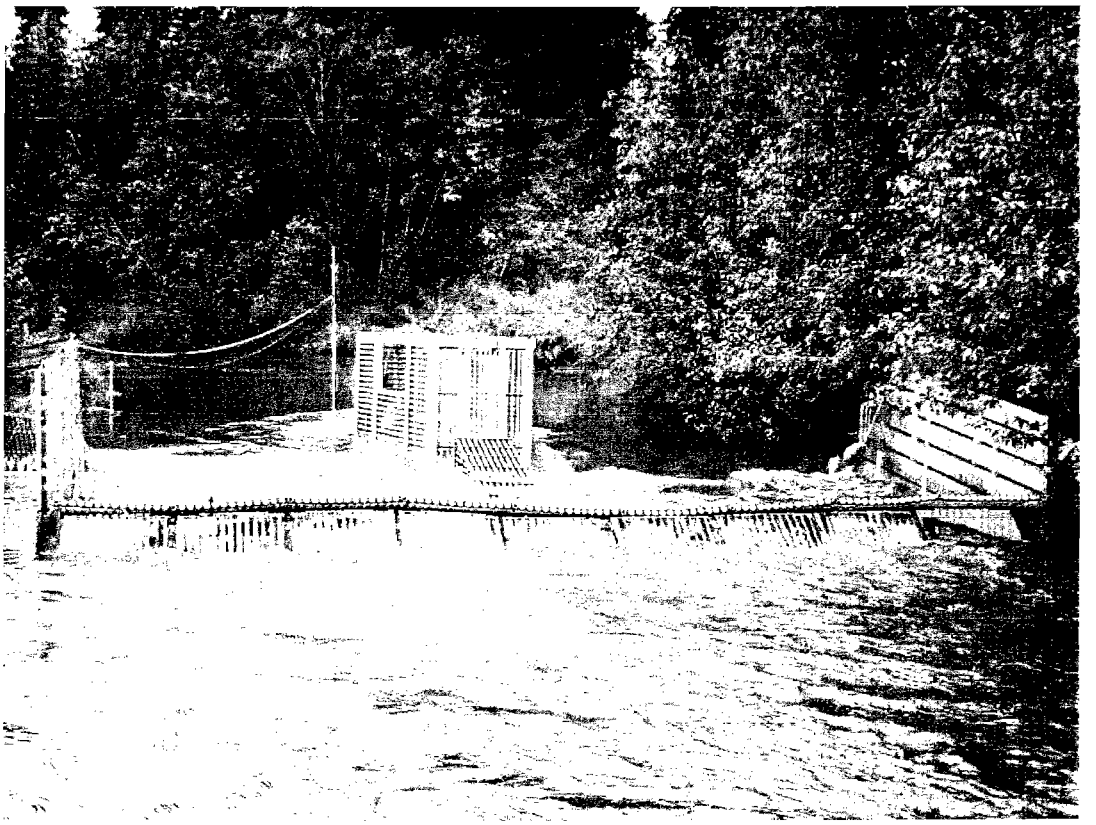
		Brood Year and Age Group				
		2004	2003	2002	2001	
		1.1	1.2	1.3	1.4	Total
Sample Period: 23 May to 5 August						
Female:	Number in Sample:			35	47	82
	% Females in Age Group:			42.7	57.3	100.0
	Estimated % of Escapement:			16.4	22.0	38.3
	Estimated Escapement:			339	456	795
	Standard Error:			49.8	55.7	
Male:	Number in Sample:	1	78	38	15	132
	% Males in Age Group:	0.8	59.1	28.8	11.4	100.0
	Estimated % of Escapement:	0.5	36.4	17.8	7.0	61.7
	Estimated Escapement:	10	756	368	145	1,280
	Standard Error:	9.2	64.8	51.5	34.4	
Total:	Number in Sample:	1	78	73	62	214
	Estimated % of Escapement:	0.5	36.4	34.1	29.0	100.0
	Estimated Escapement:	10	756	708	601	2,075
	Standard Error:	9.2	64.8	63.8	61.1	

Age and sex composition estimated for the entire Funny River Chinook salmon return, Alaska, 2007.

U.S. Fish & Wildlife Service

Abundance and Run Timing of Adult Chinook Salmon in the Funny River, Kenai Peninsula, Alaska, 2006

Alaska Fisheries Data Series Number 2007-2



Kenai Fish and Wildlife Field Office
Kenai, Alaska
February, 2007

Alaska Fisheries Data Series Number 2007-2, February 2007
U.S. Fish and Wildlife Service

Abundance and Run Timing of Adult Chinook Salmon in the Funny River, Kenai Peninsula, Alaska, 2006

Kenneth S. Gates and Douglas E. Palmer

Abstract

A fish weir equipped with an underwater video system was installed and operated in the Funny River during 2006 to collect abundance, run timing, and biological information on adult Chinook salmon *Oncorhynchus tshawytscha*. A total of 2,779 Chinook salmon were counted past the Funny River weir between 16 May and 2 October. Other species enumerated included 2,537 Dolly Varden *Salvelinus malma*, 1,909 coho salmon *O. kisutch*, 428 pink salmon *O. gorbuscha*, 158 sockeye salmon *O. nerka*, 4 chum salmon *O. keta*, 72 rainbow trout *O. mykiss*, and 14 whitefish *Coregonus* spp. Peak weekly passage of Chinook salmon occurred between 11 and 17 June. Age, sex, and length (ASL) and genetic data were collected from 183 Chinook salmon. Sex of Chinook salmon was also determined by examining recorded video footage. Females comprised 31% (ASL and video combined) of the escapement. The average length of male and female Chinook salmon was 693 mm and 832 mm, respectively. Ages of Chinook salmon determined from scale analysis ranged between 1.1 and 1.4. Females were comprised of only two age classes, 1.3 and 1.4.

Introduction

The Kenai River supports one of the largest recreational fisheries for Chinook salmon *Oncorhynchus tshawytscha* in Alaska (Nelson et al. 1999). The popularity of this sport fishery requires intensive management and research programs focusing on Kenai River Chinook salmon stocks. The fishery is managed as two distinct runs; fish entering the river during May and June are managed as the early-run, while those entering the river after 30 June are managed as the late-run. Early-run fish are harvested primarily by sport anglers in the Kenai River, whereas late-run fish are harvested by commercial, sport, subsistence, and personal use fisheries. Chinook salmon returning to the Funny River are considered part of the early-run. The number of early-run Chinook salmon returning to the Kenai River has been estimated since 1987 using split-beam sonar located at river kilometer (rkm) 13. Sonar escapement estimates for the early-run have ranged from 7,162 to 27,080 fish between 1986 and 2004 (Pappas and Marsh 2004). These estimates provide the basis for estimating spawning escapement and implementing the management plan that regulates harvest in the in-river sport fishery.

Sport harvest of early-run Chinook salmon occurs below Skilak Lake during May and June. Harvest also occurs, while not in great numbers, in four other fisheries: the Central Cook Inlet marine sport fishery, the Upper Subdistrict set gillnet (Eastside set net) commercial fishery, an in-river educational fishery, and a federal subsistence fishery (McKinley et al. 2002). Sport harvest of early-run Chinook salmon is monitored by the Alaska Department of Fish and Game (Department) through an in-river creel survey between the Warren Ames Bridge (rkm 8) and the Soldotna Bridge (rkm 32) and through the Statewide Harvest Survey between the Soldotna

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Bridge and Skilak Lake (rkm 80). Annual sport harvest has ranged between 899 and 15,209 fish and has averaged 5,963 fish since 1986 (Gamblin et al. 2004; Pappas and Marsh 2004; Larry Marsh, Alaska Department of Fish and Game, personal communication). On average, about 73% of the sport harvest occurs below the Soldotna Bridge. Much of the annual variation in harvest since 1986 can be explained by fluctuations in run strength and in-season liberalization or restriction of the sport fishery.

Radio telemetry studies conducted during the early 1980's and 1990's provide some insight regarding the migratory behavior and spawning destinations of the early-run Kenai River Chinook salmon. Bendock and Alexandersdottir (1991 and 1992) found that the majority of early-run fish spawned in larger tributaries such as the Killey (42 to 64%) and Funny (20 to 21%) rivers. The remainder of the radio-tagged fish spawned in smaller tributaries (6 to 10%) and the mainstem Kenai River (9 to 28%). Similarly, Burger et al. (1985) found that 56% spawned in the Killey River, 18% in the Funny River, 18% in the mainstem, and 5% in other Kenai River tributaries between 1980 and 1982. Peak spawning times, although subjective based on small sample sizes, are thought to occur between 12 and 22 July in the Funny River (Burger et al. 1985). Furthermore, many Chinook salmon destined for the Funny River and other tributaries have a tendency to mill for long periods prior to spawning events. Burger et al. (1983) identified one radio tagged Chinook salmon that milled near the mouth of the Funny River between 1 and 28 July before entering to spawn. Bendock and Alexandersdottir (1992) observed similar behavior and noted that early-run Chinook salmon mill for extended periods in the mainstem Kenai River at or below their destination confluence. Funny River spawners particularly exhibited this behavior along the south bank of the Kenai River between rkm 45 and 48. Similar milling behaviors have been observed by Liscom et al. (1978) for Columbia River Chinook salmon tributary spawners, which can spend 6 to 38 days near a confluence before entering to spawn. Because early-run Chinook salmon have a tendency to mill in the mainstem Kenai River near spawning tributaries into late July and slowly exit areas open to sport fishing, some early-run fish are susceptible to harvest throughout most of July when the sport fishery is targeting late-run fish (Bendock and Alexandersdottir 1992).

Regulations pertaining to early-run Chinook salmon change frequently to address biological issues. For example, a slot limit protecting fish between 44 and 55 inches, typically four and five year old ocean fish, was enacted in 2002 to address the biological concern of fewer large and old fish present in the in-river sport fishery. In January 2005, an optimum escapement goal (OEG) range of 5,300 to 9,000 fish was adopted by the Alaska Board of Fisheries. The new OEG replaced the previous biological escapement goal (BEG) of between 7,200 and 14,400 early-run Chinook salmon. With the OEG, restrictions and liberalizations in the fishery would take place only when the lower limits are not met or the upper limits are exceeded. The effects of this change are unknown but most likely would create a more predictable sport fishery by reducing restrictions on the in-river sport fishery and allowing for an increase in harvest. For example, during the first year of management using an OEG, the in-river sport fishery was liberalized on 18 June allowing the use of bait from the mouth of the Kenai River upstream to 100 yards below the mouth of the Moose River (Alaska Department of Fish and Game Emergency Order Number 2-KS-1-10-05). Restricting or liberalizing the fishery early or late in the run could increase the possibility of disproportionately harvesting early or late arriving early-run Chinook salmon. Because information is limited about run timing of specific tributary populations, disproportionately harvesting early or late in the run could be detrimental to smaller populations of early-run Chinook salmon (McKinley et al. 2002).

Stakeholders demand high levels of accuracy and repeated validation of ongoing research programs and despite the current efforts several issues remain to be resolved. For instance, the degree of overlap in the run-timing of tributary- and mainstem-spawning Chinook salmon is not known, nor is the abundance of tributary stocks which are a dominant component of the early-run. This need for more detailed information prompted the development of a cooperative study between the Service and Department. Our study focused on early-run Chinook salmon returning to the Funny River. By using a resistance board weir in conjunction with an underwater video system, we were able to (1) enumerate adult Chinook salmon entering the Funny River, (2) determine the run timing of Chinook salmon entering the Funny River, (3) estimate the age, sex and length composition of the Chinook salmon escapement in the Funny River, and (4) collect genetic tissue samples from 183 Chinook salmon that spawned in the Funny River as part of a larger watershed based study. Information pertaining to the run size, timing, age, sex, and genetic composition of Chinook salmon returning to the Funny River will provide a better understanding of tributary spawners and assist managers in refining existing management strategies.

Study Area

The glacially turbid Kenai River originates in Cooper Landing at the outlet of Kenai Lake and flows 132 km before entering Cook Inlet (Figure 1). The watershed consists of mountains, glaciers, forests, and the Kenai Peninsula's second and third largest lakes, Skilak and Kenai lakes. The Funny River, one of several tributaries, enters the Kenai River at rkm 49 (60° 29.47'N and 150° 51.92'W; WGS84). The Funny River drains approximately 218 km^2 and most of the watershed lies within the Kenai National Wildlife Refuge. The river channel near the weir location can be described as having moderate gradient, moderate to high sinuosity, and predominately coarse gravel substrate. Vegetation along the banks and throughout the flood plain consists primarily of willow and alders with some stands of spruce (Moser 1997). Water depth varies throughout the channel but is usually deepest near the outside bends and shallowest through the crossovers.

Methods

Weir and Video Operations and Design

The Service and Department operated a resistance board weir and video system in the Funny River approximately 0.8 km above the intersection of Funny River Road and Funny River from 16 May through 2 October.

The weir was constructed using specifications outlined by Tobin (1994) with minor changes to some materials, panel width, and resistance boards. The resistance board weir design works well in systems that can experience higher seasonal discharges such as the Funny River. Other than weir maintenance and biological sampling, the weir was unmanned and outfitted with a video system. The weir was configured to pass fish near the deepest part of the channel through a fish passage panel. Each weir panel was attached to a steel rail anchored to the river bottom. A live trap facilitated biological sampling and was attached to the front of the fish passage panel. The video system, consisting of a sealed camera box and fish passage chute, was attached to the front of the live trap.

Setup and design of the video system was similar to that used by Gates and Palmer (2006a and 2006b) in Crooked and Nikolai creeks during 2005 and 2006 and Anderson et al. (2004) in Big

Creek during 2003. One underwater video camera was located inside a sealed video box attached to the fish passage chute. The video box was constructed of 3.2-mm aluminum sheeting and was filled with filtered water. Safety glass was installed on the front of the video box to allow for a scratch-free, clear surface through which images were captured. The passage chute was constructed from aluminum angle and was enclosed in plywood isolating it from exterior light. The backdrop of passage chute from which video images were captured could be adjusted laterally to minimize the number of fish passing through the chute at one time. The backdrop could also be easily removed from the video chute when dirty and replaced with a new one. All video images were recorded on a removable 120 gigabyte hard drive at 20 frames-per-second using a computer-based DVR. Fish passage was recorded 24 hours per day seven days each week. Stored video files were reviewed daily. The video box and fish passage chute were artificially lit using a pair of 12-volt underwater pond lights. Pond lights were equipped with 20-watt bulbs which provided a quality image. The lights provided a consistent source of lighting during day and night hours. The DVR was equipped with motion detection to minimize the amount of blank video footage and review time. Appendix 1 contains a complete list of video equipment.

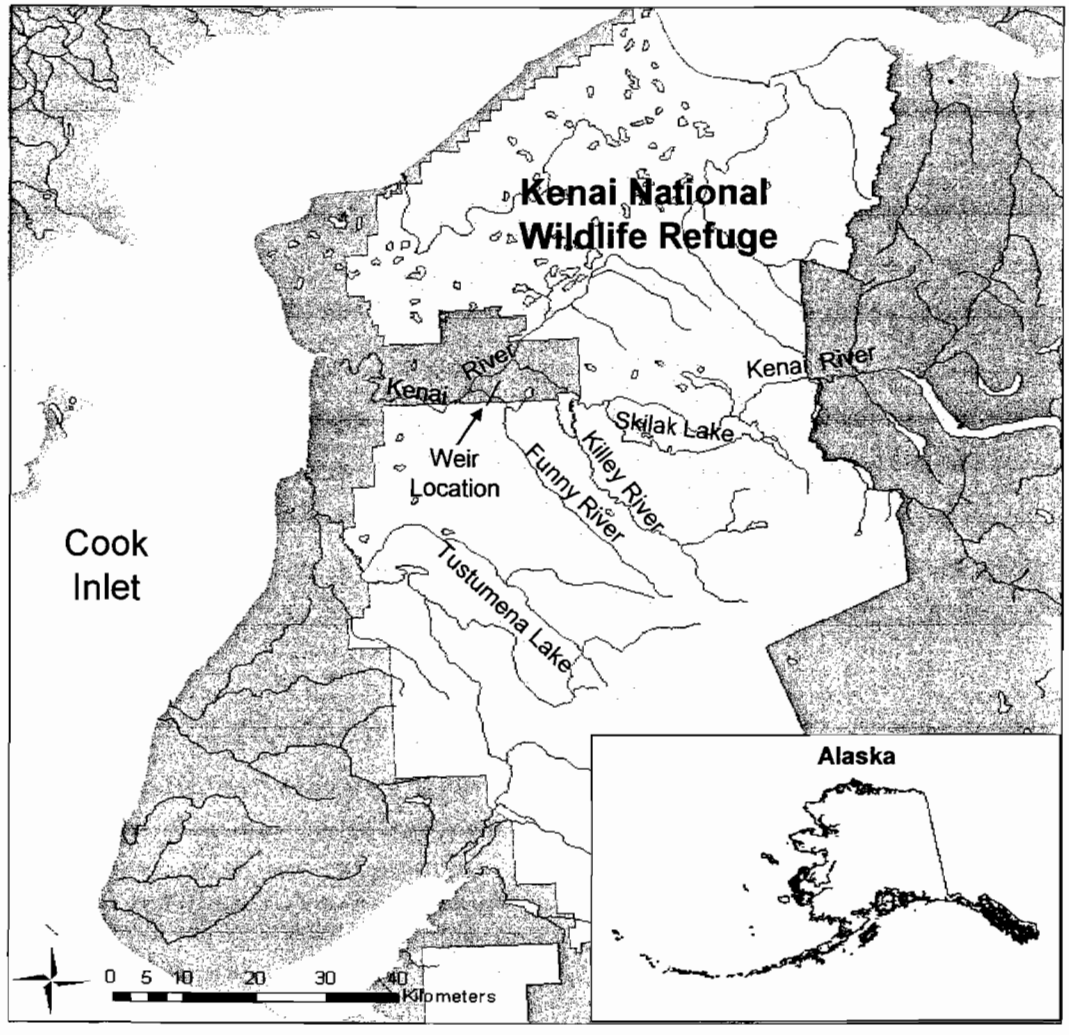

FIGURE 1. —Map of the Kenai River watershed showing weir location on Funny River.

Biological Sampling

Data on fish age, sex, and length (ASL) were collected using a temporally stratified sample design (Cochran 1977). Sampling effort was divided into strata. Each stratum is a calendar week consisting of seven days, in which sampling took place in a 2-3 day time period. Samples were taken in as minimal amount of time as possible and are considered a "snap shot" sample (Geiger et al. 1990).

Sampling consisted of sex determination, length measurements, and scale and tissue collections. Sex was determined by observing external characteristics. Length measurements were taken from the mid-eye to fork-length to the nearest 5 mm. Scales were removed from the preferred area using methods described by Mosher (1968) and Koo (1962). The preferred area is located on the left side of the fish, two scale rows above the lateral line and on a diagonal from the posterior insertion of the dorsal fin to the anterior insertion of the anal fin. Three scales were taken from each Chinook salmon, mounted on gummed cards, pressed on acetate to make an impression and then viewed with a microfiche reader by the Department. Scale analysis and reporting utilize methods described by Mosher (1969). Age determination includes the number of years spent in freshwater as a juvenile and the number of years spent in saltwater as an adult. In addition to age, sex, and length, one axillary process was removed from each Chinook salmon for genetic analysis. The axillary process was placed in a 2 mL vial and covered with denatured ethanol. Genetic tissue samples will be processed and analyzed by the Department's Gene Conservation Laboratory in Anchorage and will be summarized by the Department in a separate report.

Results

Weir and Video Operations

The weir and video system were installed on 16 May and 1 June, respectively and operated through 2 October. High water, which exceeded bank-full levels, occurred during the spring run-off from 27 to 29 May and later in the summer from 26 to 27 August. Video counts did not begin until 1 June; therefore, high water during May had no affect on the counts. This was not the case for the period of high water during August. Turbid river water reduced image quality in the video box when a log submerged a breather hose for approximately 24 h spanning two days. The image quality was restored once we removed the river water from the camera box and replaced it with filtered water on 27 August. Fish counts were incomplete during this time period.

Biological Data

Chinook salmon —A total of 2,779 Chinook salmon were counted passing the video system at the Funny River between 1 June and 24 August (Figure 2; Appendix 2). Peak weekly passage (N=809) occurred between 11 and 17 June and median cumulative passage occurred on 29 June. The highest daily count (N=296) was on 16 June. Hatchery adipose-fin-clipped Chinook salmon from Cook Inlet watersheds other than the Kenai River comprised 0.5% (N=14) of the entire run.

ASL samples were collected from 183 Chinook salmon between 16 June and 27 July. Thirty-three percent (N=61) of the collected scales could not be aged because of regeneration or the inability to determine freshwater age. In addition, scales were not sampled from one Chinook salmon. Of the aged scales, female Chinook salmon were comprised of two age groups, ages 1.3 and 1.4. Males were comprised of four age groups, ages 1.1, 1.2, 1.3, and 1.4 (Table 1).

Overall, females averaged 832 mm in length and accounted for 21% (N=39) of the sample while males averaged 693 mm in length. Sex composition for the entire return of Chinook salmon (N=2,769, N=10 unsexed), including both ASL and video records, was 31% female. Sex ratios favored males throughout the entire run (Figure 3).

Other Species —Seven additional species of fish were passed through the weir and video system in the Funny River. Passage included 2,537 Dolly Varden *Salvelinus malma*, 1,909 coho salmon *O. kisutch*, 428 pink salmon *O. gorbuscha*, 158 sockeye salmon *O. nerka*, 4 chum salmon *O. keta*, 72 rainbow trout *O. mykiss*, and 14 whitefish *Coregonus* spp. (Appendix 3). Peak weekly passage of Dolly Varden and coho salmon, the second and third most abundant fish in the Funny River, occurred between 6 and 12 August and from 27 August to 2 September, respectively. Weekly passage of all species is summarized in Table 2.

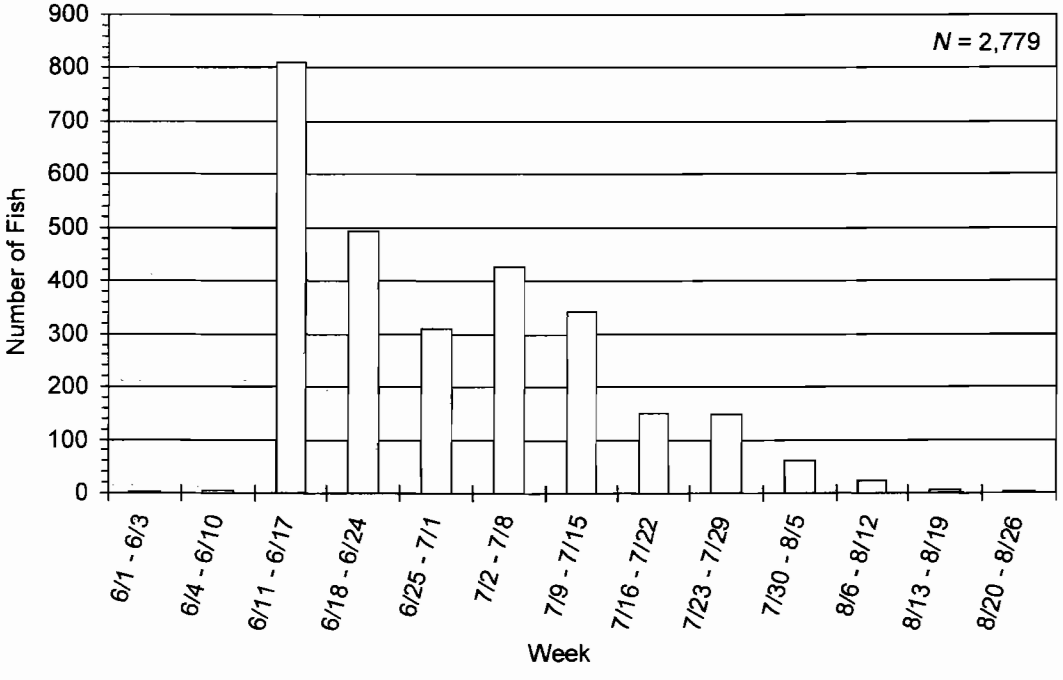

FIGURE 2. —Weekly escapement of Chinook salmon in the Funny River, Alaska, 2006. Video counts did not begin until mid-day on 1 June.

TABLE 1. —Length-at-age for Chinook salmon sampled at the Funny River weir, Alaska, 2006.

			Mid-Eye to Fork-Length	
Sex	Age	N[a]	Mean	Range
Female	1.3	11	783	715 - 825
	1.4	13	915	845 - 1000
Total		24		
Male	1.1	8	426	345 - 555
	1.2	48	616	510 - 710
	1.3	32	789	668 - 900
	1.4	9	951	840 - 1075
Total		97		

[a] Fish with incomplete age data were omitted from this table (N=62).

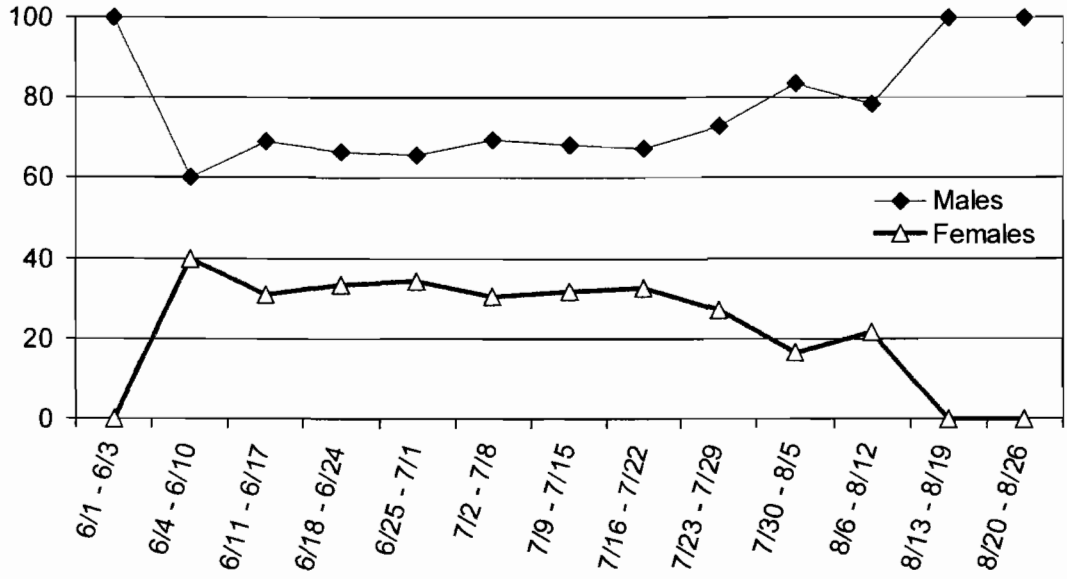

FIGURE 3. —Weekly percent of male and female Chinook salmon observed at the Funny River weir, Alaska, 2006.

TABLE 2. —Weekly passage of all species observed passing the weir and video system in the Funny River, Alaska, 2006.

Week	Rainbow Trout	Dolly Varden	Whitefish spp.	Sockeye Salmon	Pink Salmon	Chum Salmon	Chinook Salmon	Coho Salmon
6/1 to 6/3	2	6	3	1	0	0	2	0
6/4 to 6/10	4	13	2	0	0	0	5	0
6/11 to 6/17	6	7	1	2	0	0	809	0
6/18 to 6/24	8	14	1	0	1	0	494	0
6/25 to 7/1	9	11	1	3	2	0	310	0
7/2 to 7/8	10	8	0	9	10	0	428	0
7/9 to 7/15	3	24	0	10	4	0	342	0
7/16 to 7/22	6	80	1	4	6	0	151	0
7/23 to 7/29	10	290	2	8	24	0	147	0
7/30 to 8/5	2	271	2	35	78	1	60	3
8/6 to 8/12	2	521	0	38	130	0	23	36
8/13 to 8/19	2	515	1	21	62	2	6	221
8/20 to 8/26	0	177	0	10	22	0	2	311
8/27 to 9/2	2	187	0	8	12	0	0	495
9/3 to 9/9	0	171	0	4	29	1	0	337
9/10 to 9/16	3	166	0	2	41	0	0	336
9/17 to 9/23	1	60	0	0	4	0	0	142
9/24 to 9/30	1	14	0	2	3	0	0	28
10/1 to 10/2	1	2	0	1	0	0	0	0

Discussion

A total of 2,779 Chinook salmon were counted past the Funny River weir between 1 June and 24 August. We feel that these estimates of abundance accurately represent the relative run strength of Funny River Chinook salmon. We installed the weir on 16 May to ensure the enumeration of all Chinook salmon because we had no reference of their run-timing. The fish trap was installed

on 17 May to enable us to pass Chinook salmon until the video system was operational. The video system was installed on 1 June once the video equipment became available and after spring high water subsided. Initially, we had planned to operate the weir and video system through mid-August, but later decided to operate the weir through 2 October to enumerate and collect genetic tissue samples from coho salmon.

The preliminary escapement and in-river harvest estimates between Warren Ames Bridge and Soldotna Bridge for early-run Chinook salmon during 2006 were 23,326 and 3,261, respectively (Anthony Eskelin, Alaska Department of Fish and Game, personal communication). Based on these estimates, approximately 20,065 early-run Chinook salmon escaped upstream of the Soldotna Bridge to spawn. Sport harvest of early-run Chinook salmon above the Soldotna Bridge is estimated using the Statewide Harvest Survey. This information is not yet available; however, the estimated annual harvest in this reach over an 18-year period (1986 to 2003) has averaged 1,731 fish. Using the current year escapement and harvest estimates for early-run Chinook salmon, we estimated that approximately 15% of the early-run fish entered the Funny River to spawn. This level of escapement into the Funny River was similar to the 19% observed from combining all radio tagged early-run Chinook salmon from radio telemetry studies conducted by the Service and Department in the early 1980's and 1990's (Burger et al. 1985; Bendock and Alexandersdottir 1991; Bendock and Alexandersdottir 1992).

Age, sex and length information was collected from Funny River Chinook salmon between 16 June and 27 July. We feel that our sample was not representative of the entire run based on the timing of our first sample on 16 June and the peak weekly passage which unexpectedly occurred between 11 and 17 June. Less than 2% of the run was sampled after 29% of the return had passed the weir by 17 June. In addition, age composition for female Chinook salmon in the Funny River was comprised of fewer age groups (N=2) than the age compositions determined by the Department for the in-river test net fishery (N=5) below rkm 13 and in-river creel survey (N=3) between Warren Ames and Soldotna bridges (Table 3). The female sex composition (21%) from our ASL sample was also 10% less than the overall female sex composition (31%) determined from the combination of video and ASL information. Run timing observed during 2006 will be used to determine our sampling strategy during 2007.

TABLE 3. —Kenai River early-run Chinook salmon age compositions, 2006.

	Age Groups					
Sample Location	1.1	1.2	1.3	1.4	1.5	2.3
Funny River Weir						
Male	X	X	X	X		
Female			X	X		
Inriver Test-Net Fishery						
Male	X	X	X	X	X	
Female		X	X	X	X	X
Inriver Creel Survey						
Male	X	X	X	X		
Female		X	X	X		

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Resident vs Non-resident Statewide Sport Fishing License Sales 1996-2006

Year	Resident	Non-resident	Total
1996	171,605	240,599	412,204
1997	175,121	251,865	426,986
1998	169,943	254,494	424,437
1999	169,001	269,153	438,154
2000	173,181	280,939	454,120
2001	173,411	275,009	448,420
2002	179,198	284,583	463,781
2003	180,729	289,358	470,087
2004	183,731	314,446	498,177
2005	183,090	329,544	512,634
2006	175,036	311,626	486,662

Prepared by ADFG Sport Fish Division on 2-5-08

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Detecting Marine Nutrients in the Kenai River Watershed

Progress Report - October 2007

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Project description:

The purpose of this study is to understand the extent to which marine-derived nutrients (MDN) from salmon runs subsidize key trophic levels and species in Kenai River watershed, including understanding species differences and spatial patterns related to biotic uptake of MDN throughout the drainage. This report includes results from 2005 and 2006 field seasons.

We sampled 12 sites distributed throughout the Kenai River watershed during 2005 and 2006 (Figure 1). We sampled multiple trophic levels (riparian plants, benthic invertebrates from several functional feeding groups – grazers, shredders, collectors, predators – and five species of fishes) (Appendix A). Sampling was timed just after the peak of the salmon runs each year. All data from the 2005 and 2006 field seasons have been processed and analyzed, except for 2006 sulfur isotope data, and are summarized in this report. Results on 2006 sulfur analyses are forthcoming.

Key findings to date:

Key finding #1: Marine-derived nutrients are penetrating the Kenai River drainage food web (Figure 2). Relative to samples from a salmon-free reference site where salmon runs are blocked by a waterfall (Juneau Creek), most taxa showed carbon and nitrogen isotopic enrichment during both 2005 and 2006, across a broad range, indicating various degrees of marine nutrient assimilation. The sole exception was *Equisetum* (horsetail), which showed only nitrogen enrichment, as would be expected since plants assimilate carbon from the atmosphere rather than from soil. We detected a substantial range of uptake between years, with some species' uptake much higher in 2005 versus 2006, and vice versa, e.g., *Drunella* mayflies, *Isoperla* stoneflies, and Dolly Varden char (Figure 2).

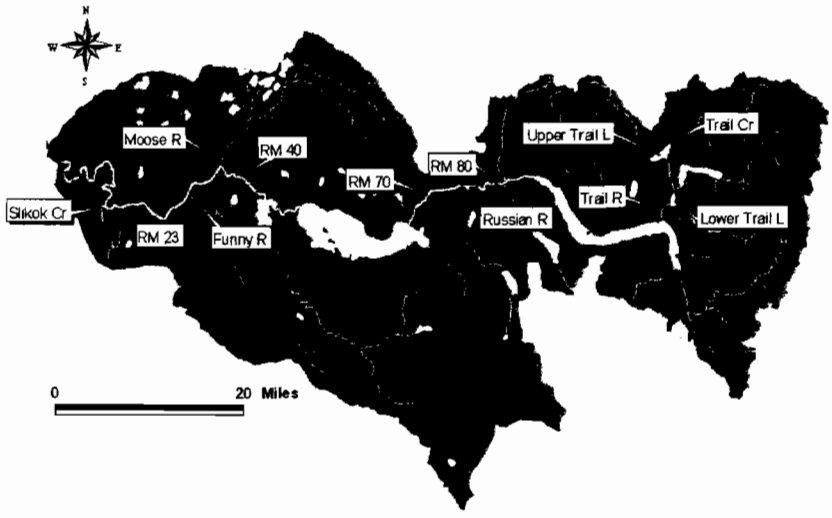


Figure 1. Kenai River watershed showing the 12 sampling stations during study years 2005 and 2006.

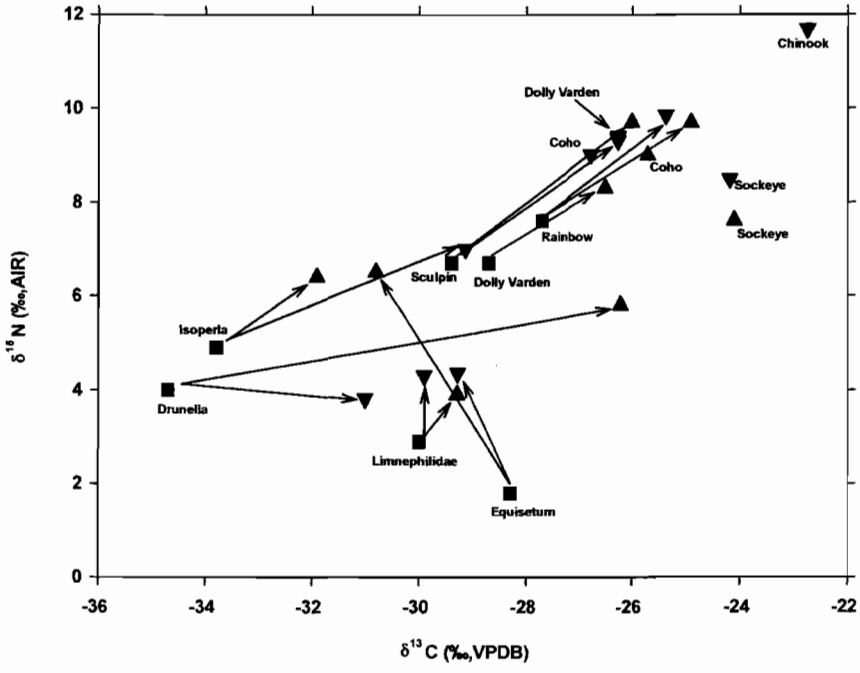


Figure 2. Multiple species and trophic levels incorporated MDN in the Kenai River drainage. Green squares represent mean values from Juneau Creek, the control stream that does not receive returning salmon; red triangles correspond to average values of taxa collected from the mainstem and tributaries in 2005 and 2006, the sites that have returning salmon. Juvenile coho, sockeye, and Chinook (2006 only) are included for reference (without controls). Direction of arrow indicates type of enrichment (C, N, or both), and length of arrow indicates magnitude of MDN enrichment.

Key finding #2: Incorporation of marine nutrients varied spatially within the watershed (Table 1). Biota in the lower watershed, particularly the mainstem, assimilated the most marine nutrients while those in the headwaters assimilated the least. This is to be expected given the presence of more spawners in mainstem and associated proximal habitats. The general pattern of MDN uptake by fish at a given site, between years, was often consistent, but in some cases we detected substantial between-year variation (Table 1).

Table 1. Species-specific isotopic enrichment expressed as a percentile of each species' total range. Values in red are greater than that species' 67th percentile (highest MDN response), values in yellow fall between the 33rd and 67th percentile (moderate MDN response), and values in green less than the 33rd percentile (lowest MDN enrichment).

Site	Fish species	Species-specific isotopic enrichment (percentile of range)		
		2005 δ34S	2005 δ15N	2006 δ15N
Funny R	coho	46.5	33.6	49.1
	Dolly			50.5
	rainbow			60.2
Kenai R at Bing's Landing (RM 40)	coho		66.0	
	Dolly		65.6	39.7
	rainbow	33.9	38.6	41.8
Kenai R at Cooper Cr (RM 80)	coho		52.2	
	Dolly		60.4	
	rainbow			
Kenai R at Jim's Landing (RM 70)	coho	64.4		43.2
	Dolly	34.0		45.3
	rainbow	53.6	65.3	56.3
Kenai R at Swiftwater (RM 23)	coho	43.4	54.3	47.5
	Dolly	44.0	43.3	
	rainbow		40.0	
Moose R	coho	66.5	35.6	
	rainbow			
Russian R	coho			64.9
	rainbow			
Slikok Cr	coho		63.2	35.4
	Dolly			
	rainbow			58.2
Trail Cr	coho			
	Dolly	39.5		37.9
	rainbow			
Trail R	coho	39.4		
	Dolly			
	rainbow		50.3	

Key finding #3: Individuals within a given species showed a range of marine nutrient assimilation (Figure 3), likely due to differences in their trophic position, species-specific feeding habits, and life history. Certain species are clearly taking advantage of and benefiting more from salmon runs and marine nutrients than others (Chinook, coho, rainbow vs. Dolly Varden and sculpin, respectively), suggesting a possible competitive advantage. And the range of uptake across fish species varied widely, with Dolly Varden having the greatest range in both N and S uptake and sockeye showing the least (Figure 3).

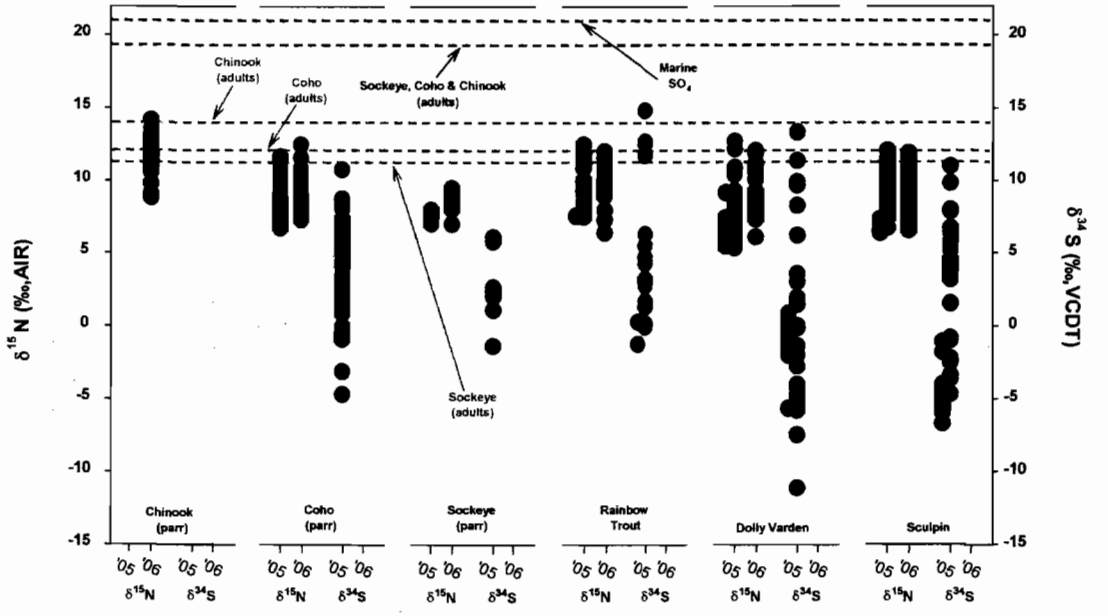


Figure 3. Nitrogen (N; green) and sulfur (S; red) isotopic signatures of fishes in the Kenai River watershed collected during 2005 and 2006. Fish from Juneau Creek (blue, 2005), the control stream, are included as a reference. Typical adult salmon isotope values and marine sulfate are also included to illustrate the marine end-members (i.e., theoretical maximum MDN signal).

Summary:

Preliminary analyses indicated that 1) much variation exists in MDN uptake among species and years, 2) certain species, especially fishes, hold promise as indicator species of marine influence in watersheds, 3) these species may provide a valuable tool for monitoring ecological changes in watersheds, and 4) the Kenai drainage may be an ideal model for developing, testing, and establishing such monitoring tools that could be applied and implemented more broadly throughout Alaska and other regions.

Appendix A. Summary of field sampling for 2005.

	Trail Creek	Upper Trail Lake	Lower Trail Lake	Trail River	Kenai R @ Cooper Creek	Russian River
Date(s) sampled	8/3	8/3	8/2-3	8/1-2	8/21-22	9/21
Equisetum spp.					(5)	(5)
Salix spp.					(5)	(5)
Invertebrate (grazer)					*Glossosoma*	*Glossosoma*
Invertebrate (shredder)	Limnephilidae			Limnephilidae	Limnephilidae	Pteronarcella
Invertebrate (collector)				*Ephemerella*	*Drunella & Ephemerella*	*Drunella & Ephemerella*
Invertebrate (filterer)				Hydropsychidae	Hydropsychidae	*Brachycentrus* Hydropsychidae
Invertebrate (predator)	*Isoperla*			*Drunella* Tipulidae	*Isoperla*	*Isoperla*
Fish	Coho (4) Dollies (4) Sculpin (4)	Sockeye (4)	Sockeye (4)	Coho (4) Dollies (1) Rainbow (1) Sculpin (4)	Coho (4) Dollies (4) Rainbows (4) Sculpin (3)	

Appendix A. Summary of field sampling for 2005 (continued).

Sites sampled	Kenai R @ Jim's Landing	Kenai R @ Bing's Landing	Moose River	Funny River	Kenai R @ Swiftwater Campground	Slikok Creek
Dates sampled	8/22-23	8/22-23	10/6	10/6-7	9/23	10/6-7
Equisetum spp.	(5)	(5)	(5)	(5)	(5)	(5)
Salix spp.	(5)	(5)	(5)	(5)	(5)	(5)
Invertebrate (grazer)	*Glossosoma*	*Glossosoma* Heptageniidae	*Glossosoma*	*Glossosoma*	*Glossosoma*	
Invertebrate (shredder)			Limnephilus	Limnephilidae *Pteronarcella*		Limnephilidae (organic case)
Invertebrate (collector)	*Drunella & Ephemerella*	*Drunella & Ephemerella*	*Gammarus*			Limnephilidae (stone case)
Invertebrate (filterer)	Brachycentrus Hydropsychidae	*Brachycentrus* Hydropsychidae	*Brachycentrus*	*Brachycentrus* Hydropsychidae	*Brachycentrus* Hydropsychidae	*Brachycentrus*
Invertebrate (predator)			Dragonfly nymph (3)	Perlodidae Tipulidae		*Isoperla*
Fish	Coho (4) Dollies (4) Rainbows (4) Sculpin (4)	Coho (4) Dollies (4) Rainbows (4) Sculpin (4)	Coho (4) Rainbow (1)	Coho (4) Dollies (4) Sculpin (4)	Coho (4) Dollies (4) Rainbows (4) Sculpin (5)	Coho (4) Dollies (4) Rainbows (4) Sculpin (4)

Appendix B. Summary of field sampling for 2006.

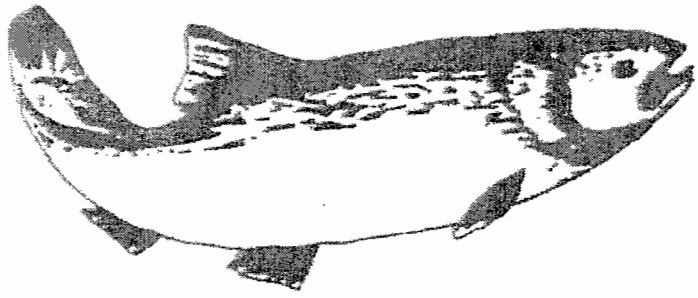
Sites sampled	Trail Creek	Upper Trail Lake	Lower Trail Lake	Trail River	Kenai R @ Cooper Creek	Russian River	
Dates sampled	8/22 and 9/27	8/23	8/23	8/23-24	9/5-6	8/25	9/25
Grass	*Arctophyla fulva* (4)			*C. canadensis* (4)	*C. canadensis* (4)	*C. canadensis* (4)	*C. canadensis* (4)
Equisetum spp.	(4)			(4)	(4)	(4)	
Salix spp.	(4)			(1)	(4)	(4)	
Invertebrate (grazer)	Heptageniidae			Heptageniidae	Heptageniidae	Heptageniidae *Glossosoma*	Heptageniidae *Glossosoma*
Invertebrate (shredder)	*Zapada*						*Pteronarcella* *Zapada*
Invertebrate (filterer)				Hydropsychidae	Hydropsychidae	Hydropsychidae Simuliidae *Brachycentrus*	Hydropsychidae *Brachycentrus*
Invertebrate (predator)	*Rhyacophila* Chloroperlidae			*Drunella* Chloroperlidae	*Drunella* Chloroperlidae		*Isoperla* *Drunella*
Fish	Coho (4) Dollies (6) Rainbow (1) Sculpin (1)	Chinook (1) Sculpin (2) Sockeye (4) Whitefish (4)	Chinook (4) Dollies (1) Sculpin (2) Sockeye (4) Whitefish (2)	Chinook (4) Coho (1) Dollies (3) Sculpin (4)	Chinook (4) Coho (4) Dollies (4) Sculpin (4)	Coho (1) Rainbow (1)	Chinook (1) Coho (1) Rainbow (2) Sculpin (4)

Appendix B. Summary of field sampling for 2006 (continued).

Sites sampled	Kenai R @ Jim's Landing	Kenai R @ Bing's Landing	Moose River	Funny River	Kenai R @ Swiftwater Campground	Slikok Creek
Dates sampled	8/24 and 9/7-8	9/6-7	9/6-7	9/8 and 9/26-27	9/8 and 9/26	9/8 and 9/26
Grass	*C. canadensis* (4)	*C. canadensis* (4)	*C. canadensis* (4)	*C. canadensis* (4)	*C. canadensis* (4)	*C. canadensis* (4)
Equisetum spp.	(4)	(4)	(4)	(4)	(4)	(4)
Salix spp.	(4)	(4)	(4)	(4)	(4)	(4)
Invertebrate (grazer)	Heptageniidae	Heptageniidae *Glossosoma*	Gastropoda	*Glossosoma*		
Invertebrate (shredder)			*Limnephilus*	*Pteronarcella* Limnephilidae		*Zapada*
Invertebrate (collector)		*Ephemerella*	*Gammarus*			
Invertebrate (filterer)	Simuliidae	Hydropsychidae Simuliidae *Brachycentrus*		Simuliidae *Brachycentrus* Hydropsychidae	Hydropsychidae *Brachycentrus*	*Brachycentrus*
Invertebrate (predator)	*Isoperla* Chloroperlidae	*Isoperla* Chloroperlidae	Dytiscidae Dragonfly nymph	Tipulidae *Isoperla*		*Isoperla*
Fish	Chinook (4) Coho (4) Dollies (4) Rainbow (2) Sculpin (2)	Chinook (5) Coho (4) Dollies (3) Rainbow (4) Sculpin (4)	Chinook (4) Coho (4) Sculpin (3)	Chinook (4) Coho (4) Dollies (4) Rainbow (1) Sculpin (4)	Chinook (4) Coho (4) Rainbow (4) Sculpin (4)	Chinook (4) Coho (4) Rainbow (4) Sculpin (4)

RC 110

NORTHERN DISTRICT SET NETTERS ASSOCIATION OF COOK INLET
Est. 1954
P.O. Box 101480 ♦ Anchorage, Alaska 99510-1480



5 February 2008

Alaska Board of Fisheries
Alaska Department of Fish and Game
Anchorage, Alaska

SUBJECT: Northern District Set Netters Proposals Nos. 147 and 148

The Northern District Set Netters Association of Cook Inlet submitted proposals No.s 147 and 148.

At this time, the association withdraws its support for Proposals Nos. 147 and 148.

Thank you.

SBraund

Stephen Braund
President

RC 111

Big Lake Petroleum Hydrocarbon Sampling Results 2004 and 2005

Summary Report prepared by:

Alaska Department of Environmental Conservation
Nonpoint Source Water Pollution Control Program

March 2007

Photo – *Swimming area at BL-10 (North Shore State Recreation Area) adjacent to boat launch. June 15, 2004.*

Laura Eldred, Environmental Program Specialist
DEC Division of Water
1700 E. Bogard Rd., Bldg. B, Suite 103
Wasilla, AK 99654

Table of Contents

EXECUTIVE SUMMARY

The Big Lake watershed in Big Lake, AK is experiencing increased development and population growth and during the past several years, the Department of Environmental Conservation (DEC) has received increasing numbers of complaints and concerns from citizens regarding water quality in Big Lake. During the summers of 2004 and 2005, the DEC, through a term contractor, performed water quality monitoring at Big Lake for four separate groups of analytes: bacteria, hydrocarbons, nutrients, and standard physical and chemical parameters (chlorophyll *a*, Secchi disk, pH, dissolved oxygen, conductivity, temperature, and turbidity). This summary report focuses on the petroleum hydrocarbon aspect of the study.

The DEC collected 122 water samples (not including duplicate samples) for petroleum hydrocarbon analysis on Big Lake in the summers of 2004 - 2005. Samples were collected from various depths in order to understand the amount of volatization and mixing occurring. The petroleum hydrocarbon that DEC regulates as an indicator for pollution from gasoline is total aromatic hydrocarbons (TAH). TAH includes the compounds benzene, toluene, ethylbenzene and xylene, (BTEX) which are constituents of gasoline. It captures contamination from most watercraft used on the lake. Total aromatic hydrocarbons are regulated by the DEC for surface water quality under 18 AAC 70.020(b)(5)(A)(iii) and may not exceed 10 µg/L. Additionally, the water quality standards state that hydrocarbons may not cause a visible sheen upon the surface of the water. For the two summers of data collection, there were a total of 19 samples that exceeded the 10 µg/L water quality standard. The highest exceedance was a measurement on July 3, 2005 at 62.20 µg/L. There were no sheens observed on the surface of the water.

This report summarizes the petroleum hydrocarbon sampling methods and results from project reports developed by OASIS Environmental, Inc. in 2004 and 2006 for the DEC and available on the DEC website:
www.dec.state.ak.us/water/wnpspc/protection_restoration/big_lucille_lakes_wqreports.htm.

- *Big Lake & Lake Lucille Water Quality Monitoring Final Report*, September 2, 2004, OASIS Environmental, Inc. for DEC
- *Big Lake Water Quality Monitoring Report*, June 15, 2006, OASIS Environmental, Inc. for DEC

Based upon the results of these water quality studies, Big Lake was Category 5, section 303(d) listed in the *2006 Integrated Water Quality & Assessment Report* by DEC for persistently not meeting the Petroleum Hydrocarbon water quality standard as outlined in 18 AAC 70.020(b)(5)(A)(iii) and is considered an impaired waterbody. Under the Clean Water Act, 303(d) listed waters must have a Total Maximum Daily Load (TMDL) developed to identify pollutant sources and to allocate pollutant loads. TMDL development for Big Lake is scheduled for 2011 but the DEC plans to begin working on addressing the petroleum hydrocarbon issue prior to that date through working with other state resource agencies, the local government, community groups and other interested parties.

1 INTRODUCTION

This report summarizes the petroleum hydrocarbon sampling results from studies conducted by the Department of Environmental Conservation (DEC) through a term contractor during the open water months of 2004 and 2005 on Big Lake, in Big Lake, Alaska.

1.1 Big Lake

Big Lake is located approximately 15 miles west of Wasilla, Alaska. It covers an area of 2,500 acres and has a maximum depth of 90 feet. Both permanent residences and recreational cabins surround the lake, and two marinas and one restaurant currently operate along the shore of the lake. Because of its large size and close access to population centers, Big Lake is a popular year-round recreational area in Southcentral Alaska.

1.2 ACWA Ranking

Big Lake is listed as a priority waterbody on the Alaska's Clean Water Actions (ACWA) list with water quality being a primary concern. Lakes typically serve as the catch basin for runoff pollution within a watershed. As the population and associated development has steadily increased over the past couple of decades, so too has the potential for nonpoint source (runoff) pollution impacts to the lake. Increased nutrient input from lakeshore development may be accelerating the normal aging process of the lake. Pollutants of concern include nutrients (phosphorus and nitrogen), fecal coliform bacteria, and petroleum hydrocarbons from the heavy use of the lake for transportation and recreation. DEC has received increasing numbers of complaints and concerns from citizens regarding water quality in Big Lake over the past several years.

1.3 Regulatory Authority

Based upon the results of these water quality studies, Big Lake was Category 5, section 303(d) listed in the *2006 Integrated Water Quality Monitoring & Assessment Report* by DEC for non-attainment of the Petroleum Hydrocarbon water quality standard as outlined in 18 AAC 70.020(b)(5)(A)(iii). Category 5 waters require a Total Maximum Daily Load (TMDL) or recovery plan be developed.

Once a waterbody has been placed on the Section 303(d) list, a TMDL recovery plan will be developed, unless data obtained subsequent to the listing indicates that the waterbody is no longer impaired or other measures are undertaken to restore the waterbody. Big Lake is scheduled for a TMDL or waterbody recovery plan to be developed between now and 2011. Specific criteria are available for delisting of impaired waterbodies.

2 SCOPE OF PROJECT

Under contract with DEC, OASIS Environmental, Inc. (OASIS) performed water quality monitoring for four separate groups of analytes: bacteria, hydrocarbons, nutrients, and standard physical and chemical parameters (chlorophyll *a*, Secchi disk, pH, dissolved oxygen, conductivity, temperature, and turbidity). OASIS, with support from personnel

from Kinnetic Laboratories, Inc. (KLI), collected laboratory samples for the analysis of bacteria, hydrocarbons, and nutrients, while physical parameters were measured using in-situ water quality meters. This summary report focuses only the petroleum hydrocarbon sampling and analysis portion of the project. Results for the other parameters are available in the complete project reports located on the DEC website as listed above.

2.1 Sample Sites

Sampling sites were selected in areas with potential hydrocarbon sources. Suspect sources included boat traffic lanes, fueling and maintenance facilities, public boat launches and residential areas with small watercraft activity. Additional sampling sites were located in less heavily used areas to indicate background conditions. See Table 1 for site descriptions. Samples were collected from multiple depths in order to determine the amount of mixing in the water column.

In 2004 there were ten petroleum hydrocarbon sampling sites at Big Lake as shown in Figure 1 in the Appendix. Samples were collected at 0.15 m, 0.5 m, 1.5 m and 5 m depths at four of the sampling sites (BL-1, BL-2, BL-3 and BL-4). At the remaining sampling sites, samples were collected at 0.15 m.

In 2005 there were five sampling sites (BL-1, BL-6, BL-7, BL-8 and BL-10) for petroleum hydrocarbons as illustrated in Figure 2 in the Appendix. The 2005 sample sites were narrowed down from the 2004 sites to focus more intensive sampling at the sites with potential hydrocarbon pollution as well as including a site for background conditions. Samples were collected at 0.15m and 0.5m at all sites and at BL-10 an additional sample depth of 1.5m was added for the final sample date.

Table 1 – Big Lake sample site descriptions

SITE	DESCRIPTION	2004	2005
BL-1	Historic USGS sampling site at the deepest area of the west basin. There is an island with residences close to the site.	X	X
BL-2	Narrow area between the two basins. This is a major traffic lane and there are residences on both sides.	X	
BL-3	Historic USGS sampling site at deepest area of the east basin. There is boat traffic in this area.	X	
BL-4	Center of furthest east section of lake. This is the most heavily used basin in the lake.	X	
BL-5	Condo development on the shore. This is also a traffic lane for the residences in the bay to the southwest.	X	
BL-6	Near Southport Marina and several residences located near shore.	X	X
BL-7	Located at outlet to Fish Creek. This is a popular fishing area as well as a high use traffic lane.	X	X
BL-8	Site located near Burkeshore Marina. Shoreline with extensive residential development.	X	X
BL-9	Residential area and lodge.	X	
BL-10	Near the North Shore State Recreation Area and is heavily used for launching boats, swimming, camping and personal watercraft operation.	X	X
BL-10s	Sample taken within swimming area at North Shore State Recreation Area.	X	
BL-10b	Sample site moved approximately 5 meters in order to get a sample depth of 3 meters.		X

2.2 Sample Dates

Sampling was conducted during the open water months for both years. An attempt was made both summers to capture water quality information prior to spring lake turnover. However, temperature profiles indicated that spring turnover had most likely already occurred prior to the first sample event in May for both years.

2004 Sample Dates:
May 15, 2004
May 29, 2004
June 12, 2004

2005 Sample Dates:
May 12, 2005
May 28, 2005
July 3, 2005
July 23, 2005
August 20, 2005
September 4, 2005

3 METHODS

Hydrocarbon samples were collected for the following parameters:

- Total aromatic hydrocarbons (TAH) and
- Polycyclic aromatic hydrocarbons (PAH, in 2004 only).

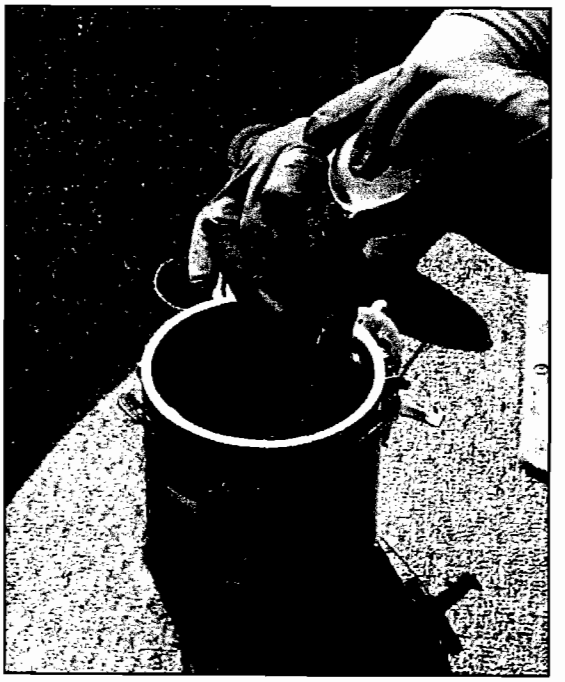


Photo - Preserving a TAH sample at Big Lake on June 12, 2004

TAH includes the compounds benzene, toluene, ethylbenzene and xylene, which are constituents of gasoline. It captures contamination from most watercraft used on the lake. PAH includes heavier compounds present in diesel and oil. Older 2-stroke engines may contribute PAH contamination from the oil mixed with the gasoline.

Hydrocarbon samples were collected using a volatile organic carbon (VOC) sampler designed by U.S. Geological Survey (USGS) and built by Wildco®. TAH samples were preserved with five drops of hydrochloric acid (HCl) after sample collection; PAH samples do not require preservation.

Sampling sites were selected in areas with potential hydrocarbon sources. Suspect sources included boat traffic lanes, fueling and maintenance facilities, public boat launches and residential areas with small watercraft activity. The exception was BL-1, which was considered an open water background location. Samples were collected from multiple shallow depths in order to determine whether dissolved phase hydrocarbons were mixing in the water column.

All samples were immediately placed on gel ice after sampling and remained chilled to 4°C (±2°C) during transportation to the laboratory. TAH samples were analyzed at SGS Environmental Services, Inc. laboratory in Anchorage, AK. TAH samples were analyzed using EPA Method 602.

Sampling was required to follow a DEC approved Quality Assurance Project Plan (QAPP) for sample integrity and validation. For a complete description of the sampling procedures, equipment and analysis, see the Quality Assurance Project Plan (QAPP) located on the DEC website:
www.dec.state.ak.us/water/wnpspc/protection_restoration/big_lucille_lakes_wqreports.htm.

4 RESULTS

Results from the two summers of data collection indicate a correlation between increased motorized usage on the lake, sunny and warm days, and exceedances of the petroleum hydrocarbon standard.

4.1 2004 Results Summary

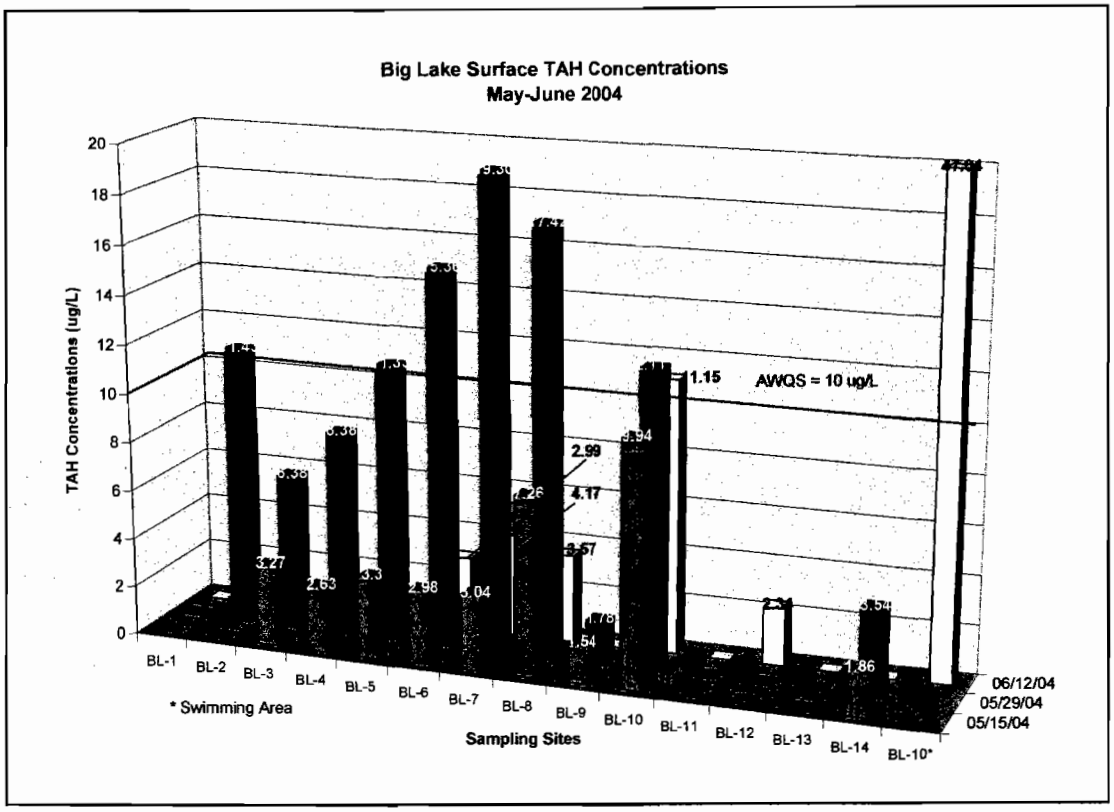
In 2004, TAH samples were collected at all sampling sites and depths on all dates as outlined in the Sample Plan. For each sampling event, PAH samples were collected at half of the sampling sites and depths. PAH samples were below the reporting limit at all of the sampling sites and depths. For this reason, PAH was not collected in 2005.

TAH at the fourteen surface sampling sites (0.15 m depth) were > 1 µg/L at all of the sampling sites at one or more sampling events except for BL-1. Concentrations were highest on May 29 and ranged from 1.78-19.30 µg/L. An additional sample was collected on June 12 inside the swimming area at sampling site BL-10. The TAH concentration inside the swimming area, 47.04 µg/L, is two times greater than the next highest TAH result. There were eight exceedances of the Water Quality Standard (WQS) 18 AAC 70 for TAH, six on May 29 and two on June 12. Four of the exceedances are located in the furthest east basin of Big Lake. The other two are located in the traffic lane separating the east and west basins and at the North Shore State Recreation Area. Figure 3 shows the TAH concentrations at the surface sampling sites.

TAH samples were collected at four depths (0.15 m, 0.5 m, 1.5 m and 5 m) at sampling sites BL-1, BL-2, BL-3 and BL-4. TAH concentrations were detected at sampling sites BL-3 and BL-4 on May 15 down to 1.5 m and ranged from 1.88-3.50 µg/L. On May 29, all four sampling sites had TAH concentrations at one or more depths. Concentrations

ranged from 1.40-11.43 µg/L and were reported to the 1.5 m depth interval. Only sampling site BL-2 reported TAH concentrations at the 0.5 m and 1.5 m depth intervals on June 12. Concentrations were < 2 µg/L. There was one exceedance of the WQS for TAH, at sampling site BL-2 at 0.15 m which was included in the eight exceedances reported at the surface sampling sites.

Figure 3 – TAH surface concentrations May – June 2004 at Big Lake.



4.2 2005 Results Summary

The 2005 TAH samples were collected at five sampling sites on all dates as outlined in the Sample Plan. Sampling depths were 0.15 meter and 0.5 meter for all five sites. An additional abbreviated round of sampling occurred on September 4, 2005, when sampling sites BL-8 and BL-10 were sampled at greater depths.

The TAH WQS of 10 µg/L was exceeded during four of the six sampling events at BL-10: May 28, July 3, July 23, and September 4. The TAH WQS was also exceeded during two sampling events at BL-8: July 23 and August 20.

Eleven exceedances of the WQS for TAH were reported at Big Lake. All exceedances occurred at either sampling site BL-8 or BL-10, with seven of the eleven exceedances occurring at sampling site BL-10. Sampling site BL-10 had the highest concentrations of TAH with a maximum of 62.2 µg/L. The majority of exceedances occurred at the shallow depth of 0.15 meter although at BL-1 on May 28 and July 23, the deeper sample

(0.5 meter) had a higher concentration than the corresponding shallow sample. This indicates that lake activity, whether boats or wind or other factors, is most likely mixing the lighter-than-water hydrocarbons into the water column.

The July 3 sample event had the highest TAH concentrations at three of the five sampling sites for both sample depths. The July 23 sample event had three of the remaining four possible maximum TAH concentrations, and the August 20 sample event had a single highest TAH concentration. These sample dates correlate with the highest mean air temperatures of the six sample events throughout the open water season. This comparison demonstrates that TAH concentrations are likely influenced by a combination of good weather and time of season.

Figure 4 – TAH surface concentrations May – September 2005, Big Lake.

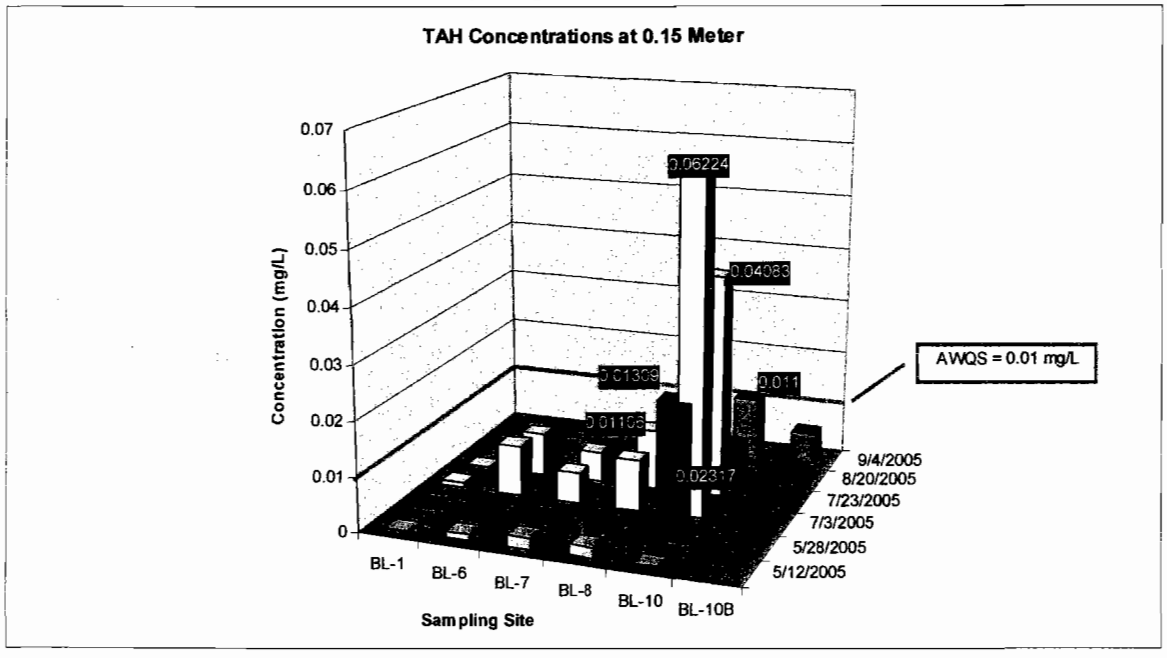
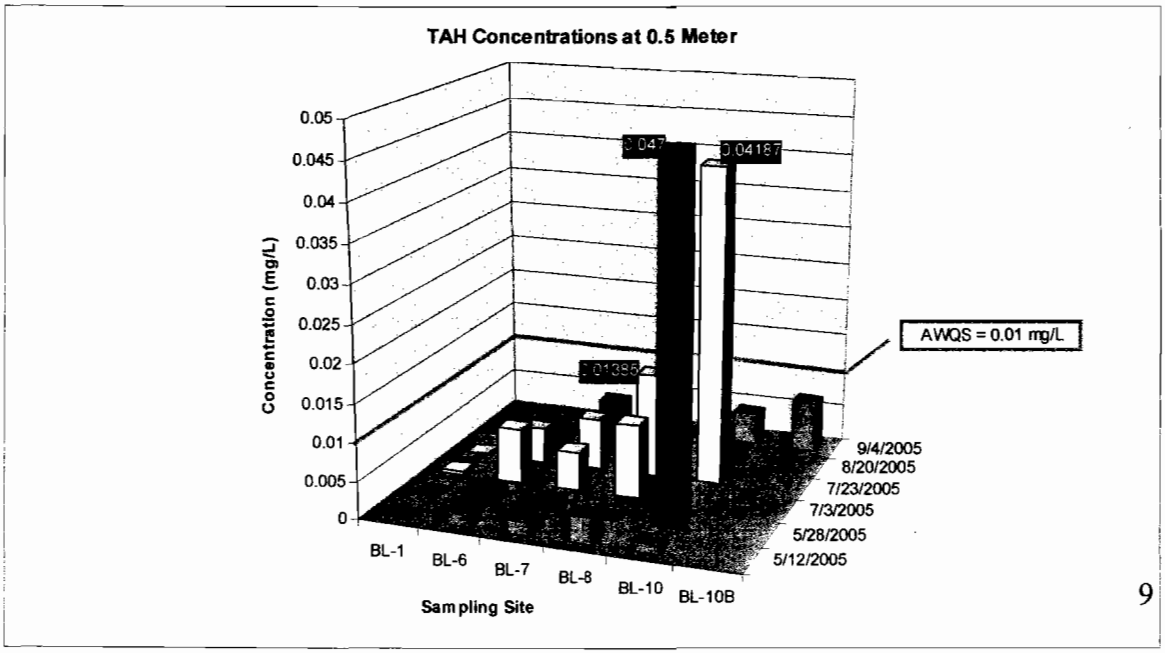


Figure 5 – TAH concentrations 0.5 meter depth May – September 2005, Big Lake



5.0 DISCUSSION

Sampling site BL-8 is in front of Burkeshore Marina, and sampling site BL-10 is at the North Shore State Recreation Area public boat launch. It is likely that fuel handling practices and the mixing of cooling water with exhaust emitted from recreational outboard motors have resulted in the TAH contributions noted near the boat launch areas. Therefore, it is not surprising that the highest TAH readings came from these sampling sites where boat traffic would be expected to be most frequent.

The best comparison between the 2004 and 2005 sample events is using the late May sampling: May 29, 2004 and May 28, 2005. For May 29, 2004, six exceedances of the TAH WQS occurred at 0.15 meter for 14 total samples collected, while for May 28, 2005, only one exceedance occurred at 0.15 meter for 5 total samples collected. Sampling site BL-10 was the exceedance that occurred both years for late May.

Table 2 in the Appendix provides a summary of the TAH data results for 2004 and 2005 for all sample sites and dates. Figures 6 – 9 in the Appendix are data graphs of the sites with TAH exceedances for both 2004 and 2005.

5.1 Next Steps and Actions

DEC will work with the Department of Natural Resources, local government, community groups and other interested parties to look at ways to decrease the amount of TAH entering into Big Lake. Since the water quality data for TAH led to Big Lake being placed on the Section 303(d) list and Category 5 on the 2006 Integrated Report, a TMDL recovery plan will be developed, unless data obtained subsequent to the listing indicates that the waterbody is no longer impaired or other measures are undertaken to restore the waterbody. Big Lake is scheduled for a TMDL or waterbody recovery plan to be developed between now and 2011. There are specific criteria for the delisting of impaired waterbodies. The ultimate goal is to restore Big Lake to meet water quality standards and the DEC is taking preliminary steps now to identify the process for this work.

It is important to note that the DEC still considers Big Lake safe for swimming even though the impaired area is adjacent to one of the public beaches. While 10 µg/L is the water quality standard for Water Supply aquaculture, the standard for primary contact recreation states that there should be no film, sheen or discoloration on the surface or floor of the waterbody or adjoining shorelines. At Big Lake, no sheen was seen on the water surface at any of the sampling sites.

APPENDICES

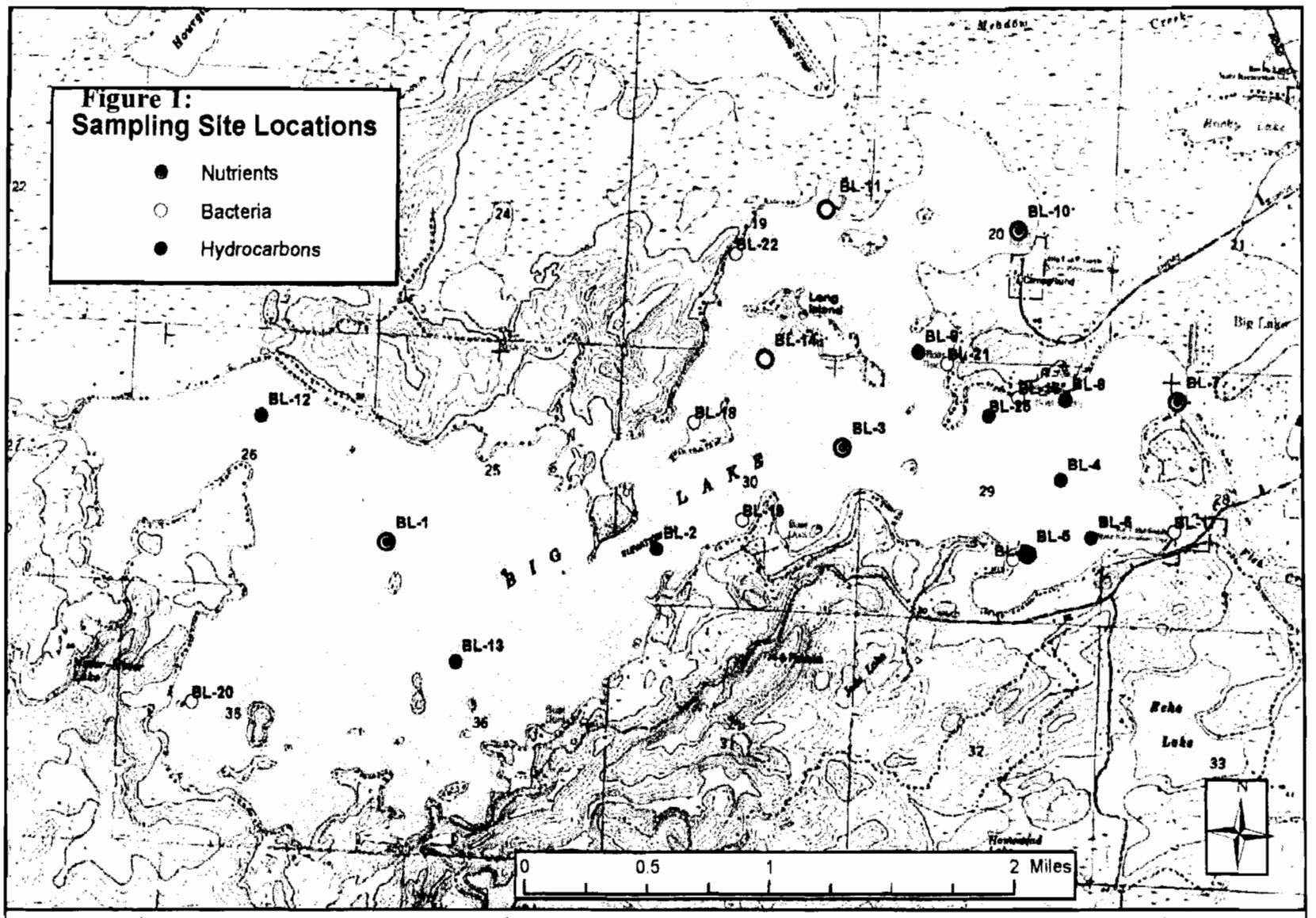


Figure 1:
Sampling Site Locations
Nutrients
Bacteria
Hydrocarbons
BL-1
BL-2
BL-3
BL-4
BL-5
BL-6
BL-7
BL-8
BL-9
BL-10
BL-11
BL-12
BL-13
BL-14
BL-15
BL-16
BL-17
BL-18
BL-19
BL-20
BL-21
BL-22
BL-23
BIG LAKE
Long Island
Big Lake
Echo Lake
0 0.5 1 2 Miles
N
DATE
MAY 2004
CHKD
P.A.
DRAWN
B.S.
PROJ NO
14-054
LAKE LUCILLE AND BIG LAKE WATER QUALITY MONITORING
BIG LAKE SAMPLING SITES
Big Lake, Alaska
Map 1

Figure 2

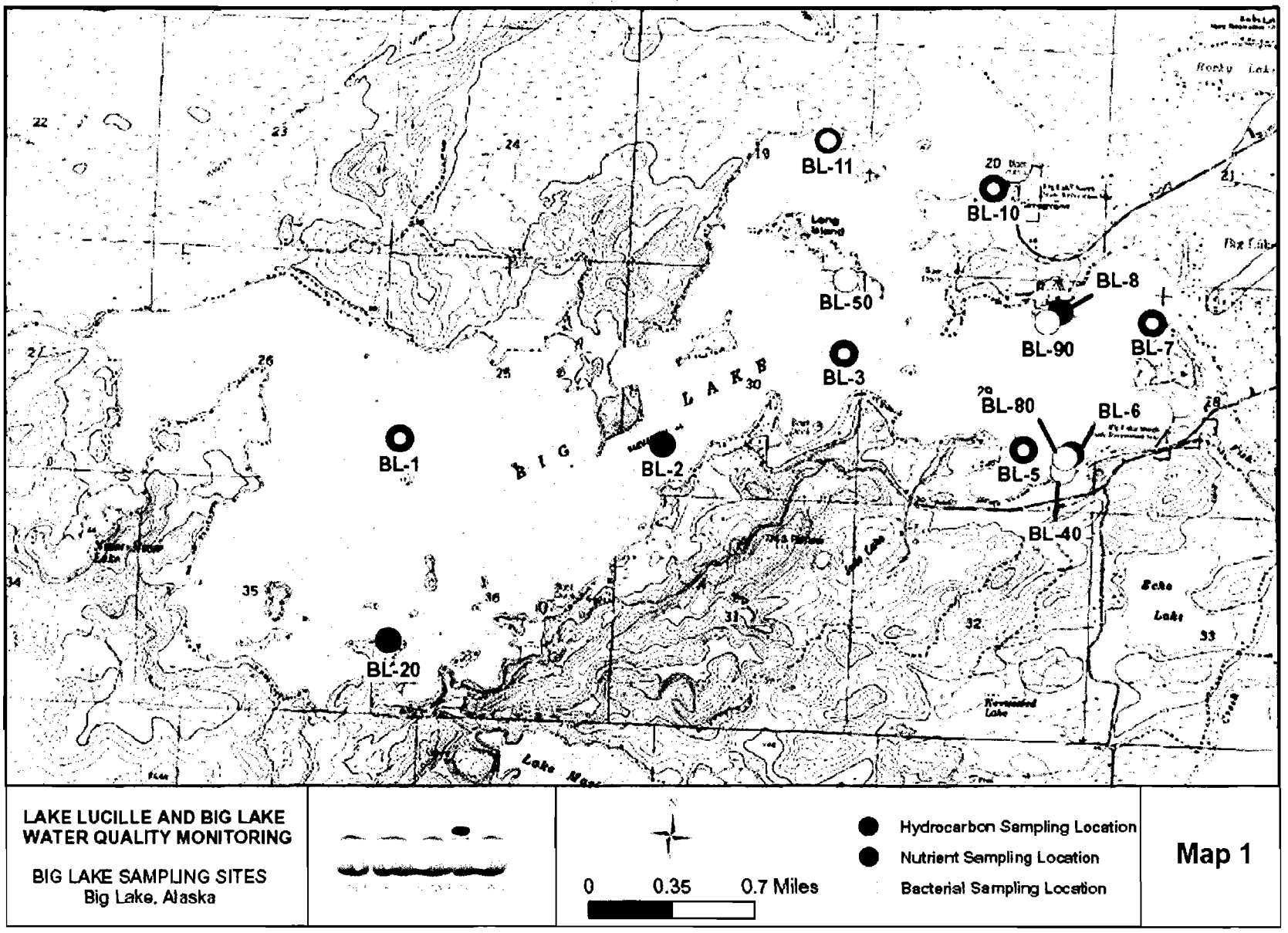

BL-11
BL-10
BL-50
BL-8
BL-90
BL-7
BL-3
BL-80
BL-6
BL-1
BL-2
BL-5
BL-40
BL-20
BIG LAKE
LAKE LUCILLE AND BIG LAKE WATER QUALITY MONITORING
BIG LAKE SAMPLING SITES
Big Lake, Alaska
0 0.35 0.7 Miles
Hydrocarbon Sampling Location
Nutrient Sampling Location
Bacterial Sampling Location
Map 1

Table 1: TAH Results in µg/L for 2004 and 2005 sampling at Big Lake.

DATE	SITE	DEPTH in Meters 0.15	0.5	1.5	3.0	5.0
15-May-04						
	BL-1	0.00	0.00	0.00		0.00
	BL-2	0.00	0.00	0.00		0.00
	BL-3	3.27	3.50	0.00		0.00
	BL-4	2.63	2.15	1.88		0.00
	BL-5	3.30				
	BL-6	2.98				
	BL-7	3.04				
	BL-8	7.26				
	BL-9	1.54				
	BL-10	9.94				
29-May-04						
	BL-1	0.00	0.00	1.40		0.00
	BL-2	11.43	3.80	2.50		0.00
	BL-3	6.38	8.10	8.12		0.00
	BL-4	8.38	8.00	7.59		0.00
	BL-5	11.33				
	BL-6	15.36				
	BL-7	19.30				
	BL-8	17.42				
	BL-9	1.78				
	BL-10	12.11				
12-Jun-04						
	BL-1	0.00	0.00	0.00		0.00
	BL-2	0.00	0.40	1.40		0.00
	BL-3	0.00	0.00	0.00		0.00
	BL-4	0.00	0.00	0.00		0.00
	BL-5	0.00				
	BL-6	2.99				
	BL-7	4.17				
	BL-8	3.57				
	BL-9	0.00				
	BL-10	11.15				
	BL-10s*	47.04				
12-May-05						
	BL-1	0.00	0.00			
	BL-6	1.10	1.80			
	BL-7	2.10	1.80			
	BL-8	2.90	3.40			
	BL-10	0.00	1.20			
28-May-05						
	BL-1	0.20	0.20			
	BL-6	2.60	2.00			
	BL-7	1.00	1.30			
	BL-8	1.50	0.30			

	BL-10	**23.20**	**47.00**			
3-Jul-05						
	BL-1	1.00	0.50			
	BL-6	9.40	7.30			
	BL-7	5.50	5.10			
	BL-8	9.30	9.70			
	BL-10	**62.20**	**60.50**			
23-Jul-05						
	BL-1	0.00	0.00			
	BL-6	7.80	4.60			
	BL-7	5.60	6.80			
	BL-8	**11.06**	**13.85**			
	BL-10	**40.80**	**41.90**			
20-Aug-05						
	BL-1	0.00	0.00			
	BL-6	1.30	1.60			
	BL-7	2.40	6.70			
	BL-8	**13.09**	**10.73**			
	BL-10	5.90	1.80			
4-Sep-05						
	BL-1					
	BL-6					
	BL-7					
	BL-8					
	BL-10	**11.00**		4.30		
	BL-10b**	5.60		6.70	6.00	

* sample taken within swimming area at North Shore State Recreation Area

** sample site moved approximately 5 meters in order to get a sample depth of 3 meters

bold denotes exceeding state water quality standards 18 AAC 70.020(b)(5)(A)(iii) for TAH

blank cell denotes no sample taken

Figure 6: Sample site BL-06 results for 2004 & 2005

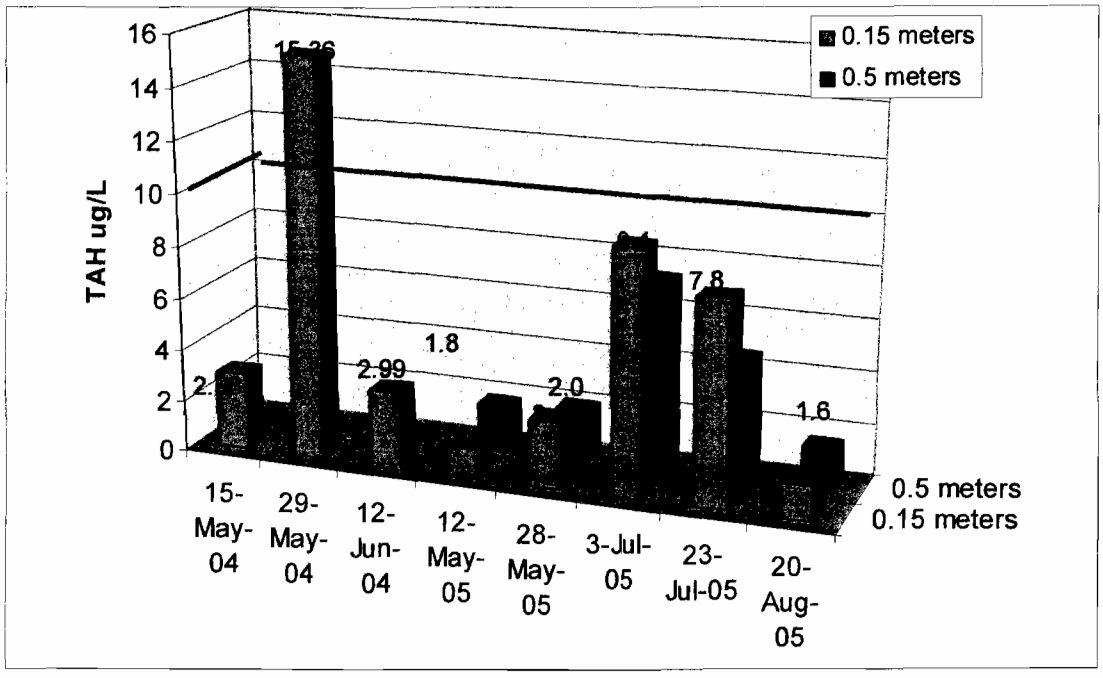


Figure 7: Sample site BL-07 results for 2004 & 2005

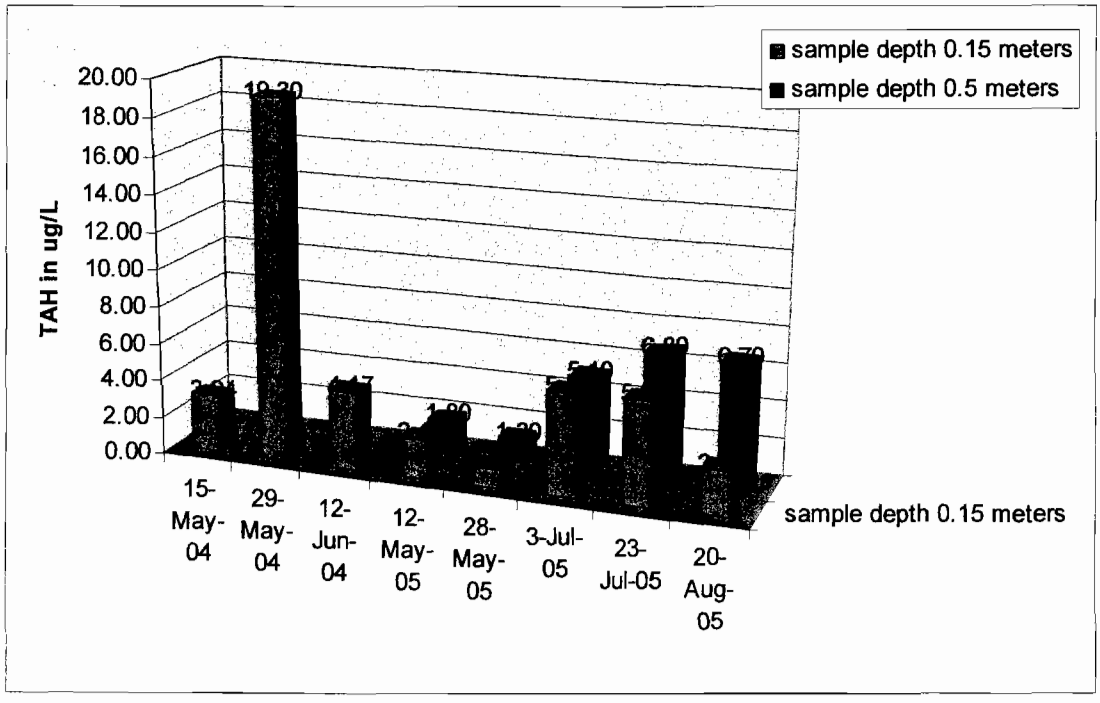


Figure 8: Sample site BL-08 results for 2004 & 2005

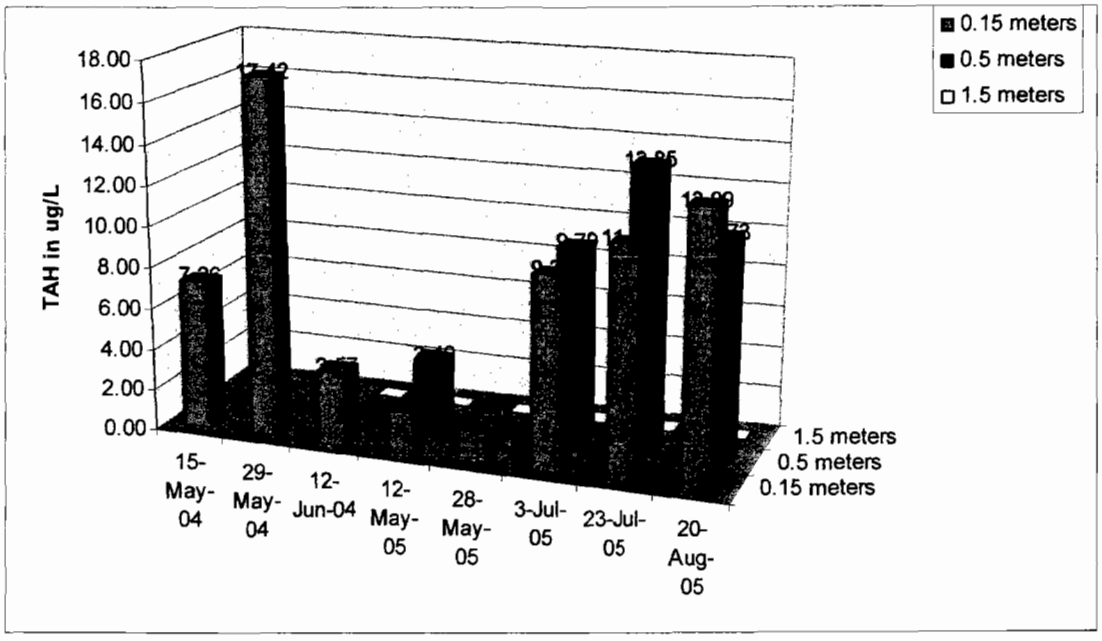
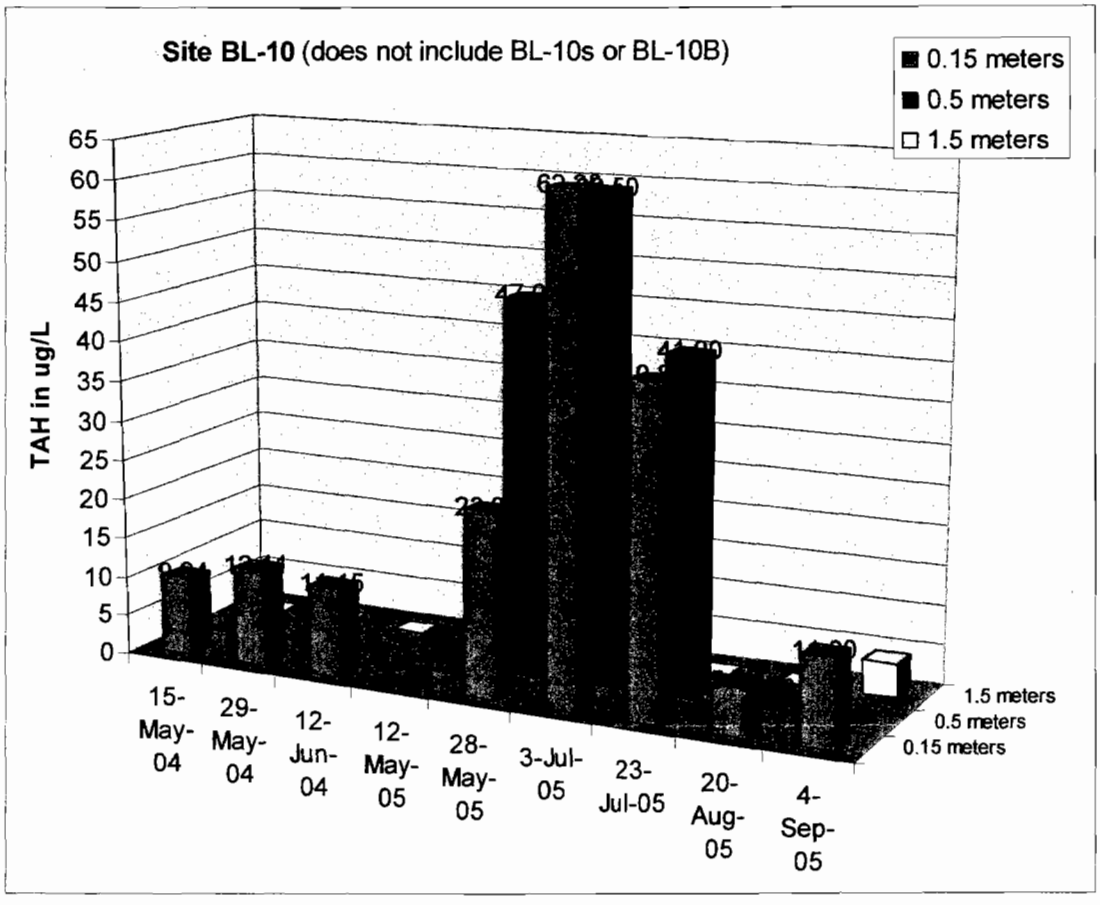


Figure 9: Sample site BL-10 results for 2004 & 2005



RC 112

MEMORANDUM

State of Alaska
Department of Law

TO: Dr. John White
Chair
Alaska Board of fisheries

The Honorable Frank Rue
Commissioner
Department of Fish & Game

DATE: November 6, 1997

FILE NO.: 661-98-0127

TELEPHONE NO.: 269-5240

SUBJECT: Authority of the Board of Fisheries Over Private Nonprofit Hatchery Production

FROM: Robert C. Nauheim
Lance B. Nelson
Assistant Attorneys General
Natural Resources-Anchorage

I. Introduction

In your memorandum of June 24, 1997, and in discussions at the recent Board of Fisheries (Board) work session, you requested guidance regarding the authority of the Board over private, nonprofit salmon hatcheries and their operations. Specifically, you asked for a review of (1) statutes and regulations relating to the authority of the Board and the Commissioner of the Department of Fish and Game (commissioner) over hatchery salmon production and cost recovery, (2) the historical development of Board authority in this area, (3) the scope of the Board's authority over hatchery salmon production, and (4) the relationship between the Department of Commerce and Economic Development's hatchery loan program, the Board, and the Department of Fish and Game (department). We understand that you require an analysis of these issues to assist the Board in its discussions during its upcoming meetings.

II. Summary Answers

1. The legislative scheme for the regulation of private, nonprofit hatcheries vests the more detailed, comprehensive authority in the commissioner and department.

2. Although the board initially had broad rule-making authority over all aspects of the private, nonprofit hatchery program, the legislature significantly restricted that authority by an amendment to AS 16.10.440(b) in 1979.

3. The Board may exercise indirect authority over hatchery production by regulating the harvest of hatchery-released fish in the common use fishery, hatchery brood stock and cost-recovery harvests, and by amending those portions of hatchery permits relating to the source and number of salmon eggs, hatchery harvests, and the designation of special harvest areas by the adoption of appropriate regulations. However, Board action that effectively revokes, or prevents the issuance of, a hatchery permit is probably not authorized.

4. The Commissioner of the Department of Commerce and Economic Development is independently responsible for the implementation of the hatchery loan program under AS 16.10.500 - 16.10.560.

III. Discussion

This discussion focuses primarily upon an evaluation of existing Board authority over the operation of private, nonprofit salmon hatcheries. It opens with a review of the extensive statutory authority of the commissioner and the department over hatcheries.

Beginning in 1974, the legislature adopted various statutory provisions regulating the construction and operation of private, nonprofit salmon hatcheries in Alaska. The goal of the program was "the rehabilitation of the state's depleted and depressed salmon fishery." Sec. 1, ch. 111, SLA 1974. Although the legislature initially granted both the department and the Board responsibility for the program, it limited what was initially a broad grant of rule-making authority to the Board over the implementation of the program by statutory amendment in 1979.

A. Commissioner/Department Authority over Hatcheries

The hatchery statutes place direct and nearly comprehensive responsibility for the private, nonprofit hatchery program in the hands of the commissioner and the department. The legislature has granted exclusive authority to the commissioner to issue permits for the construction and operation of salmon hatcheries. *Id.* at § 2; AS 16.10.400-16.10.430 (as amended). We believe this broad and detailed permitting authority was intended to assign responsibility for the fundamental policy determination of whether to authorize the operation of a private, nonprofit hatchery to the commissioner and department.

1. Pre-permit Responsibilities

Pursuant to AS 16.10.375 the commissioner must designate regions of the state for salmon production and develop a comprehensive salmon plan for each region through teams consisting of department personnel and nonprofit regional associations of user groups. The commissioner also has the task of classifying an anadromous fish stream as suitable for enhancement purposes before a permit for a hatchery on that stream may be issued. AS 16.10.400(f). AS 16.10.400(g) requires a determination by the commissioner that a hatchery would result in substantial public benefits and would not jeopardize natural stocks. The statutes also require the department to conduct public hearings near the proposed hatcheries, and to consider comments offered by the public at the hearings before issuance of a permit. AS 16.10.410.

2. Permit Issuance and Hatchery Operation Responsibilities

For issuing a private, nonprofit hatchery permit, the legislature delegated to the department the power to control the following:

(1) the specific location where eggs or fry may be placed in the waters of the state (AS 16.10.420(2));

(2) the source of salmon eggs procured by the hatchery (AS 16.10.420(1));

(3) the resale of salmon eggs procured by the hatchery (AS 16.10.420(3));

(4) the release of salmon by the hatchery (AS 16.10.420(4));

(5) the designation of the manner and place for the destruction of any diseased salmon (AS 16.10.420(5));

(6) the specific locations for the harvest of adult salmon (AS 16.10.420(6));

(7) the first option to purchase surplus eggs from a hatchery and inspection of eggs and the approval of sale of those eggs to other hatcheries (AS 16.10.420(7));

(8) the determination of reasonable segregation by location) of hatchery from natural stocks (AS 16.10.420(10));

(9) the source and number of salmon eggs to be used by the hatchery (AS 16.10.445(a)); and

(10) the inspection of hatchery facilities (AS 16.10.460).

3. Alteration, Suspension, or Revocation Authority

The commissioner may suspend or revoke a permit after determination of a failure to comply with conditions and terms of the permit. AS 16.10.430(a). Upon a finding "that the operation of the hatchery is not in the best interests of the public, the commissioner may alter the conditions of the permit to mitigate the adverse effects" and, in extreme cases, may "initiate termination of the operation under the permit over a reasonable period of time under the circumstances, not to exceed four years." AS 16.20.430(b).

The foregoing authorities demonstrate that the legislature granted detailed and broad authority to the commissioner and the department for the implementation and day-to-day regulation of salmon hatcheries. On the other hand, the specific authority given to the Board is more circumscribed.

B. Board of Fisheries' Authority over Hatcheries

Although the legislature placed primary administrative authority over the permitting and day-to-day operation of hatcheries within the department, it also vested considerable general and specific authority in the Board of Fisheries. The Board's regulatory authority over private, nonprofit hatcheries is governed primarily by AS 16.05.251, 16.10.440 and 16.10.730.

1. Board Authority under AS 16.05.251

The Board's general rule-making powers over fish and the taking of fish are set out in AS 16.05.251. These powers include setting time, area, and methods and means limitations on the taking of fish. AS 16.05.251(a)(2), (4). The Board also establishes quotas, bag limits and harvest levels. AS 16.05.251(a)(3).

The Board has broad authority to "adopt regulations it considers advisable . . . for regulating commercial, sport, guided sport, subsistence, and personal use fishing as needed for the conservation, development, and utilization of fisheries." AS 16.05.251(a)(12). This authority includes the power to allocate fishing opportunities between competing user groups. *Meier v. State*, 739 P.2d 172, 174 (Alaska App. 1987); AS 16.05.251(e). The Board's authority extends to the regulation of the harvest of hatchery fish and egg collection. *See* 1990 Inf. Op. Att'y Gen. 41 (August 1; 663-90-0327) (Board's regulatory authority extends to management of hatchery brood stock and allocation of cost-recovery fishing). Existing regulations reflect this principle. *See* 5 AAC 40.005 (harvest of hatchery-produced fish governed by Board regulation). The Board also has general authority to adopt regulations for "prohibiting and regulating the live capture, possession, transport, or release of native or exotic fish or their eggs." AS 16.05.251(a)(9). This provision would include, but is not limited to, regulation of the capture, possession, transportation, and release of salmon and their eggs by hatcheries. *Id.*

2. Board Authority under AS 16.10.440

In former AS 16.10.440, the legislature initially vested broad rule-making authority in the Board of Fisheries and Game[1] over hatchery-produced fish and the implementation of the hatchery program in general. Sec. 2, ch. 111, SLA 1974. Former AS 16.10.440 provided:

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[1] Prior to 1975, regulatory authority over the harvest of fish and game resources was vested in the Board of Fisheries and Game. In 1975 the legislature abolished the Board of Fisheries and Game and simultaneously created a separate Board of Game and Board of Fisheries, each having broad regulatory powers. Ch. 206, SLA 1975; *see also* AS 16.05.221, 16.05.241, 16.05.251, 16.05.255. The legislature also amended AS 16.10.440(b) to clarify that the authority over hatcheries formerly resting in the Board of Fisheries and Game was to be held by the newly created Board of Fisheries.

> REGULATION: (a) Fish released into the natural waters of the state by a hatchery operated under secs. 400 - 470 of this chapter are available to the people for common use and are subject to regulation under applicable law in the same way as fish occurring in their natural state until they return to the specific location designated by the department for harvest by the hatchery operator.
>
> (b) The board may promulgate regulations necessary to implement secs. 400 - 470 of this chapter.

Alaska Statute 16.10.440 (a), which has remained unchanged since 1975, confirms that fish released by hatcheries into the natural waters of the state are, as are all wild fish and game within the state, available for common use and subject to lawful regulation. *See generally McDowell v. State*, 785 P.2d 1, 5-9 (Alaska 1989)(equal access clauses of art. VIII of Alaska Constitution are intended to provide the broadest possible public access to state's fish and game.)

Alaska Statutue 16.10.440(a) does purport to exempt the effect of at least some applicable law to hatchery-produced fish once the fish arrive at areas designated by the department for harvest by the hatchery operator. *See* AS 16.10.440(a) (fish subject to regulation "until they return to the specific location designated by the department for harvest by the hatchery operator"). For reasons discussed in greater detail below, AS 16.10.440(a) does not significantly limit the authority of the Board or the department to regulate hatchery-produced fish at these locations, since AS 16.10.440(b) goes on to grant specific authority for regulation at the point of return.

Former AS 16.10.440(b) vested in the Board of Fisheries and Game broad authority to "promulgate regulations necessary to implement sec. 400 - 470 of this chapter." This broad language purported to give the Board of Fisheries and Game expansive rule-making authority over all aspects of carrying out the hatchery program.

In 1979, the legislature amended AS 16.10.440(b), eliminating the broad authority "to promulgate regulations necessary to implement" the hatchery program, and replacing it with more specific, but limited responsibilities:

> (b) The Board of Fisheries may, after the issuance of a permit by the commissioner, amend by regulation adopted in accordance with the

> Administrative Procedures Act (AS 44.62), the terms of the permit relating to the source and number of salmon eggs, the harvest of fish by hatchery operators, and the specific locations designated by the department for harvest. The Board of Fisheries may not adopt any regulations nor take any action regarding the issuance or denial of any permits required in AS 16.10.400-16.10.470.

Sec. 3, ch. 59, SLA 1979.[2]

The legislative history of the 1979 amendment reveals the legislative intent behind the new, more restricted language:

> Section 2 of the bill [HB 359] amends AS 16.10.440(a)(b). The amendment clarifies the role of the Board of Fisheries. The role of the Board of Fisheries as envisioned by the original legislation was to *regulate the harvest of salmon returning to the waters of the state. That role extends to regulating those fish which are returning as a result of releases from natural systems and also from hatchery releases.* There are provisions in other portions of the non-profit hatchery Act which allow the designation of specific locations for the harvest of salmon by the hatchery operator for sale, and use of the money from that sale, for the specific purposes as stated in AS 16.10.450. *The added language clarifies that the Board of Fisheries may adopt regulations relating to the harvest of the fish by hatchery operators at the specifically designated locations.* The Board of Fisheries in the past year or two has enacted regulations relating to those harvests for several of the private non-profit hatcheries in the state.

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[2] In 1979, the legislature also authorized the Commercial Fisheries Entry Commission to issue special harvest area limited entry permits to operators of private, nonprofit hatcheries. Sec. 1, ch. 64, SLA 1979; AS 16.43.400-16.43.440. Special harvest areas may be designated by the department in a hatchery permit, by emergency orders under AS 16.10.420, or by regulation adopted by the Board under AS 16.05.251 or AS 16.10.440(a). *See* 1993 Inf. Op. Att'y Gen. 273 (July 16; 663-93-522).

> The intention of the original bill relating to the non-profit hatchery Act as amended in recent years was that the permits for the construction and operation of the private non-profit hatcheries were to be issued by the Commissioner of the Department of Fish and Game. Specific language in AS 16.10.400 lays out the grounds for the issuance of the permits and AS 16.10.420 lays out the statutory guidelines that must be included in such a permit. Those statutory provisions remain the same under this amendment.
>
> In this bill AS 16.10.440(b) is deleted and the necessary powers are substituted in the language which is added to (a).[3] That deletion helps clarify a technical problem which has arisen because the original section (b) stated that the Board of Fisheries may promulgate regulations necessary to implement subsections 400 - 470 of this chapter. That in effect gave the Board of fisheries the power to enact regulations regarding a requirement by the Department of Commerce and Economic Development. In section .470(b) the Department of Commerce and Economic Development is instructed to provide a form to the permit holder for submission of an annual report regarding the financial aspects of the hatchery operation, if such a hatchery operator has obtained a loan from the State of Alaska.

House Journal, March 15, 1979 (remarks of Rep. Fred Zharoff, Chm. House Resources Committee regarding HB 359) (emphasis added).

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[3] In the final version of the bill passed by the legislature, the language referenced here was again divided into two subsections, leaving AS 16.10.440(a) intact and moving the new language into subsection (b).

3. Board Authority under AS 16.05.730

In 1992, the legislature enacted AS 16.05.730[4], which requires the department and Board to manage all fish stocks consistent with the sustained yield of wild fish stocks and authorizes, but does not require, management consistent with the sustained yield of enhanced stocks. AS 16.05.730(a). In addition, the statute mandates Board consideration of the need of enhancement projects to obtain brood stock when allocating enhanced fish stocks, and authorizes the Board to direct the department's management to achieve an

---

[4] AS 16.05.730 provides:

> **Management of wild and enhanced stocks of fish.** (a) Fish stocks in the state shall be managed consistent with sustained yield of wild fish stocks and may be managed consistent with sustained yield of enhanced fish stocks.
>
> (b) In allocating enhanced fish stocks, the board shall consider the need of fish enhancement projects to obtain brood stock. The board may direct the department to manage fisheries in the state to achieve an adequate return of fish from enhanced stocks to enhancement projects for brood stock; however, management to achieve an adequate return of fish to enhancement projects for brood stock shall be consistent with sustained yield of wild fish stocks.
>
> (c) The board may consider the need of enhancement projects authorized under AS 16.10.400 and contractors who operate state-owned enhancement projects under AS 16.10.480 to harvest and sell fish produced by the enhancement project that are not needed for brood stock to obtain funds for the purposes allowed under AS 16.10.450 or 16.10.480(d). The board may exercise its authority under this title as it considers necessary to direct the department to provide a reasonable harvest of fish, in addition to the fish needed for brood stock, to an enhancement project to obtain funds for the enhancement project if the harvest is consistent with sustained yield of wild fish stocks. The board may adopt a fishery management plan to provide fish to an enhancement project to obtain funds for the purposes allowed under AS 16.10.450 or 16.10.480(d).
>
> (d) In this section, "enhancement project" means a project, facility, or hatchery for the enhancement of fishery resources of the state for which the department has issued a permit.

adequate return for brood stock. AS 16.05.730(b). The Board may also consider the need for enhancement projects to harvest and sell fish to obtain funds for project operation, may direct the department to provide a reasonable harvest of fish to the hatchery for those purposes, and may adopt management plans to provide fish to a hatchery to obtain funds for the purposes allowed under AS 16.10.450 or AS 16.10.480(d). AS 16.05.730(c). Significantly, while the statute requires Board consideration of hatchery brood stock needs, it does not mandate any particular level of hatchery harvest of enhanced fish stocks. Consideration of harvest and sale of fish for project funding is authorized, but not required.

C. The Balance between Department Commissioner and Board Authority over Private Nonprofit Hatchery Production

As the foregoing discussion suggests, the department and the Board share regulatory authority over private, nonprofit hatcheries. Although primary responsibility over permitting and the administration of the hatchery program rests with the department, the Board has substantial, indirect control over hatchery production by virtue of its regulatory authority to amend hatchery permits with respect to special harvest areas, the harvest of brood stock[5] and cost-recovery fish.[6]

Though no statute expressly grants the Board regulatory authority over hatchery production *per se*, it may exercise considerable influence over hatchery production by virtue of its authority to directly amend hatchery permit terms relating to fish and egg harvesting.[7] We have previously advised that while the Board is authorized to do so, it is not required to allocate cost recovery fish to a hatchery. 1990 Inf. Op. Att'y Gen. 41 (Aug. 1;

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[5] In this memorandum, we use the term "brood stock" to designate fish returning to the hatchery as a result of hatchery operations that are harvested for the purpose of the biological reproduction of fish.

[6] In this memorandum, we use the term "cost-recovery" fish to designate those fish or eggs authorized to be harvested for purposes of sale under AS 16.10.450.

[7] It might be argued that the authority set out in AS 16.10.440(b) to amend hatchery permits, particularly as to the "source and number of salmon eggs," is express and direct authority to regulate hatchery production. Since the statute does not expressly address "hatchery production" or any similar concept, we have, in previous oral comments to the Board, characterized the authority over this area to be "indirect" and "implied." We continue to believe that this advice is correct.

663-90-0327); AS 16.05.730(c). Similarly, we have advised that the Board has authority to regulate brood stock harvest. *Id.*

The Board must *consider* hatchery brood stock needs in determining appropriate harvest levels. AS 16.05.730(b). The Board may also consider hatchery cost recovery needs. AS 16.05.730(c). However, it is not *required* to provide harvest opportunities that are inconsistent with what the Board reasonably determines to be appropriate. 1990 Inf. Op. Att'y Gen. 41 (August 1; 663-90-0327). For example, to the extent the Board believes that a hatchery permit issued by the department provides too liberal or restrictive an opportunity to harvest salmon or collect eggs,[8] it may amend the permit by adopting appropriate regulations.

As previously noted, AS 16.05.730 requires the Board to manage all stocks of fish consistent with the sustained yield of wild fish stocks and to consider the need of fish enhancement projects for brood stock. Accordingly, in evaluating whether to amend a hatchery permit or adopt regulations governing hatchery harvests, the Board must carefully consider the needs of fish enhancement projects to obtain brood stock and manage harvests so as to be consistent with the sustained yield of wild fish stocks. AS 16.05.730(a), (b).

The Board's authority over hatchery production is circumscribed by the 1979 amendment to AS 16.10.440(b) and, to a lesser extent, by AS 16.05.730. The Board's authority to amend permits is limited to terms in the permit "relating to the source and number of salmon eggs, the harvest of fish by hatchery operators, and the specific locations designated by the department for harvest."[9] Under AS 16.10.440(b) the Board "may not adopt any regulations or take any action regarding the issuance or denial of any permits

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[8] It has been suggested that the Board's authority to regulate the harvest of eggs from returning hatchery fish may be distinguishable from its authority to regulate the harvest of eggs from wild fish stocks. We see no reason to distinguish between these two. The Board has authority to amend hatchery permits as they relate to "the source and number of salmon eggs." AS 16.10.440(b). We believe this language covers the harvest of eggs from both wild and hatchery stocks.

[9] AS 16.10.440(a) provides that hatchery-released fish are subject to Board regulation "until they return to the specific location designated by the department for harvest by the hatchery operator." However, given the Board's general authority over the allocation of fishery resources under AS 16.05.251 and its specific authority to amend hatchery permits by regulation under AS 16.05.440(b), it may, therefore, regulate the harvest of salmon or collection of eggs *after* salmon have returned to the location designated for harvest or egg collection in that manner.

required in AS 16.10.400-16.10.470." Although the meaning of this limitation is not completely clear, we conclude for the reasons set forth below that the limiting language contained in AS 16.10.440(b) was intended to clarify that the Board's specific regulatory authority over the amendment[10] of hatchery permits is to be limited to the authority set out in AS 16.10.440(b).[11]

The following principles would guide a court in interpreting AS 16.10.440(b). In interpreting a statute, a court's goal is to give effect to the intent of the legislature with due regard to the plain meaning of the statute. *Cook v. Botelho*, 921 P.2d 1126, 1129 (Alaska 1996). In addition, a court may consider the overall purpose of a statute and its legislative history. *Muller v. BP Exploration (Alaska), Inc.*, 923 P.2d 783, 789-91 (Alaska 1996). Whenever possible, each part or section of a statute must be interpreted to create a harmonious whole. *Rydwell v. Anchorage School District*, 864 P.2d 526, 528 (Alaska 1993). Finally, where a potential conflict or ambiguity exists, a statute that deals more specifically with a particular issue must govern over a more general statute. *Welch v. City of Valdez*, 821 P.2d 1354, 1363 (Alaska 1991).

Given (1) the detailed statutory scheme granting specific authority to the department over nearly every aspect of the permitting and operation of nonprofit hatcheries, (2) the more general statutory authority of the Board over the harvest of fishery resources, and (3) by contrast, the limitations imposed upon the specific statutory authority of the Board over hatchery permits by the amendment to AS 16.10.440(b) in 1979, we conclude the following. Though the Board may effectively amend hatchery permits by regulation in a manner that affects hatchery fish production, we do not believe the Board may either (1) adopt regulations that effectively veto or override a fundamental department policy

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[10] The legislature's use of the concept of "amending" permits by the adoption of Board regulation presents an unusual mixture of administrative law principles. We believe the legislature's use of the concept of amending a hatchery permit by regulation was not intended to vest the Board with administrative adjudicatory authority over permits. *See* AS 16.05.241 (the Board has rule-making authority, but does not have other administrative powers). Instead, we interpret the legislature's use of the term "amend" to allow the Board to adopt regulations that may *effectively* change or modify an existing permit by virtue of the change in regulatory setting created by appropriate Board regulation. *See also* AS 16.10.400(a) (commissioner-approved permits are "subject to the restrictions imposed by statute or regulation under AS 16.10.400-16.20.470").

[11] This view is supported by AS 16.10.400(a), which specifically provides that permits are subject to "restrictions imposed by . . . regulation under AS 16.20.400-16.10.470."

decision regarding whether to authorize the operation of a particular hatchery or (2) adopt regulations preventing the department from exercising its authority to permit a hatchery operation. We believe that Board actions falling into either of these two categories would risk being viewed by a court as constructing an impermissible impediment to the department's role as the primary government agency responsible for the regulation of hatcheries. In particular, such actions would risk being deemed incompatible with the limitations imposed by the 1979 amendment to AS 16.05.440(b).

A recent decision by the Alaska Supreme Court supports this view. In *Peninsula Marketing Ass'n v. Rosier*, 890 P.2d 567, 573 (Alaska 1995), the court held that in absence of specific statutory authority for the commissioner to issue emergency orders concerning a question previously considered by the Board, the commissioner could not effectively veto a decision by the Board for which there was specific statutory authority. The court ruled that "[i]nferring a broad veto power would make superfluous the detailed provisions dividing power and authority within the Department" and effectively eviscerate the powers explicitly granted to the Board. *Id.* Similarly, to read the limited grant of authority to the Board over hatcheries set out in AS 16.10.440(b) to permit the Board to effectively veto fundamental policy decisions by the department for which there is specific statutory authority would upset the balance of the statutory scheme chosen by the legislature.

Additional reasons support that conclusion. As previously noted, the Board "may not adopt any regulations or take any action regarding the *issuance* or *denial* of any permits required under AS 16.10.400-16.10.470." AS 16.10.440(b) (emphasis added). We believe that a Board regulation that so drastically amends a hatchery permit to render the hatchery's operation impracticable might be viewed by a court to be an impermissible action by the Board "regarding the issuance or denial . . . of a permit." *See* AS 16.10.440(b). In other words, a Board amendment that puts a hatchery out of operation might be construed as an effective revocation or denial of a hatchery permit, an action that is expressly prohibited by AS 16.10.440(b). Similarly, Board regulations prohibiting the establishment of a hatchery in a particular area deemed by a court as an action by the Board regarding the issuance of a permit and, therefore, unlawful under AS 16.10.440(b).[12]

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[12] We realize that without additional clarification from the legislature the parameters of permissible Board regulations remain somewhat murky. However, we believe that the more significantly a particular Board regulation restricts the effective functioning of a hatchery in a way that is incompatible with a departmental decision to permit the hatchery's operation, the greater is the risk that the Board regulation may be invalidated by a reviewing court.

One additional aspect of Board and department authority merits some discussion. AS 16.05.251(a)(9) specifically authorizes the Board to adopt regulations "prohibiting and regulating the live capture, possession, transport, or *release* of native or exotic fish or their eggs" (emphasis added). This statute must be read, if possible, to be harmonized with AS 16.10.420, the statute governing the department's authority to issue hatchery permits, and the limitation on Board authority with respect to Board "amendment" of hatchery permits set out in AS 16.10.440(b). *See Borg-Warner v. Avco Corp.*, 850 P.2d 628 (Alaska 1993). Although AS 16.10.420 requires the department to issue hatchery permits specifying that a hatchery may not place or release salmon eggs or fry in the waters of the state other than those provided in the permit, the statute does not directly conflict with the Board's authority over the release of fish set out in AS 16.05.251(a)(9). However, AS 16.10.440(b) does not specifically authorize the Board to adopt regulations that amend the terms of the permit governing the release of hatchery fish.

Currently, the Board has delegated its authority over the release of fish to the department commissioner by the adoption of 5 AAC 41. These regulations establish a process for the issuance of permits by the commissioner according to regulatory criteria for the release of fish. Accordingly, absent a repeal by the Board of this delegation of authority, there may not be significant potential for conflict between the Board and the department.

D. Fisheries Enhancement Loan Program

In 1977, the legislature created the fisheries enhancement revolving loan fund within the Department of Commerce and Economic Development for making loans to private, nonprofit hatchery permit holders and to regional associations for long-term, low-interest loans for the planning, construction, and operation of salmon hatcheries, and the rehabilitation and enhancement of salmon fisheries. Sec. 9, ch. 154, SLA 1977; AS 16.10.500-16.10.500. The Commissioner of the Department of Commerce and Economic Development independently administers this loan program.[13] *See* AS 16.10.500-16.10.560.

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[13] As the legislative history set out previously in this memorandum suggests, the broad rule-making authority under former AS 16.10.440 created uncertainty regarding whether the Board could, by adopting appropriate regulations, affect the requirement of hatcheries to report to the Department of Commerce and Economic Development under AS 16.10.470. The 1979 amendment to AS 16.10.440 clarifies that the Board may not regulate in this area.

The Commissioner of the Department of Commerce is authorized to make loans from the fisheries enhancement revolving loan fund to holders of private, nonprofit salmon hatchery permits issued by the Department of Fish and Game under AS 16.10.400-16.10.470. AS 16.10.505, 16.10.510. The commissioner may also make grants to qualified regional associations for "organizational and planning purposes." AS 16.10.510(9).

While this loan and grant program is administered independently from the Department of Fish and Game and the Board, only qualified regional associations and private, nonprofit hatchery permit holders are eligible to receive them. *See* AS 16.10.510-16.10.520.

IV. Conclusion

We hope this discussion provides answers to your questions. Please do not hesitate to contact us if we can provide additional assistance.

3. Board Authority under AS 16.05.730

In 1992, the legislature enacted AS 16.05.730[4], which requires the department and Board to manage all fish stocks consistent with the sustained yield of wild fish stocks and authorizes, but does not require, management consistent with the sustained yield of enhanced stocks. AS 16.05.730(a). In addition, the statute mandates Board consideration of the need of enhancement projects to obtain brood stock when allocating enhanced fish stocks, and authorizes the Board to direct the department's management to achieve an

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[4] AS 16.05.730 provides:

> **Management of wild and enhanced stocks of fish.** (a) Fish stocks in the state shall be managed consistent with sustained yield of wild fish stocks and may be managed consistent with sustained yield of enhanced fish stocks.
>
> (b) In allocating enhanced fish stocks, the board shall consider the need of fish enhancement projects to obtain brood stock. The board may direct the department to manage fisheries in the state to achieve an adequate return of fish from enhanced stocks to enhancement projects for brood stock; however, management to achieve an adequate return of fish to enhancement projects for brood stock shall be consistent with sustained yield of wild fish stocks.
>
> (c) The board may consider the need of enhancement projects authorized under AS 16.10.400 and contractors who operate state-owned enhancement projects under AS 16.10.480 to harvest and sell fish produced by the enhancement project that are not needed for brood stock to obtain funds for the purposes allowed under AS 16.10.450 or 16.10.480(d). The board may exercise its authority under this title as it considers necessary to direct the department to provide a reasonable harvest of fish, in addition to the fish needed for brood stock, to an enhancement project to obtain funds for the enhancement project if the harvest is consistent with sustained yield of wild fish stocks. The board may adopt a fishery management plan to provide fish to an enhancement project to obtain funds for the purposes allowed under AS 16.10.450 or 16.10.480(d).
>
> (d) In this section, "enhancement project" means a project, facility, or hatchery for the enhancement of fishery resources of the state for which the department has issued a permit.

adequate return for brood stock. AS 16.05.730(b). The Board may also consider the need for enhancement projects to harvest and sell fish to obtain funds for project operation, may direct the department to provide a reasonable harvest of fish to the hatchery for those purposes, and may adopt management plans to provide fish to a hatchery to obtain funds for the purposes allowed under AS 16.10.450 or AS 16.10.480(d). AS 16.05.730(c). Significantly, while the statute requires Board consideration of hatchery brood stock needs, it does not mandate any particular level of hatchery harvest of enhanced fish stocks. Consideration of harvest and sale of fish for project funding is authorized, but not required.

C. The Balance between Department Commissioner and Board Authority over Private Nonprofit Hatchery Production

As the foregoing discussion suggests, the department and the Board share regulatory authority over private, nonprofit hatcheries. Although primary responsibility over permitting and the administration of the hatchery program rests with the department, the Board has substantial, indirect control over hatchery production by virtue of its regulatory authority to amend hatchery permits with respect to special harvest areas, the harvest of brood stock[5] and cost-recovery fish.[6]

Though no statute expressly grants the Board regulatory authority over hatchery production *per se*, it may exercise considerable influence over hatchery production by virtue of its authority to directly amend hatchery permit terms relating to fish and egg harvesting.[7] We have previously advised that while the Board is authorized to do so, it is not required to allocate cost recovery fish to a hatchery. 1990 Inf. Op. Att'y Gen. 41 (Aug. 1;

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[5] In this memorandum, we use the term "brood stock" to designate fish returning to the hatchery as a result of hatchery operations that are harvested for the purpose of the biological reproduction of fish.

[6] In this memorandum, we use the term "cost-recovery" fish to designate those fish or eggs authorized to be harvested for purposes of sale under AS 16.10.450.

[7] It might be argued that the authority set out in AS 16.10.440(b) to amend hatchery permits, particularly as to the "source and number of salmon eggs," is express and direct authority to regulate hatchery production. Since the statute does not expressly address "hatchery production" or any similar concept, we have, in previous oral comments to the Board, characterized the authority over this area to be "indirect" and "implied." We continue to believe that this advice is correct.

663-90-0327); AS 16.05.730(c). Similarly, we have advised that the Board has authority to regulate brood stock harvest. *Id.*

The Board must *consider* hatchery brood stock needs in determining appropriate harvest levels. AS 16.05.730(b). The Board may also consider hatchery cost recovery needs. AS 16.05.730(c). However, it is not *required* to provide harvest opportunities that are inconsistent with what the Board reasonably determines to be appropriate. 1990 Inf. Op. Att'y Gen. 41 (August 1; 663-90-0327). For example, to the extent the Board believes that a hatchery permit issued by the department provides too liberal or restrictive an opportunity to harvest salmon or collect eggs,[8] it may amend the permit by adopting appropriate regulations.

As previously noted, AS 16.05.730 requires the Board to manage all stocks of fish consistent with the sustained yield of wild fish stocks and to consider the need of fish enhancement projects for brood stock. Accordingly, in evaluating whether to amend a hatchery permit or adopt regulations governing hatchery harvests, the Board must carefully consider the needs of fish enhancement projects to obtain brood stock and manage harvests so as to be consistent with the sustained yield of wild fish stocks. AS 16.05.730(a), (b).

The Board's authority over hatchery production is circumscribed by the 1979 amendment to AS 16.10.440(b) and, to a lesser extent, by AS 16.05.730. The Board's authority to amend permits is limited to terms in the permit "relating to the source and number of salmon eggs, the harvest of fish by hatchery operators, and the specific locations designated by the department for harvest."[9] Under AS 16.10.440(b) the Board "may not adopt any regulations or take any action regarding the issuance or denial of any permits

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[8] It has been suggested that the Board's authority to regulate the harvest of eggs from returning hatchery fish may be distinguishable from its authority to regulate the harvest of eggs from wild fish stocks. We see no reason to distinguish between these two. The Board has authority to amend hatchery permits as they relate to "the source and number of salmon eggs." AS 16.10.440(b). We believe this language covers the harvest of eggs from both wild and hatchery stocks.

[9] AS 16.10.440(a) provides that hatchery-released fish are subject to Board regulation "until they return to the specific location designated by the department for harvest by the hatchery operator." However, given the Board's general authority over the allocation of fishery resources under AS 16.05.251 and its specific authority to amend hatchery permits by regulation under AS 16.05.440(b), it may, therefore, regulate the harvest of salmon or collection of eggs *after* salmon have returned to the location designated for harvest or egg collection in that manner.

required in AS 16.10.400-16.10.470." Although the meaning of this limitation is not completely clear, we conclude for the reasons set forth below that the limiting language contained in AS 16.10.440(b) was intended to clarify that the Board's specific regulatory authority over the amendment[10] of hatchery permits is to be limited to the authority set out in AS 16.10.440(b).[11]

The following principles would guide a court in interpreting AS 16.10.440(b). In interpreting a statute, a court's goal is to give effect to the intent of the legislature with due regard to the plain meaning of the statute. *Cook v. Botelho*, 921 P.2d 1126, 1129 (Alaska 1996). In addition, a court may consider the overall purpose of a statute and its legislative history. *Muller v. BP Exploration (Alaska), Inc.*, 923 P.2d 783, 789-91 (Alaska 1996). Whenever possible, each part or section of a statute must be interpreted to create a harmonious whole. *Rydwell v. Anchorage School District*, 864 P.2d 526, 528 (Alaska 1993). Finally, where a potential conflict or ambiguity exists, a statute that deals more specifically with a particular issue must govern over a more general statute. *Welch v. City of Valdez*, 821 P.2d 1354, 1363 (Alaska 1991).

Given (1) the detailed statutory scheme granting specific authority to the department over nearly every aspect of the permitting and operation of nonprofit hatcheries, (2) the more general statutory authority of the Board over the harvest of fishery resources, and (3) by contrast, the limitations imposed upon the specific statutory authority of the Board over hatchery permits by the amendment to AS 16.10.440(b) in 1979, we conclude the following. Though the Board may effectively amend hatchery permits by regulation in a manner that affects hatchery fish production, we do not believe the Board may either (1) adopt regulations that effectively veto or override a fundamental department policy

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[10] The legislature's use of the concept of "amending" permits by the adoption of Board regulation presents an unusual mixture of administrative law principles. We believe the legislature's use of the concept of amending a hatchery permit by regulation was not intended to vest the Board with administrative adjudicatory authority over permits. *See* AS 16.05.241 (the Board has rule-making authority, but does not have other administrative powers). Instead, we interpret the legislature's use of the term "amend" to allow the Board to adopt regulations that may *effectively* change or modify an existing permit by virtue of the change in regulatory setting created by appropriate Board regulation. *See also* AS 16.10.400(a) (commissioner-approved permits are "subject to the restrictions imposed by statute or regulation under AS 16.10.400-16.20.470").

[11] This view is supported by AS 16.10.400(a), which specifically provides that permits are subject to "restrictions imposed by . . . regulation under AS 16.20.400-16.10.470."

decision regarding whether to authorize the operation of a particular hatchery or (2) adopt regulations preventing the department from exercising its authority to permit a hatchery operation. We believe that Board actions falling into either of these two categories would risk being viewed by a court as constructing an impermissible impediment to the department's role as the primary government agency responsible for the regulation of hatcheries. In particular, such actions would risk being deemed incompatible with the limitations imposed by the 1979 amendment to AS 16.05.440(b).

A recent decision by the Alaska Supreme Court supports this view. In *Peninsula Marketing Ass'n v. Rosier*, 890 P.2d 567, 573 (Alaska 1995), the court held that in absence of specific statutory authority for the commissioner to issue emergency orders concerning a question previously considered by the Board, the commissioner could not effectively veto a decision by the Board for which there was specific statutory authority. The court ruled that "[i]nferring a broad veto power would make superfluous the detailed provisions dividing power and authority within the Department" and effectively eviscerate the powers explicitly granted to the Board. *Id.* Similarly, to read the limited grant of authority to the Board over hatcheries set out in AS 16.10.440(b) to permit the Board to effectively veto fundamental policy decisions by the department for which there is specific statutory authority would upset the balance of the statutory scheme chosen by the legislature.

Additional reasons support that conclusion. As previously noted, the Board "may not adopt any regulations or take any action regarding the *issuance* or *denial* of any permits required under AS 16.10.400-16.10.470." AS 16.10.440(b) (emphasis added). We believe that a Board regulation that so drastically amends a hatchery permit to render the hatchery's operation impracticable might be viewed by a court to be an impermissible action by the Board "regarding the issuance or denial . . . of a permit." *See* AS 16.10.440(b). In other words, a Board amendment that puts a hatchery out of operation might be construed as an effective revocation or denial of a hatchery permit, an action that is expressly prohibited by AS 16.10.440(b). Similarly, Board regulations prohibiting the establishment of a hatchery in a particular area deemed by a court as an action by the Board regarding the issuance of a permit and, therefore, unlawful under AS 16.10.440(b).[12]

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[12] We realize that without additional clarification from the legislature the parameters of permissible Board regulations remain somewhat murky. However, we believe that the more significantly a particular Board regulation restricts the effective functioning of a hatchery in a way that is incompatible with a departmental decision to permit the hatchery's operation, the greater is the risk that the Board regulation may be invalidated by a reviewing court.

One additional aspect of Board and department authority merits some discussion. AS 16.05.251(a)(9) specifically authorizes the Board to adopt regulations "prohibiting and regulating the live capture, possession, transport, or *release* of native or exotic fish or their eggs" (emphasis added). This statute must be read, if possible, to be harmonized with AS 16.10.420, the statute governing the department's authority to issue hatchery permits, and the limitation on Board authority with respect to Board "amendment" of hatchery permits set out in AS 16.10.440(b). *See Borg-Warner v. Avco Corp.*, 850 P.2d 628 (Alaska 1993). Although AS 16.10.420 requires the department to issue hatchery permits specifying that a hatchery may not place or release salmon eggs or fry in the waters of the state other than those provided in the permit, the statute does not directly conflict with the Board's authority over the release of fish set out in AS 16.05.251(a)(9). However, AS 16.10.440(b) does not specifically authorize the Board to adopt regulations that amend the terms of the permit governing the release of hatchery fish.

Currently, the Board has delegated its authority over the release of fish to the department commissioner by the adoption of 5 AAC 41. These regulations establish a process for the issuance of permits by the commissioner according to regulatory criteria for the release of fish. Accordingly, absent a repeal by the Board of this delegation of authority, there may not be significant potential for conflict between the Board and the department.

D. Fisheries Enhancement Loan Program

In 1977, the legislature created the fisheries enhancement revolving loan fund within the Department of Commerce and Economic Development for making loans to private, nonprofit hatchery permit holders and to regional associations for long-term, low-interest loans for the planning, construction, and operation of salmon hatcheries, and the rehabilitation and enhancement of salmon fisheries. Sec. 9, ch. 154, SLA 1977; AS 16.10.500-16.10.500. The Commissioner of the Department of Commerce and Economic Development independently administers this loan program.[13] *See* AS 16.10.500-16.10.560.

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[13] As the legislative history set out previously in this memorandum suggests, the broad rule-making authority under former AS 16.10.440 created uncertainty regarding whether the Board could, by adopting appropriate regulations, affect the requirement of hatcheries to report to the Department of Commerce and Economic Development under AS 16.10.470. The 1979 amendment to AS 16.10.440 clarifies that the Board may not regulate in this area.

The Commissioner of the Department of Commerce is authorized to make loans from the fisheries enhancement revolving loan fund to holders of private, nonprofit salmon hatchery permits issued by the Department of Fish and Game under AS 16.10.400-16.10.470. AS 16.10.505, 16.10.510. The commissioner may also make grants to qualified regional associations for "organizational and planning purposes." AS 16.10.510(9).

While this loan and grant program is administered independently from the Department of Fish and Game and the Board, only qualified regional associations and private, nonprofit hatchery permit holders are eligible to receive them. *See* AS 16.10.510-16.10.520.

IV. Conclusion

We hope this discussion provides answers to your questions. Please do not hesitate to contact us if we can provide additional assistance.

PREPARED BY ALASKA DEPT. FISH & GAME

RC 113

Kenai River Data is sorted by Year, Section of the River, and Date of Activity.

Freshwater Logbook data summaries for the Kenai River, 2005-2007

P50001 - Kenai River - Cook Inlet to Soldotna Bridge
P50002 - Kenai River - Soldotna Bridge to Moose River
P50003 - Kenai River - Moose River to Skilak Outlet
P50004 - Kenai River - Skilak Inlet to Kenai Lake

Source: ADF&G Freshwater Logbook

		King		Coho		Sockeye	
Site	Date	Kept	Rele	Kept	Rele	Kept	Rele
	2005						
Kenai River - Cook Inlet to Soldotna Bridge	5/3/2005	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/4/2005	0	2	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/5/2005	0	1	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/6/2005	1	1	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/7/2005	0	1	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/9/2005	2	1	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/10/2005	1	2	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/11/2005	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/12/2005	1	5	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/13/2005	5	6	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/14/2005	2	5	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/17/2005	8	7	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/18/2005	4	10	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/19/2005	6	7	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/20/2005	9	13	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/21/2005	18	17	6	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/22/2005	3	14	1	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/23/2005	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/24/2005	19	15	1	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/25/2005	21	12	2	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/26/2005	23	10	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/27/2005	16	21	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	5/28/2005	17	17	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	5/29/2005	2	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/30/2005	17	11	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	5/31/2005	29	19	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/1/2005	30	43	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/2/2005	47	37	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/3/2005	47	38	2	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/4/2005	58	36	0	0	1	1
Kenai River - Cook Inlet to Soldotna Bridge	6/6/2005	2	3	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/7/2005	109	86	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	6/8/2005	96	71	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/9/2005	72	65	0	0	3	0
Kenai River - Cook Inlet to Soldotna Bridge	6/10/2005	75	45	0	0	2	1
Kenai River - Cook Inlet to Soldotna Bridge	6/11/2005	61	47	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	6/12/2005	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/13/2005	0	1	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/14/2005	122	76	0	0	5	1
Kenai River - Cook Inlet to Soldotna Bridge	6/15/2005	98	64	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	6/16/2005	80	46	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/17/2005	71	68	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/18/2005	155	148	0	0	4	0
Kenai River - Cook Inlet to Soldotna Bridge	6/19/2005	4	5	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/20/2005	2	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/21/2005	154	114	0	0	8	0
Kenai River - Cook Inlet to Soldotna Bridge	6/22/2005	97	95	0	0	6	0
Kenai River - Cook Inlet to Soldotna Bridge	6/23/2005	78	75	0	0	7	0
Kenai River - Cook Inlet to Soldotna Bridge	6/24/2005	82	79	0	0	7	0
Kenai River - Cook Inlet to Soldotna Bridge	6/25/2005	101	85	0	0	6	0

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2005						
Kenai River - Cook Inlet to Soldotna Bridge	6/26/2005	5	1	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/27/2005	5	3	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/28/2005	170	177	0	0	5	1
Kenai River - Cook Inlet to Soldotna Bridge	6/29/2005	126	116	0	0	3	0
Kenai River - Cook Inlet to Soldotna Bridge	6/30/2005	161	184	0	1	2	0
Kenai River - Cook Inlet to Soldotna Bridge	7/1/2005	310	200	0	0	12	0
Kenai River - Cook Inlet to Soldotna Bridge	7/2/2005	245	165	0	0	4	1
Kenai River - Cook Inlet to Soldotna Bridge	7/3/2005	7	4	2	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	7/4/2005	14	3	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	7/5/2005	401	272	0	0	3	0
Kenai River - Cook Inlet to Soldotna Bridge	7/6/2005	335	220	1	0	14	1
Kenai River - Cook Inlet to Soldotna Bridge	7/7/2005	256	197	1	0	3	0
Kenai River - Cook Inlet to Soldotna Bridge	7/8/2005	303	225	0	0	3	0
Kenai River - Cook Inlet to Soldotna Bridge	7/9/2005	344	248	0	1	9	0
Kenai River - Cook Inlet to Soldotna Bridge	7/10/2005	5	2	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	7/11/2005	7	7	0	0	24	15
Kenai River - Cook Inlet to Soldotna Bridge	7/12/2005	746	572	0	0	7	1
Kenai River - Cook Inlet to Soldotna Bridge	7/13/2005	549	427	0	0	4	1
Kenai River - Cook Inlet to Soldotna Bridge	7/14/2005	563	329	4	3	7	2
Kenai River - Cook Inlet to Soldotna Bridge	7/15/2005	499	411	6	0	39	16
Kenai River - Cook Inlet to Soldotna Bridge	7/16/2005	559	352	0	0	62	32
Kenai River - Cook Inlet to Soldotna Bridge	7/17/2005	7	1	0	0	71	23
Kenai River - Cook Inlet to Soldotna Bridge	7/18/2005	6	7	0	0	137	39
Kenai River - Cook Inlet to Soldotna Bridge	7/19/2005	749	508	0	1	48	1
Kenai River - Cook Inlet to Soldotna Bridge	7/20/2005	549	311	1	0	48	44
Kenai River - Cook Inlet to Soldotna Bridge	7/21/2005	471	287	1	0	43	64
Kenai River - Cook Inlet to Soldotna Bridge	7/22/2005	414	247	0	1	95	75
Kenai River - Cook Inlet to Soldotna Bridge	7/23/2005	438	251	1	0	99	34
Kenai River - Cook Inlet to Soldotna Bridge	7/24/2005	7	2	0	0	54	10
Kenai River - Cook Inlet to Soldotna Bridge	7/25/2005	10	5	0	0	85	2
Kenai River - Cook Inlet to Soldotna Bridge	7/26/2005	615	306	0	1	61	29
Kenai River - Cook Inlet to Soldotna Bridge	7/27/2005	551	257	0	0	41	22
Kenai River - Cook Inlet to Soldotna Bridge	7/28/2005	475	273	2	0	23	0
Kenai River - Cook Inlet to Soldotna Bridge	7/29/2005	502	271	0	1	56	0
Kenai River - Cook Inlet to Soldotna Bridge	7/30/2005	595	383	10	0	37	0
Kenai River - Cook Inlet to Soldotna Bridge	7/31/2005	5	1	0	0	40	11
Kenai River - Cook Inlet to Soldotna Bridge	8/1/2005	0	8	21	1	137	2
Kenai River - Cook Inlet to Soldotna Bridge	8/2/2005	2	51	60	4	134	14
Kenai River - Cook Inlet to Soldotna Bridge	8/3/2005	0	53	36	0	149	18
Kenai River - Cook Inlet to Soldotna Bridge	8/4/2005	0	53	70	6	175	11
Kenai River - Cook Inlet to Soldotna Bridge	8/5/2005	1	48	55	2	167	14
Kenai River - Cook Inlet to Soldotna Bridge	8/6/2005	4	58	89	8	181	41
Kenai River - Cook Inlet to Soldotna Bridge	8/7/2005	0	42	66	1	115	37
Kenai River - Cook Inlet to Soldotna Bridge	8/8/2005	4	2	15	0	68	7
Kenai River - Cook Inlet to Soldotna Bridge	8/9/2005	10	41	180	5	182	41
Kenai River - Cook Inlet to Soldotna Bridge	8/10/2005	4	25	163	1	116	35
Kenai River - Cook Inlet to Soldotna Bridge	8/11/2005	0	32	186	6	101	25
Kenai River - Cook Inlet to Soldotna Bridge	8/12/2005	8	25	248	5	137	72
Kenai River - Cook Inlet to Soldotna Bridge	8/13/2005	8	36	293	31	155	74
Kenai River - Cook Inlet to Soldotna Bridge	8/14/2005	13	14	245	10	84	44
Kenai River - Cook Inlet to Soldotna Bridge	8/15/2005	0	0	33	0	21	0
Kenai River - Cook Inlet to Soldotna Bridge	8/16/2005	9	19	386	43	78	39
Kenai River - Cook Inlet to Soldotna Bridge	8/17/2005	9	25	266	30	66	14
Kenai River - Cook Inlet to Soldotna Bridge	8/18/2005	16	11	270	24	60	36
Kenai River - Cook Inlet to Soldotna Bridge	8/19/2005	8	31	315	31	41	29
Kenai River - Cook Inlet to Soldotna Bridge	8/20/2005	4	19	318	53	42	6
Kenai River - Cook Inlet to Soldotna Bridge	8/21/2005	6	6	244	16	7	2
Kenai River - Cook Inlet to Soldotna Bridge	8/22/2005	4	5	49	1	19	12
Kenai River - Cook Inlet to Soldotna Bridge	8/23/2005	7	12	415	33	14	6
Kenai River - Cook Inlet to Soldotna Bridge	8/24/2005	6	7	355	28	8	13

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2005						
Kenai River - Cook Inlet to Soldotna Bridge	8/25/2005	2	7	402	41	11	15
Kenai River - Cook Inlet to Soldotna Bridge	8/26/2005	12	6	329	52	8	8
Kenai River - Cook Inlet to Soldotna Bridge	8/27/2005	7	19	254	28	4	9
Kenai River - Cook Inlet to Soldotna Bridge	8/28/2005	12	2	202	21	0	3
Kenai River - Cook Inlet to Soldotna Bridge	8/29/2005	0	0	44	1	0	0
Kenai River - Cook Inlet to Soldotna Bridge	8/30/2005	9	3	251	29	9	20
Kenai River - Cook Inlet to Soldotna Bridge	8/31/2005	4	2	214	24	1	8
Kenai River - Cook Inlet to Soldotna Bridge	9/1/2005	0	3	110	15	8	4
Kenai River - Cook Inlet to Soldotna Bridge	9/2/2005	0	1	142	12	5	1
Kenai River - Cook Inlet to Soldotna Bridge	9/3/2005	2	0	137	15	10	8
Kenai River - Cook Inlet to Soldotna Bridge	9/4/2005	0	0	134	12	1	13
Kenai River - Cook Inlet to Soldotna Bridge	9/5/2005	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/6/2005	4	0	102	15	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/7/2005	0	2	113	9	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/8/2005	0	3	144	18	6	0
Kenai River - Cook Inlet to Soldotna Bridge	9/9/2005	0	0	66	7	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/10/2005	0	1	74	16	1	0
Kenai River - Cook Inlet to Soldotna Bridge	9/11/2005	0	0	59	4	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/12/2005	0	0	8	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/13/2005	0	0	83	5	3	0
Kenai River - Cook Inlet to Soldotna Bridge	9/14/2005	0	1	52	1	4	0
Kenai River - Cook Inlet to Soldotna Bridge	9/15/2005	0	0	61	1	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/16/2005	0	0	75	9	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/17/2005	0	0	59	1	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/18/2005	0	0	37	6	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/19/2005	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/20/2005	0	0	26	4	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/21/2005	0	0	40	3	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/22/2005	8	0	28	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/23/2005	8	0	22	1	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/24/2005	0	0	44	2	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/25/2005	0	3	24	4	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/26/2005	0	0	6	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/27/2005	0	0	20	1	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/28/2005	0	0	11	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/29/2005	0	0	13	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/30/2005	0	0	6	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	10/1/2005	0	0	6	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	10/2/2005	0	0	5	2	0	0
Kenai River - Soldotna Bridge to Moose River	5/16/2005	1	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/17/2005	1	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/18/2005	2	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/21/2005	4	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/22/2005	2	1	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	5/24/2005	1	2	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/25/2005	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/26/2005	0	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/27/2005	0	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/28/2005	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/30/2005	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/31/2005	0	3	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	6/2/2005	1	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/3/2005	4	7	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/4/2005	0	1	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	6/7/2005	4	6	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/8/2005	2	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/9/2005	2	2	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/10/2005	2	6	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/11/2005	0	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/14/2005	7	4	0	0	1	0

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2005						
Kenai River - Soldotna Bridge to Moose River	6/15/2005	10	2	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/16/2005	4	2	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/17/2005	3	5	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/18/2005	20	29	0	0	0	3
Kenai River - Soldotna Bridge to Moose River	6/20/2005	1	1	0	0	0	6
Kenai River - Soldotna Bridge to Moose River	6/21/2005	18	29	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	6/22/2005	21	11	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	6/23/2005	27	12	0	0	3	0
Kenai River - Soldotna Bridge to Moose River	6/24/2005	24	26	0	0	3	0
Kenai River - Soldotna Bridge to Moose River	6/25/2005	33	23	0	0	4	0
Kenai River - Soldotna Bridge to Moose River	6/27/2005	1	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/28/2005	15	22	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/29/2005	22	9	0	0	1	2
Kenai River - Soldotna Bridge to Moose River	6/30/2005	6	7	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/1/2005	20	0	0	0	6	0
Kenai River - Soldotna Bridge to Moose River	7/2/2005	13	16	0	0	7	0
Kenai River - Soldotna Bridge to Moose River	7/3/2005	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/5/2005	9	12	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	7/6/2005	17	39	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/7/2005	19	10	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/8/2005	16	7	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/9/2005	17	7	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/10/2005	0	0	0	0	12	0
Kenai River - Soldotna Bridge to Moose River	7/12/2005	27	12	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/13/2005	28	12	0	0	13	0
Kenai River - Soldotna Bridge to Moose River	7/14/2005	18	11	0	0	5	8
Kenai River - Soldotna Bridge to Moose River	7/15/2005	30	31	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/16/2005	28	22	0	0	8	0
Kenai River - Soldotna Bridge to Moose River	7/17/2005	2	3	0	0	36	0
Kenai River - Soldotna Bridge to Moose River	7/18/2005	2	0	0	0	18	0
Kenai River - Soldotna Bridge to Moose River	7/19/2005	31	21	0	0	5	5
Kenai River - Soldotna Bridge to Moose River	7/20/2005	23	13	0	0	61	18
Kenai River - Soldotna Bridge to Moose River	7/21/2005	24	14	0	0	62	8
Kenai River - Soldotna Bridge to Moose River	7/22/2005	26	15	0	0	45	7
Kenai River - Soldotna Bridge to Moose River	7/23/2005	21	10	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	7/24/2005	0	4	0	0	82	22
Kenai River - Soldotna Bridge to Moose River	7/25/2005	0	1	0	0	108	22
Kenai River - Soldotna Bridge to Moose River	7/26/2005	29	11	0	0	9	2
Kenai River - Soldotna Bridge to Moose River	7/27/2005	16	9	0	0	29	9
Kenai River - Soldotna Bridge to Moose River	7/28/2005	12	7	0	0	7	0
Kenai River - Soldotna Bridge to Moose River	7/29/2005	18	8	0	0	24	0
Kenai River - Soldotna Bridge to Moose River	7/30/2005	12	4	0	0	60	11
Kenai River - Soldotna Bridge to Moose River	7/31/2005	4	1	0	0	63	0
Kenai River - Soldotna Bridge to Moose River	8/1/2005	0	0	2	0	108	32
Kenai River - Soldotna Bridge to Moose River	8/2/2005	0	1	0	0	108	20
Kenai River - Soldotna Bridge to Moose River	8/3/2005	0	0	0	0	83	22
Kenai River - Soldotna Bridge to Moose River	8/4/2005	0	9	2	0	172	40
Kenai River - Soldotna Bridge to Moose River	8/5/2005	0	0	2	0	88	26
Kenai River - Soldotna Bridge to Moose River	8/6/2005	0	7	15	1	188	45
Kenai River - Soldotna Bridge to Moose River	8/7/2005	0	0	1	0	93	25
Kenai River - Soldotna Bridge to Moose River	8/8/2005	0	1	0	0	51	15
Kenai River - Soldotna Bridge to Moose River	8/9/2005	0	3	6	2	203	36
Kenai River - Soldotna Bridge to Moose River	8/10/2005	0	3	13	1	85	31
Kenai River - Soldotna Bridge to Moose River	8/11/2005	0	3	23	0	101	20
Kenai River - Soldotna Bridge to Moose River	8/12/2005	0	5	24	2	104	52
Kenai River - Soldotna Bridge to Moose River	8/13/2005	0	3	16	2	46	8
Kenai River - Soldotna Bridge to Moose River	8/14/2005	0	2	10	0	89	58
Kenai River - Soldotna Bridge to Moose River	8/15/2005	0	0	0	0	27	9
Kenai River - Soldotna Bridge to Moose River	8/16/2005	0	2	17	6	54	54
Kenai River - Soldotna Bridge to Moose River	8/17/2005	0	1	33	2	61	28

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2005						
Kenai River - Soldotna Bridge to Moose River	8/18/2005	0	4	37	0	42	32
Kenai River - Soldotna Bridge to Moose River	8/19/2005	0	1	33	4	35	20
Kenai River - Soldotna Bridge to Moose River	8/20/2005	0	1	28	6	40	39
Kenai River - Soldotna Bridge to Moose River	8/21/2005	0	1	29	5	28	51
Kenai River - Soldotna Bridge to Moose River	8/22/2005	0	0	5	0	0	0
Kenai River - Soldotna Bridge to Moose River	8/23/2005	0	0	26	8	29	26
Kenai River - Soldotna Bridge to Moose River	8/24/2005	0	2	29	3	1	1
Kenai River - Soldotna Bridge to Moose River	8/25/2005	0	1	24	5	0	0
Kenai River - Soldotna Bridge to Moose River	8/26/2005	0	0	25	0	0	0
Kenai River - Soldotna Bridge to Moose River	8/27/2005	0	0	32	3	0	2
Kenai River - Soldotna Bridge to Moose River	8/28/2005	0	3	22	0	10	3
Kenai River - Soldotna Bridge to Moose River	8/29/2005	0	0	0	1	0	0
Kenai River - Soldotna Bridge to Moose River	8/30/2005	0	2	25	4	1	2
Kenai River - Soldotna Bridge to Moose River	8/31/2005	0	0	19	4	0	0
Kenai River - Soldotna Bridge to Moose River	9/1/2005	0	0	19	4	0	2
Kenai River - Soldotna Bridge to Moose River	9/2/2005	0	0	21	8	0	0
Kenai River - Soldotna Bridge to Moose River	9/3/2005	0	0	16	5	0	0
Kenai River - Soldotna Bridge to Moose River	9/4/2005	0	0	12	5	0	0
Kenai River - Soldotna Bridge to Moose River	9/6/2005	0	0	20	13	0	0
Kenai River - Soldotna Bridge to Moose River	9/7/2005	0	1	39	15	0	4
Kenai River - Soldotna Bridge to Moose River	9/8/2005	0	1	33	8	0	2
Kenai River - Soldotna Bridge to Moose River	9/9/2005	0	1	18	2	0	5
Kenai River - Soldotna Bridge to Moose River	9/10/2005	0	0	18	3	0	2
Kenai River - Soldotna Bridge to Moose River	9/11/2005	0	0	6	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/12/2005	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/13/2005	0	0	13	2	0	4
Kenai River - Soldotna Bridge to Moose River	9/14/2005	0	0	17	0	0	2
Kenai River - Soldotna Bridge to Moose River	9/15/2005	0	0	11	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/16/2005	0	0	4	1	0	9
Kenai River - Soldotna Bridge to Moose River	9/17/2005	0	0	16	1	1	7
Kenai River - Soldotna Bridge to Moose River	9/18/2005	0	0	8	2	0	0
Kenai River - Soldotna Bridge to Moose River	9/19/2005	0	0	0	0	0	18
Kenai River - Soldotna Bridge to Moose River	9/20/2005	0	0	0	0	0	11
Kenai River - Soldotna Bridge to Moose River	9/21/2005	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/22/2005	0	0	12	2	0	7
Kenai River - Soldotna Bridge to Moose River	9/23/2005	0	0	14	3	1	4
Kenai River - Soldotna Bridge to Moose River	9/24/2005	0	0	14	2	0	0
Kenai River - Soldotna Bridge to Moose River	9/25/2005	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/27/2005	0	0	16	8	0	0
Kenai River - Soldotna Bridge to Moose River	9/28/2005	0	0	16	19	0	0
Kenai River - Soldotna Bridge to Moose River	9/29/2005	0	0	17	22	0	0
Kenai River - Soldotna Bridge to Moose River	9/30/2005	0	0	12	24	0	0
Kenai River - Soldotna Bridge to Moose River	10/1/2005	0	0	8	23	0	0
Kenai River - Soldotna Bridge to Moose River	10/4/2005	0	0	4	4	0	0
Kenai River - Soldotna Bridge to Moose River	10/11/2005	0	0	6	7	0	0
Kenai River - Soldotna Bridge to Moose River	10/29/2005	0	0	0	3	0	0
Kenai River - Moose River to Skilak Outlet	4/29/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/4/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/15/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/21/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/24/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/25/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/26/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/27/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/29/2005	0	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/2/2005	0	2	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/3/2005	2	2	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/4/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/6/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/7/2005	0	1	0	0	0	0

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2005						
Kenai River - Moose River to Skilak Outlet	6/8/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/9/2005	1	2	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/10/2005	1	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/11/2005	1	1	0	0	5	0
Kenai River - Moose River to Skilak Outlet	6/12/2005	0	0	0	0	13	2
Kenai River - Moose River to Skilak Outlet	6/13/2005	0	0	0	0	16	0
Kenai River - Moose River to Skilak Outlet	6/14/2005	4	6	0	0	12	0
Kenai River - Moose River to Skilak Outlet	6/15/2005	0	0	0	0	1	12
Kenai River - Moose River to Skilak Outlet	6/16/2005	2	1	0	0	10	20
Kenai River - Moose River to Skilak Outlet	6/17/2005	2	0	0	0	0	30
Kenai River - Moose River to Skilak Outlet	6/18/2005	0	0	0	0	7	0
Kenai River - Moose River to Skilak Outlet	6/19/2005	0	0	0	0	6	0
Kenai River - Moose River to Skilak Outlet	6/21/2005	3	1	0	0	4	12
Kenai River - Moose River to Skilak Outlet	6/22/2005	2	5	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/23/2005	5	3	0	0	1	0
Kenai River - Moose River to Skilak Outlet	6/24/2005	3	2	0	0	1	0
Kenai River - Moose River to Skilak Outlet	6/25/2005	5	0	0	0	1	0
Kenai River - Moose River to Skilak Outlet	6/26/2005	0	0	0	0	12	0
Kenai River - Moose River to Skilak Outlet	6/27/2005	0	1	0	0	12	0
Kenai River - Moose River to Skilak Outlet	6/28/2005	3	2	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/29/2005	0	0	0	0	1	0
Kenai River - Moose River to Skilak Outlet	6/30/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/1/2005	3	3	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/2/2005	2	2	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/3/2005	0	0	0	0	2	0
Kenai River - Moose River to Skilak Outlet	7/5/2005	10	3	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/6/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/7/2005	2	0	0	0	12	0
Kenai River - Moose River to Skilak Outlet	7/8/2005	3	2	0	0	12	0
Kenai River - Moose River to Skilak Outlet	7/9/2005	8	1	0	0	4	0
Kenai River - Moose River to Skilak Outlet	7/10/2005	0	0	0	0	25	6
Kenai River - Moose River to Skilak Outlet	7/11/2005	0	0	0	0	9	0
Kenai River - Moose River to Skilak Outlet	7/12/2005	4	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/13/2005	5	3	0	0	6	0
Kenai River - Moose River to Skilak Outlet	7/14/2005	2	1	0	0	12	1
Kenai River - Moose River to Skilak Outlet	7/15/2005	9	7	0	0	10	0
Kenai River - Moose River to Skilak Outlet	7/16/2005	6	2	0	0	2	0
Kenai River - Moose River to Skilak Outlet	7/17/2005	0	0	0	0	55	31
Kenai River - Moose River to Skilak Outlet	7/18/2005	3	3	0	0	70	7
Kenai River - Moose River to Skilak Outlet	7/19/2005	3	6	1	0	18	40
Kenai River - Moose River to Skilak Outlet	7/20/2005	3	0	0	0	24	6
Kenai River - Moose River to Skilak Outlet	7/21/2005	4	2	0	0	25	0
Kenai River - Moose River to Skilak Outlet	7/22/2005	3	6	0	0	66	15
Kenai River - Moose River to Skilak Outlet	7/23/2005	6	7	0	0	50	13
Kenai River - Moose River to Skilak Outlet	7/24/2005	1	0	0	0	81	16
Kenai River - Moose River to Skilak Outlet	7/25/2005	0	0	0	0	69	10
Kenai River - Moose River to Skilak Outlet	7/26/2005	11	7	0	0	39	2
Kenai River - Moose River to Skilak Outlet	7/27/2005	4	4	0	0	28	0
Kenai River - Moose River to Skilak Outlet	7/28/2005	1	2	0	0	14	2
Kenai River - Moose River to Skilak Outlet	7/29/2005	5	10	0	0	33	39
Kenai River - Moose River to Skilak Outlet	7/30/2005	4	1	0	0	8	0
Kenai River - Moose River to Skilak Outlet	7/31/2005	0	0	0	0	28	7
Kenai River - Moose River to Skilak Outlet	8/1/2005	0	0	5	1	124	68
Kenai River - Moose River to Skilak Outlet	8/2/2005	0	1	0	1	165	98
Kenai River - Moose River to Skilak Outlet	8/3/2005	0	4	1	0	201	121
Kenai River - Moose River to Skilak Outlet	8/4/2005	0	1	0	0	113	62
Kenai River - Moose River to Skilak Outlet	8/5/2005	0	0	10	0	154	105
Kenai River - Moose River to Skilak Outlet	8/6/2005	0	0	0	0	171	82
Kenai River - Moose River to Skilak Outlet	8/7/2005	0	0	9	1	113	57
Kenai River - Moose River to Skilak Outlet	8/8/2005	0	0	9	0	138	178

Source: ADF&G Freshwater Logbook

		King		Coho		Sockeye	
Site	Date	Kept	Rele	Kept	Rele	Kept	Rele
	2005						
Kenai River - Moose River to Skilak Outlet	8/9/2005	0	1	2	0	214	117
Kenai River - Moose River to Skilak Outlet	8/10/2005	0	3	3	4	170	57
Kenai River - Moose River to Skilak Outlet	8/11/2005	0	0	1	0	163	80
Kenai River - Moose River to Skilak Outlet	8/12/2005	0	2	13	0	216	105
Kenai River - Moose River to Skilak Outlet	8/13/2005	0	0	14	0	76	85
Kenai River - Moose River to Skilak Outlet	8/14/2005	0	7	1	1	81	84
Kenai River - Moose River to Skilak Outlet	8/15/2005	0	1	6	0	46	45
Kenai River - Moose River to Skilak Outlet	8/16/2005	0	3	20	2	106	105
Kenai River - Moose River to Skilak Outlet	8/17/2005	0	3	18	4	111	103
Kenai River - Moose River to Skilak Outlet	8/18/2005	0	3	42	4	87	137
Kenai River - Moose River to Skilak Outlet	8/19/2005	0	1	48	2	114	111
Kenai River - Moose River to Skilak Outlet	8/20/2005	0	0	52	4	71	72
Kenai River - Moose River to Skilak Outlet	8/21/2005	0	2	52	3	51	24
Kenai River - Moose River to Skilak Outlet	8/22/2005	0	0	8	3	16	33
Kenai River - Moose River to Skilak Outlet	8/23/2005	0	2	65	10	32	43
Kenai River - Moose River to Skilak Outlet	8/24/2005	0	1	71	19	42	27
Kenai River - Moose River to Skilak Outlet	8/25/2005	0	5	94	18	32	29
Kenai River - Moose River to Skilak Outlet	8/26/2005	0	0	67	15	1	8
Kenai River - Moose River to Skilak Outlet	8/27/2005	0	1	78	20	7	29
Kenai River - Moose River to Skilak Outlet	8/28/2005	0	0	24	0	18	3
Kenai River - Moose River to Skilak Outlet	8/29/2005	0	1	6	0	24	16
Kenai River - Moose River to Skilak Outlet	8/30/2005	0	1	46	32	0	64
Kenai River - Moose River to Skilak Outlet	8/31/2005	0	0	47	21	0	5
Kenai River - Moose River to Skilak Outlet	9/1/2005	0	3	93	11	0	12
Kenai River - Moose River to Skilak Outlet	9/2/2005	0	2	53	5	0	12
Kenai River - Moose River to Skilak Outlet	9/3/2005	0	5	54	7	2	23
Kenai River - Moose River to Skilak Outlet	9/4/2005	0	0	26	4	0	0
Kenai River - Moose River to Skilak Outlet	9/5/2005	0	0	1	3	0	28
Kenai River - Moose River to Skilak Outlet	9/6/2005	0	1	56	14	0	28
Kenai River - Moose River to Skilak Outlet	9/7/2005	0	0	71	16	0	9
Kenai River - Moose River to Skilak Outlet	9/8/2005	0	3	63	5	0	10
Kenai River - Moose River to Skilak Outlet	9/9/2005	0	0	40	7	0	7
Kenai River - Moose River to Skilak Outlet	9/10/2005	0	0	52	7	2	29
Kenai River - Moose River to Skilak Outlet	9/11/2005	0	0	35	14	0	37
Kenai River - Moose River to Skilak Outlet	9/12/2005	0	0	14	4	0	22
Kenai River - Moose River to Skilak Outlet	9/13/2005	0	0	44	21	0	20
Kenai River - Moose River to Skilak Outlet	9/14/2005	0	0	54	9	0	20
Kenai River - Moose River to Skilak Outlet	9/15/2005	0	0	35	4	0	35
Kenai River - Moose River to Skilak Outlet	9/16/2005	7	0	29	5	0	19
Kenai River - Moose River to Skilak Outlet	9/17/2005	0	0	28	1	0	18
Kenai River - Moose River to Skilak Outlet	9/18/2005	0	0	19	2	0	11
Kenai River - Moose River to Skilak Outlet	9/19/2005	0	0	11	0	0	5
Kenai River - Moose River to Skilak Outlet	9/20/2005	0	0	24	5	0	13
Kenai River - Moose River to Skilak Outlet	9/21/2005	0	0	10	2	0	9
Kenai River - Moose River to Skilak Outlet	9/22/2005	0	0	27	2	0	12
Kenai River - Moose River to Skilak Outlet	9/23/2005	0	0	34	14	0	22
Kenai River - Moose River to Skilak Outlet	9/24/2005	0	0	20	5	0	0
Kenai River - Moose River to Skilak Outlet	9/25/2005	0	0	20	7	0	0
Kenai River - Moose River to Skilak Outlet	9/26/2005	0	0	0	0	0	4
Kenai River - Moose River to Skilak Outlet	9/27/2005	0	0	17	41	0	0
Kenai River - Moose River to Skilak Outlet	9/28/2005	0	2	14	3	0	1
Kenai River - Moose River to Skilak Outlet	9/29/2005	0	0	14	1	0	0
Kenai River - Moose River to Skilak Outlet	9/30/2005	0	0	8	4	0	0
Kenai River - Moose River to Skilak Outlet	10/1/2005	0	0	17	17	0	0
Kenai River - Moose River to Skilak Outlet	10/2/2005	0	0	10	1	0	0
Kenai River - Moose River to Skilak Outlet	10/3/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/4/2005	0	0	6	20	0	0
Kenai River - Moose River to Skilak Outlet	10/5/2005	0	0	13	0	0	1
Kenai River - Moose River to Skilak Outlet	10/6/2005	0	0	8	0	0	0
Kenai River - Moose River to Skilak Outlet	10/7/2005	0	0	10	0	0	0

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2005						
Kenai River - Moose River to Skilak Outlet	10/8/2005	0	0	7	3	0	0
Kenai River - Moose River to Skilak Outlet	10/9/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/10/2005	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/11/2005	0	0	6	12	0	0
Kenai River - Moose River to Skilak Outlet	10/12/2005	0	0	4	0	0	0
Kenai River - Moose River to Skilak Outlet	10/13/2005	0	0	4	2	0	0
Kenai River - Skilak Inlet to Kenai Lake		0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	4/23/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	4/27/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	4/28/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/1/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/2/2005	0	0	0	0	7	3
Kenai River - Skilak Inlet to Kenai Lake	6/3/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/4/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/5/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/6/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/7/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/8/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/9/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/10/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/11/2005	0	0	0	0	20	3
Kenai River - Skilak Inlet to Kenai Lake	6/12/2005	0	0	0	0	16	3
Kenai River - Skilak Inlet to Kenai Lake	6/13/2005	0	0	0	0	48	35
Kenai River - Skilak Inlet to Kenai Lake	6/14/2005	5	0	0	0	42	13
Kenai River - Skilak Inlet to Kenai Lake	6/15/2005	0	0	0	0	75	43
Kenai River - Skilak Inlet to Kenai Lake	6/16/2005	0	0	4	10	125	20
Kenai River - Skilak Inlet to Kenai Lake	6/17/2005	0	0	0	0	88	40
Kenai River - Skilak Inlet to Kenai Lake	6/18/2005	0	0	0	0	105	94
Kenai River - Skilak Inlet to Kenai Lake	6/19/2005	0	0	0	0	75	30
Kenai River - Skilak Inlet to Kenai Lake	6/20/2005	0	0	0	0	99	87
Kenai River - Skilak Inlet to Kenai Lake	6/21/2005	3	43	0	0	101	21
Kenai River - Skilak Inlet to Kenai Lake	6/22/2005	1	35	0	0	58	8
Kenai River - Skilak Inlet to Kenai Lake	6/23/2005	0	0	0	0	63	34
Kenai River - Skilak Inlet to Kenai Lake	6/24/2005	0	0	0	0	47	6
Kenai River - Skilak Inlet to Kenai Lake	6/25/2005	0	0	0	0	54	27
Kenai River - Skilak Inlet to Kenai Lake	6/26/2005	0	0	0	0	61	17
Kenai River - Skilak Inlet to Kenai Lake	6/27/2005	0	0	0	0	93	24
Kenai River - Skilak Inlet to Kenai Lake	6/28/2005	0	0	0	0	64	12
Kenai River - Skilak Inlet to Kenai Lake	6/29/2005	0	0	0	0	40	14
Kenai River - Skilak Inlet to Kenai Lake	6/30/2005	0	0	0	0	29	6
Kenai River - Skilak Inlet to Kenai Lake	7/1/2005	0	0	0	0	7	11
Kenai River - Skilak Inlet to Kenai Lake	7/2/2005	0	0	0	0	11	26
Kenai River - Skilak Inlet to Kenai Lake	7/3/2005	0	0	0	0	11	4
Kenai River - Skilak Inlet to Kenai Lake	7/4/2005	0	0	0	0	14	21
Kenai River - Skilak Inlet to Kenai Lake	7/5/2005	0	0	0	0	5	9
Kenai River - Skilak Inlet to Kenai Lake	7/6/2005	0	0	0	0	28	18
Kenai River - Skilak Inlet to Kenai Lake	7/7/2005	0	0	0	0	24	11
Kenai River - Skilak Inlet to Kenai Lake	7/8/2005	1	1	0	0	37	23
Kenai River - Skilak Inlet to Kenai Lake	7/9/2005	0	0	0	0	32	20
Kenai River - Skilak Inlet to Kenai Lake	7/10/2005	0	0	0	0	30	16
Kenai River - Skilak Inlet to Kenai Lake	7/11/2005	0	1	0	0	108	79
Kenai River - Skilak Inlet to Kenai Lake	7/12/2005	0	0	0	0	114	129
Kenai River - Skilak Inlet to Kenai Lake	7/13/2005	3	1	0	0	139	94
Kenai River - Skilak Inlet to Kenai Lake	7/14/2005	0	1	0	0	108	61
Kenai River - Skilak Inlet to Kenai Lake	7/15/2005	0	0	0	0	108	67
Kenai River - Skilak Inlet to Kenai Lake	7/16/2005	0	1	0	0	67	39
Kenai River - Skilak Inlet to Kenai Lake	7/17/2005	0	0	0	0	81	26
Kenai River - Skilak Inlet to Kenai Lake	7/18/2005	0	0	0	0	79	50
Kenai River - Skilak Inlet to Kenai Lake	7/19/2005	1	2	0	0	61	59
Kenai River - Skilak Inlet to Kenai Lake	7/20/2005	3	1	0	0	69	46

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2005						
Kenai River - Skilak Inlet to Kenai Lake	7/21/2005	2	0	0	0	133	84
Kenai River - Skilak Inlet to Kenai Lake	7/22/2005	1	2	0	0	135	74
Kenai River - Skilak Inlet to Kenai Lake	7/23/2005	4	2	0	0	86	26
Kenai River - Skilak Inlet to Kenai Lake	7/24/2005	0	0	0	0	73	24
Kenai River - Skilak Inlet to Kenai Lake	7/25/2005	0	0	0	0	185	81
Kenai River - Skilak Inlet to Kenai Lake	7/26/2005	0	0	0	0	83	14
Kenai River - Skilak Inlet to Kenai Lake	7/27/2005	0	0	0	0	87	52
Kenai River - Skilak Inlet to Kenai Lake	7/28/2005	0	0	0	0	146	138
Kenai River - Skilak Inlet to Kenai Lake	7/29/2005	1	0	0	0	188	255
Kenai River - Skilak Inlet to Kenai Lake	7/30/2005	0	0	0	0	61	76
Kenai River - Skilak Inlet to Kenai Lake	7/31/2005	0	0	0	0	13	26
Kenai River - Skilak Inlet to Kenai Lake	8/1/2005	0	0	0	0	72	52
Kenai River - Skilak Inlet to Kenai Lake	8/2/2005	0	0	0	0	59	73
Kenai River - Skilak Inlet to Kenai Lake	8/3/2005	0	0	0	0	37	33
Kenai River - Skilak Inlet to Kenai Lake	8/4/2005	0	0	0	0	40	24
Kenai River - Skilak Inlet to Kenai Lake	8/5/2005	0	1	0	0	18	40
Kenai River - Skilak Inlet to Kenai Lake	8/6/2005	0	0	0	0	16	45
Kenai River - Skilak Inlet to Kenai Lake	8/7/2005	0	0	0	0	7	43
Kenai River - Skilak Inlet to Kenai Lake	8/8/2005	0	0	0	0	8	44
Kenai River - Skilak Inlet to Kenai Lake	8/9/2005	0	0	1	0	34	75
Kenai River - Skilak Inlet to Kenai Lake	8/10/2005	0	0	0	1	14	72
Kenai River - Skilak Inlet to Kenai Lake	8/11/2005	0	0	0	0	1	13
Kenai River - Skilak Inlet to Kenai Lake	8/12/2005	0	0	0	0	0	19
Kenai River - Skilak Inlet to Kenai Lake	8/13/2005	0	0	0	0	4	23
Kenai River - Skilak Inlet to Kenai Lake	8/14/2005	0	0	0	0	0	15
Kenai River - Skilak Inlet to Kenai Lake	8/15/2005	0	0	0	0	4	31
Kenai River - Skilak Inlet to Kenai Lake	8/16/2005	0	0	0	0	0	13
Kenai River - Skilak Inlet to Kenai Lake	8/17/2005	0	0	0	0	0	23
Kenai River - Skilak Inlet to Kenai Lake	8/18/2005	0	0	0	0	1	10
Kenai River - Skilak Inlet to Kenai Lake	8/19/2005	0	0	3	1	0	39
Kenai River - Skilak Inlet to Kenai Lake	8/20/2005	0	0	0	0	0	14
Kenai River - Skilak Inlet to Kenai Lake	8/21/2005	0	0	2	0	0	29
Kenai River - Skilak Inlet to Kenai Lake	8/22/2005	0	0	6	0	1	37
Kenai River - Skilak Inlet to Kenai Lake	8/23/2005	0	2	1	0	2	34
Kenai River - Skilak Inlet to Kenai Lake	8/24/2005	0	0	3	0	12	64
Kenai River - Skilak Inlet to Kenai Lake	8/25/2005	0	0	2	4	0	54
Kenai River - Skilak Inlet to Kenai Lake	8/26/2005	0	1	7	5	0	59
Kenai River - Skilak Inlet to Kenai Lake	8/27/2005	0	0	20	2	0	43
Kenai River - Skilak Inlet to Kenai Lake	8/28/2005	0	0	12	12	0	45
Kenai River - Skilak Inlet to Kenai Lake	8/29/2005	0	23	16	8	0	47
Kenai River - Skilak Inlet to Kenai Lake	8/30/2005	0	0	18	14	0	61
Kenai River - Skilak Inlet to Kenai Lake	8/31/2005	0	0	9	12	0	30
Kenai River - Skilak Inlet to Kenai Lake	9/1/2005	0	0	38	10	0	122
Kenai River - Skilak Inlet to Kenai Lake	9/2/2005	0	0	31	11	0	44
Kenai River - Skilak Inlet to Kenai Lake	9/3/2005	0	0	31	10	0	30
Kenai River - Skilak Inlet to Kenai Lake	9/4/2005	0	1	27	14	0	30
Kenai River - Skilak Inlet to Kenai Lake	9/5/2005	0	0	10	4	0	11
Kenai River - Skilak Inlet to Kenai Lake	9/6/2005	0	0	31	22	0	9
Kenai River - Skilak Inlet to Kenai Lake	9/7/2005	0	0	38	23	0	16
Kenai River - Skilak Inlet to Kenai Lake	9/8/2005	0	0	35	55	0	48
Kenai River - Skilak Inlet to Kenai Lake	9/9/2005	0	0	26	19	0	29
Kenai River - Skilak Inlet to Kenai Lake	9/10/2005	0	0	18	8	0	10
Kenai River - Skilak Inlet to Kenai Lake	9/11/2005	0	0	12	11	0	23
Kenai River - Skilak Inlet to Kenai Lake	9/12/2005	0	0	25	8	0	4
Kenai River - Skilak Inlet to Kenai Lake	9/13/2005	0	0	32	19	0	40
Kenai River - Skilak Inlet to Kenai Lake	9/14/2005	0	0	47	49	5	21
Kenai River - Skilak Inlet to Kenai Lake	9/15/2005	0	0	22	16	0	17
Kenai River - Skilak Inlet to Kenai Lake	9/16/2005	0	0	11	5	0	18
Kenai River - Skilak Inlet to Kenai Lake	9/17/2005	0	0	7	8	0	21
Kenai River - Skilak Inlet to Kenai Lake	9/18/2005	0	0	4	14	0	37

Source: ADF&G Freshwater Logbook

		King		Coho		Sockeye	
Site	Date	Kept	Rele	Kept	Rele	Kept	Rele
	2005						
Kenai River - Skilak Inlet to Kenai Lake	9/19/2005	0	0	4	2	0	20
Kenai River - Skilak Inlet to Kenai Lake	9/20/2005	0	0	5	5	0	22
Kenai River - Skilak Inlet to Kenai Lake	9/21/2005	0	0	5	2	0	13
Kenai River - Skilak Inlet to Kenai Lake	9/22/2005	0	0	10	18	0	46
Kenai River - Skilak Inlet to Kenai Lake	9/23/2005	0	0	7	8	0	14
Kenai River - Skilak Inlet to Kenai Lake	9/24/2005	0	0	2	8	0	22
Kenai River - Skilak Inlet to Kenai Lake	9/25/2005	0	0	0	0	0	12
Kenai River - Skilak Inlet to Kenai Lake	9/26/2005	0	0	0	0	0	11
Kenai River - Skilak Inlet to Kenai Lake	9/27/2005	0	0	0	0	0	22
Kenai River - Skilak Inlet to Kenai Lake	9/28/2005	0	0	2	3	0	8
Kenai River - Skilak Inlet to Kenai Lake	9/29/2005	0	0	11	1	0	20
Kenai River - Skilak Inlet to Kenai Lake	9/30/2005	0	0	5	2	0	2
Kenai River - Skilak Inlet to Kenai Lake	10/1/2005	0	0	5	13	0	3
Kenai River - Skilak Inlet to Kenai Lake	10/2/2005	0	0	2	11	0	10
Kenai River - Skilak Inlet to Kenai Lake	10/3/2005	0	0	0	3	0	10
Kenai River - Skilak Inlet to Kenai Lake	10/4/2005	0	0	0	3	0	1
Kenai River - Skilak Inlet to Kenai Lake	10/5/2005	0	0	0	4	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/6/2005	0	0	0	6	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/7/2005	0	0	1	10	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/8/2005	0	0	0	6	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/9/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/10/2005	0	0	4	9	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/12/2005	0	0	4	2	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/13/2005	0	0	7	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/14/2005	0	0	0	2	0	4
Kenai River - Skilak Inlet to Kenai Lake	10/15/2005	0	0	0	4	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/17/2005	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/19/2005	0	0	0	0	0	0

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2006						
Kenai River - Cook Inlet to Soldotna Bridge		0	0	8	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	1/20/2006	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/6/2006	0	1	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/7/2006	0	2	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/8/2006	2	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/10/2006	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/13/2006	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/15/2006	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/16/2006	1	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/17/2006	5	4	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/18/2006	0	2	6	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	5/19/2006	1	2	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/20/2006	2	8	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/21/2006	1	1	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/23/2006	11	8	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/24/2006	7	3	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/25/2006	3	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/26/2006	0	1	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/27/2006	2	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/28/2006	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/29/2006	1	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/30/2006	3	2	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/31/2006	4	2	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/1/2006	10	7	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/2/2006	29	17	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/3/2006	35	63	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/6/2006	82	61	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	6/7/2006	68	30	0	0	2	0
Kenai River - Cook Inlet to Soldotna Bridge	6/8/2006	65	47	0	0	2	0
Kenai River - Cook Inlet to Soldotna Bridge	6/9/2006	61	46	0	0	1	1
Kenai River - Cook Inlet to Soldotna Bridge	6/10/2006	80	68	0	3	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/11/2006	2	1	0	0	0	11
Kenai River - Cook Inlet to Soldotna Bridge	6/12/2006	3	0	0	0	0	2
Kenai River - Cook Inlet to Soldotna Bridge	6/13/2006	173	143	0	0	15	0
Kenai River - Cook Inlet to Soldotna Bridge	6/14/2006	113	83	0	0	19	0
Kenai River - Cook Inlet to Soldotna Bridge	6/15/2006	116	105	0	0	20	3
Kenai River - Cook Inlet to Soldotna Bridge	6/16/2006	112	60	0	0	14	0
Kenai River - Cook Inlet to Soldotna Bridge	6/17/2006	92	39	0	0	14	0
Kenai River - Cook Inlet to Soldotna Bridge	6/18/2006	4	5	0	0	10	0
Kenai River - Cook Inlet to Soldotna Bridge	6/19/2006	5	6	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	6/20/2006	118	102	0	22	10	15
Kenai River - Cook Inlet to Soldotna Bridge	6/21/2006	91	75	0	0	8	0
Kenai River - Cook Inlet to Soldotna Bridge	6/22/2006	94	60	8	1	2	0
Kenai River - Cook Inlet to Soldotna Bridge	6/23/2006	73	46	0	0	6	0
Kenai River - Cook Inlet to Soldotna Bridge	6/24/2006	68	68	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	6/25/2006	5	3	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/26/2006	2	3	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/27/2006	154	111	3	0	10	2
Kenai River - Cook Inlet to Soldotna Bridge	6/28/2006	117	95	0	1	10	1
Kenai River - Cook Inlet to Soldotna Bridge	6/29/2006	141	119	0	0	2	0
Kenai River - Cook Inlet to Soldotna Bridge	6/30/2006	97	121	1	0	10	1
Kenai River - Cook Inlet to Soldotna Bridge	7/1/2006	138	112	0	0	7	0
Kenai River - Cook Inlet to Soldotna Bridge	7/2/2006	1	0	0	0	0	1
Kenai River - Cook Inlet to Soldotna Bridge	7/3/2006	4	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	7/4/2006	215	157	0	0	5	0
Kenai River - Cook Inlet to Soldotna Bridge	7/5/2006	261	187	0	0	7	2
Kenai River - Cook Inlet to Soldotna Bridge	7/6/2006	217	189	0	1	7	0
Kenai River - Cook Inlet to Soldotna Bridge	7/7/2006	172	169	0	0	10	0
Kenai River - Cook Inlet to Soldotna Bridge	7/8/2006	157	145	1	0	12	0
Kenai River - Cook Inlet to Soldotna Bridge	7/9/2006	1	1	0	0	0	0

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2006						
Kenai River - Cook Inlet to Soldotna Bridge	7/10/2006	5	4	0	0	4	0
Kenai River - Cook Inlet to Soldotna Bridge	7/11/2006	162	134	1	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	7/12/2006	149	126	1	0	4	0
Kenai River - Cook Inlet to Soldotna Bridge	7/13/2006	183	136	7	0	4	2
Kenai River - Cook Inlet to Soldotna Bridge	7/14/2006	227	135	4	2	11	13
Kenai River - Cook Inlet to Soldotna Bridge	7/15/2006	297	204	3	0	7	1
Kenai River - Cook Inlet to Soldotna Bridge	7/16/2006	5	0	1	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	7/17/2006	4	4	0	0	12	1
Kenai River - Cook Inlet to Soldotna Bridge	7/18/2006	354	296	2	0	6	0
Kenai River - Cook Inlet to Soldotna Bridge	7/19/2006	336	208	6	5	7	4
Kenai River - Cook Inlet to Soldotna Bridge	7/20/2006	355	249	5	0	12	4
Kenai River - Cook Inlet to Soldotna Bridge	7/21/2006	339	219	9	0	28	1
Kenai River - Cook Inlet to Soldotna Bridge	7/22/2006	361	221	7	0	7	1
Kenai River - Cook Inlet to Soldotna Bridge	7/23/2006	7	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	7/24/2006	11	22	0	0	7	33
Kenai River - Cook Inlet to Soldotna Bridge	7/25/2006	314	163	6	1	0	3
Kenai River - Cook Inlet to Soldotna Bridge	7/26/2006	425	228	14	5	0	7
Kenai River - Cook Inlet to Soldotna Bridge	7/27/2006	376	202	24	3	0	9
Kenai River - Cook Inlet to Soldotna Bridge	7/28/2006	452	252	35	13	2	16
Kenai River - Cook Inlet to Soldotna Bridge	7/29/2006	445	182	52	12	3	17
Kenai River - Cook Inlet to Soldotna Bridge	7/30/2006	5	1	1	0	0	1
Kenai River - Cook Inlet to Soldotna Bridge	8/1/2006	4	13	121	9	69	8
Kenai River - Cook Inlet to Soldotna Bridge	8/2/2006	2	24	102	9	62	22
Kenai River - Cook Inlet to Soldotna Bridge	8/3/2006	3	9	137	5	47	24
Kenai River - Cook Inlet to Soldotna Bridge	8/4/2006	6	29	135	1	96	32
Kenai River - Cook Inlet to Soldotna Bridge	8/5/2006	1	24	142	3	120	42
Kenai River - Cook Inlet to Soldotna Bridge	8/6/2006	0	16	42	2	60	10
Kenai River - Cook Inlet to Soldotna Bridge	8/7/2006	0	1	5	0	26	18
Kenai River - Cook Inlet to Soldotna Bridge	8/8/2006	3	25	139	21	89	18
Kenai River - Cook Inlet to Soldotna Bridge	8/9/2006	3	30	120	8	87	4
Kenai River - Cook Inlet to Soldotna Bridge	8/10/2006	7	12	107	2	31	3
Kenai River - Cook Inlet to Soldotna Bridge	8/11/2006	0	13	236	11	18	10
Kenai River - Cook Inlet to Soldotna Bridge	8/12/2006	2	2	167	6	17	4
Kenai River - Cook Inlet to Soldotna Bridge	8/13/2006	0	3	149	4	11	3
Kenai River - Cook Inlet to Soldotna Bridge	8/14/2006	0	0	8	1	1	2
Kenai River - Cook Inlet to Soldotna Bridge	8/15/2006	4	2	305	14	24	2
Kenai River - Cook Inlet to Soldotna Bridge	8/16/2006	1	2	284	11	22	0
Kenai River - Cook Inlet to Soldotna Bridge	8/17/2006	5	2	341	10	26	0
Kenai River - Cook Inlet to Soldotna Bridge	8/18/2006	6	1	306	26	25	2
Kenai River - Cook Inlet to Soldotna Bridge	8/19/2006	0	3	282	25	24	8
Kenai River - Cook Inlet to Soldotna Bridge	8/20/2006	1	0	207	27	16	3
Kenai River - Cook Inlet to Soldotna Bridge	8/21/2006	0	0	3	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	8/22/2006	6	1	138	10	7	0
Kenai River - Cook Inlet to Soldotna Bridge	8/23/2006	0	1	153	15	0	0
Kenai River - Cook Inlet to Soldotna Bridge	8/24/2006	8	0	103	17	0	0
Kenai River - Cook Inlet to Soldotna Bridge	8/25/2006	0	3	105	15	4	1
Kenai River - Cook Inlet to Soldotna Bridge	8/26/2006	0	2	58	5	1	0
Kenai River - Cook Inlet to Soldotna Bridge	8/27/2006	0	0	31	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	8/28/2006	1	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	8/29/2006	5	0	82	7	0	0
Kenai River - Cook Inlet to Soldotna Bridge	8/30/2006	0	2	72	9	0	0
Kenai River - Cook Inlet to Soldotna Bridge	8/31/2006	0	0	40	1	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/1/2006	0	1	82	18	2	1
Kenai River - Cook Inlet to Soldotna Bridge	9/2/2006	0	0	64	8	0	3
Kenai River - Cook Inlet to Soldotna Bridge	9/3/2006	0	0	88	7	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/4/2006	0	0	4	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/5/2006	0	1	70	6	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/6/2006	0	0	63	8	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/7/2006	0	1	62	8	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/8/2006	0	0	59	7	0	0

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2006						
Kenai River - Cook Inlet to Soldotna Bridge	9/9/2006	0	0	31	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/10/2006	0	0	21	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/11/2006	0	0	10	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/12/2006	0	0	63	2	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/13/2006	0	0	56	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	9/14/2006	0	0	91	3	2	16
Kenai River - Cook Inlet to Soldotna Bridge	9/15/2006	0	0	64	1	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/16/2006	0	0	70	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/17/2006	0	0	30	3	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/18/2006	0	0	6	5	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/19/2006	0	0	14	6	0	1
Kenai River - Cook Inlet to Soldotna Bridge	9/20/2006	0	0	9	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/21/2006	0	0	13	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/22/2006	0	0	22	1	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/23/2006	0	0	32	9	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/24/2006	0	0	23	2	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/25/2006	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/26/2006	0	0	14	6	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/27/2006	0	1	1	0	0	1
Kenai River - Cook Inlet to Soldotna Bridge	9/28/2006	0	0	4	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/29/2006	0	0	10	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/30/2006	0	0	8	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	10/1/2006	0	0	6	3	0	0
Kenai River - Cook Inlet to Soldotna Bridge	10/2/2006	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	10/4/2006	0	0	4	2	0	0
Kenai River - Cook Inlet to Soldotna Bridge	10/5/2006	0	0	3	0	0	0
Kenai River - Soldotna Bridge to Moose River	1/17/2006	2	7	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	1/21/2006	2	3	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/30/2006	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/31/2006	1	4	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/1/2006	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/2/2006	2	11	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/3/2006	4	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/6/2006	1	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/7/2006	4	3	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/8/2006	1	7	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/9/2006	8	5	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/10/2006	3	5	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/13/2006	13	10	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/14/2006	25	13	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/15/2006	11	29	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	6/16/2006	16	14	1	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/17/2006	28	18	0	0	22	20
Kenai River - Soldotna Bridge to Moose River	6/18/2006	0	0	6	0	21	18
Kenai River - Soldotna Bridge to Moose River	6/20/2006	29	25	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/21/2006	33	26	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/22/2006	29	22	0	0	2	2
Kenai River - Soldotna Bridge to Moose River	6/23/2006	39	19	0	1	0	0
Kenai River - Soldotna Bridge to Moose River	6/24/2006	21	28	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/25/2006	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/26/2006	0	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/27/2006	22	16	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/28/2006	26	13	1	0	1	0
Kenai River - Soldotna Bridge to Moose River	6/29/2006	16	10	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/30/2006	6	11	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/1/2006	6	6	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/2/2006	1	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/4/2006	3	4	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/5/2006	3	0	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	7/6/2006	4	2	0	0	0	0

Source: ADF&G Freshwater Logbook

		King		Coho		Sockeye	
Site	Date	Kept	Rele	Kept	Rele	Kept	Rele
	2006						
Kenai River - Soldotna Bridge to Moose River	7/7/2006	3	8	0	1	1	0
Kenai River - Soldotna Bridge to Moose River	7/8/2006	6	1	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	7/10/2006	1	0	0	0	16	4
Kenai River - Soldotna Bridge to Moose River	7/11/2006	3	7	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/12/2006	4	2	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/13/2006	4	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/14/2006	3	3	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/15/2006	8	3	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/16/2006	0	0	0	0	3	0
Kenai River - Soldotna Bridge to Moose River	7/17/2006	0	0	0	0	18	5
Kenai River - Soldotna Bridge to Moose River	7/18/2006	12	7	0	0	69	13
Kenai River - Soldotna Bridge to Moose River	7/19/2006	9	2	1	0	15	0
Kenai River - Soldotna Bridge to Moose River	7/20/2006	5	3	0	0	36	3
Kenai River - Soldotna Bridge to Moose River	7/21/2006	5	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/22/2006	5	5	0	0	7	20
Kenai River - Soldotna Bridge to Moose River	7/23/2006	1	0	0	0	0	6
Kenai River - Soldotna Bridge to Moose River	7/24/2006	0	0	0	0	9	53
Kenai River - Soldotna Bridge to Moose River	7/25/2006	7	5	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/26/2006	8	6	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	7/27/2006	7	1	1	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/28/2006	10	3	0	2	0	1
Kenai River - Soldotna Bridge to Moose River	7/29/2006	6	6	1	1	0	1
Kenai River - Soldotna Bridge to Moose River	7/31/2006	3	0	0	0	0	6
Kenai River - Soldotna Bridge to Moose River	8/1/2006	0	0	13	7	22	2
Kenai River - Soldotna Bridge to Moose River	8/2/2006	2	1	9	5	75	56
Kenai River - Soldotna Bridge to Moose River	8/3/2006	0	0	1	0	29	21
Kenai River - Soldotna Bridge to Moose River	8/4/2006	0	0	14	6	64	60
Kenai River - Soldotna Bridge to Moose River	8/5/2006	0	0	10	0	28	29
Kenai River - Soldotna Bridge to Moose River	8/6/2006	0	1	16	6	44	36
Kenai River - Soldotna Bridge to Moose River	8/7/2006	0	1	6	1	1	1
Kenai River - Soldotna Bridge to Moose River	8/8/2006	0	6	38	8	81	78
Kenai River - Soldotna Bridge to Moose River	8/9/2006	0	1	17	1	56	15
Kenai River - Soldotna Bridge to Moose River	8/10/2006	2	0	0	0	87	58
Kenai River - Soldotna Bridge to Moose River	8/11/2006	0	1	7	6	23	5
Kenai River - Soldotna Bridge to Moose River	8/12/2006	0	0	8	0	21	0
Kenai River - Soldotna Bridge to Moose River	8/13/2006	0	0	6	1	7	9
Kenai River - Soldotna Bridge to Moose River	8/14/2006	0	0	7	0	50	25
Kenai River - Soldotna Bridge to Moose River	8/15/2006	0	0	22	0	10	14
Kenai River - Soldotna Bridge to Moose River	8/16/2006	0	1	20	0	76	24
Kenai River - Soldotna Bridge to Moose River	8/17/2006	0	2	23	0	57	58
Kenai River - Soldotna Bridge to Moose River	8/18/2006	0	1	31	2	16	60
Kenai River - Soldotna Bridge to Moose River	8/19/2006	0	0	0	0	18	0
Kenai River - Soldotna Bridge to Moose River	8/20/2006	0	4	23	2	23	4
Kenai River - Soldotna Bridge to Moose River	8/21/2006	0	0	9	0	44	52
Kenai River - Soldotna Bridge to Moose River	8/22/2006	0	0	35	6	20	65
Kenai River - Soldotna Bridge to Moose River	8/23/2006	0	1	42	15	12	18
Kenai River - Soldotna Bridge to Moose River	8/24/2006	0	0	55	3	2	22
Kenai River - Soldotna Bridge to Moose River	8/25/2006	0	22	40	6	21	4
Kenai River - Soldotna Bridge to Moose River	8/26/2006	0	0	31	2	9	20
Kenai River - Soldotna Bridge to Moose River	8/27/2006	2	1	19	0	0	1
Kenai River - Soldotna Bridge to Moose River	8/28/2006	0	1	7	0	0	7
Kenai River - Soldotna Bridge to Moose River	8/29/2006	0	0	19	2	0	11
Kenai River - Soldotna Bridge to Moose River	8/30/2006	0	1	21	0	0	1
Kenai River - Soldotna Bridge to Moose River	8/31/2006	0	0	1	1	0	0
Kenai River - Soldotna Bridge to Moose River	9/1/2006	0	0	16	3	1	8
Kenai River - Soldotna Bridge to Moose River	9/2/2006	0	0	21	8	0	2
Kenai River - Soldotna Bridge to Moose River	9/3/2006	0	0	14	0	0	1
Kenai River - Soldotna Bridge to Moose River	9/4/2006	0	0	0	0	0	5
Kenai River - Soldotna Bridge to Moose River	9/5/2006	0	0	13	0	0	2
Kenai River - Soldotna Bridge to Moose River	9/6/2006	0	1	10	0	0	3

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2006						
Kenai River - Soldotna Bridge to Moose River	9/7/2006	0	0	0	0	0	12
Kenai River - Soldotna Bridge to Moose River	9/8/2006	0	0	5	2	0	0
Kenai River - Soldotna Bridge to Moose River	9/9/2006	0	1	0	0	0	7
Kenai River - Soldotna Bridge to Moose River	9/10/2006	0	0	3	0	0	6
Kenai River - Soldotna Bridge to Moose River	9/12/2006	0	0	4	2	0	5
Kenai River - Soldotna Bridge to Moose River	9/13/2006	0	0	8	9	0	0
Kenai River - Soldotna Bridge to Moose River	9/14/2006	0	0	6	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/15/2006	0	0	14	2	0	0
Kenai River - Soldotna Bridge to Moose River	9/16/2006	0	0	14	3	0	0
Kenai River - Soldotna Bridge to Moose River	9/17/2006	0	0	17	6	0	0
Kenai River - Soldotna Bridge to Moose River	9/19/2006	0	0	8	10	0	0
Kenai River - Soldotna Bridge to Moose River	9/20/2006	0	0	10	7	0	0
Kenai River - Soldotna Bridge to Moose River	9/21/2006	0	0	4	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/22/2006	0	0	7	8	0	0
Kenai River - Soldotna Bridge to Moose River	9/23/2006	0	0	3	2	0	0
Kenai River - Soldotna Bridge to Moose River	9/24/2006	0	0	4	17	0	0
Kenai River - Soldotna Bridge to Moose River	9/27/2006	0	0	10	14	0	0
Kenai River - Soldotna Bridge to Moose River	9/29/2006	0	0	8	9	0	0
Kenai River - Soldotna Bridge to Moose River	9/30/2006	0	0	6	2	0	0
Kenai River - Soldotna Bridge to Moose River	10/3/2006	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/4/2006	0	0	6	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/6/2006	0	0	0	6	0	0
Kenai River - Soldotna Bridge to Moose River	10/8/2006	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/11/2006	0	0	3	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/12/2006	0	0	6	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/14/2006	0	0	3	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/15/2006	0	0	8	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/20/2006	0	0	4	5	0	0
Kenai River - Soldotna Bridge to Moose River	10/22/2006	0	0	4	0	0	0
Kenai River - Moose River to Skilak Outlet	1/22/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/13/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/18/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/23/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/24/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/25/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/26/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/27/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/29/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/30/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/31/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/1/2006	2	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/2/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/3/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/4/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/6/2006	4	3	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/7/2006	1	5	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/8/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/9/2006	3	4	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/10/2006	3	1	0	0	1	0
Kenai River - Moose River to Skilak Outlet	6/11/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/13/2006	1	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/14/2006	3	3	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/15/2006	5	6	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/16/2006	0	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/17/2006	1	2	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/18/2006	5	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/20/2006	1	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/21/2006	3	4	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/22/2006	6	3	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/23/2006	1	0	0	0	0	0

Source: ADF&G Freshwater Logbook

		King		Coho		Sockeye	
Site	Date	Kept	Rele	Kept	Rele	Kept	Rele
	2006						
Kenai River - Moose River to Skilak Outlet	6/24/2006	2	3	0	0	12	0
Kenai River - Moose River to Skilak Outlet	6/25/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/27/2006	0	6	2	0	0	0
Kenai River - Moose River to Skilak Outlet	6/28/2006	1	1	0	0	6	8
Kenai River - Moose River to Skilak Outlet	6/29/2006	1	3	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/30/2006	2	6	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/1/2006	1	1	0	0	1	0
Kenai River - Moose River to Skilak Outlet	7/3/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/4/2006	4	3	8	6	0	0
Kenai River - Moose River to Skilak Outlet	7/5/2006	2	3	6	0	6	0
Kenai River - Moose River to Skilak Outlet	7/6/2006	2	2	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/7/2006	3	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/8/2006	3	5	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/9/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/10/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/11/2006	3	4	0	0	3	1
Kenai River - Moose River to Skilak Outlet	7/12/2006	0	2	0	0	1	0
Kenai River - Moose River to Skilak Outlet	7/13/2006	4	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/14/2006	0	5	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/15/2006	2	2	0	0	1	0
Kenai River - Moose River to Skilak Outlet	7/16/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/18/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/19/2006	2	0	0	0	2	0
Kenai River - Moose River to Skilak Outlet	7/20/2006	4	1	0	0	3	0
Kenai River - Moose River to Skilak Outlet	7/21/2006	1	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/22/2006	2	1	0	0	8	2
Kenai River - Moose River to Skilak Outlet	7/24/2006	0	0	0	0	4	15
Kenai River - Moose River to Skilak Outlet	7/25/2006	1	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/26/2006	3	1	8	0	0	1
Kenai River - Moose River to Skilak Outlet	7/27/2006	0	0	0	0	0	5
Kenai River - Moose River to Skilak Outlet	7/28/2006	2	2	0	1	0	1
Kenai River - Moose River to Skilak Outlet	7/29/2006	2	0	1	1	0	9
Kenai River - Moose River to Skilak Outlet	7/31/2006	0	0	0	0	1	1
Kenai River - Moose River to Skilak Outlet	8/1/2006	0	1	10	2	78	46
Kenai River - Moose River to Skilak Outlet	8/2/2006	0	0	13	11	45	22
Kenai River - Moose River to Skilak Outlet	8/3/2006	0	2	19	22	71	83
Kenai River - Moose River to Skilak Outlet	8/4/2006	0	0	20	5	94	65
Kenai River - Moose River to Skilak Outlet	8/5/2006	0	0	14	10	62	55
Kenai River - Moose River to Skilak Outlet	8/6/2006	0	0	7	0	32	7
Kenai River - Moose River to Skilak Outlet	8/7/2006	0	3	1	0	102	29
Kenai River - Moose River to Skilak Outlet	8/8/2006	0	1	48	18	126	65
Kenai River - Moose River to Skilak Outlet	8/9/2006	0	6	34	10	114	46
Kenai River - Moose River to Skilak Outlet	8/10/2006	0	3	20	1	96	65
Kenai River - Moose River to Skilak Outlet	8/11/2006	0	3	17	0	85	75
Kenai River - Moose River to Skilak Outlet	8/12/2006	0	0	21	3	31	8
Kenai River - Moose River to Skilak Outlet	8/13/2006	0	0	12	8	22	12
Kenai River - Moose River to Skilak Outlet	8/14/2006	0	0	0	0	4	1
Kenai River - Moose River to Skilak Outlet	8/15/2006	1	4	33	0	85	51
Kenai River - Moose River to Skilak Outlet	8/16/2006	0	0	44	0	104	40
Kenai River - Moose River to Skilak Outlet	8/17/2006	0	1	41	1	101	51
Kenai River - Moose River to Skilak Outlet	8/18/2006	0	0	38	12	49	18
Kenai River - Moose River to Skilak Outlet	8/19/2006	0	1	37	9	53	43
Kenai River - Moose River to Skilak Outlet	8/20/2006	0	0	4	1	4	7
Kenai River - Moose River to Skilak Outlet	8/21/2006	0	1	1	0	12	3
Kenai River - Moose River to Skilak Outlet	8/22/2006	0	0	41	46	16	32
Kenai River - Moose River to Skilak Outlet	8/23/2006	0	1	73	15	71	48
Kenai River - Moose River to Skilak Outlet	8/24/2006	4	0	59	8	12	13
Kenai River - Moose River to Skilak Outlet	8/25/2006	0	0	79	14	9	24
Kenai River - Moose River to Skilak Outlet	8/26/2006	0	0	44	7	4	4
Kenai River - Moose River to Skilak Outlet	8/27/2006	0	2	40	13	0	11

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2006						
Kenai River - Moose River to Skilak Outlet	8/28/2006	0	2	2	5	0	4
Kenai River - Moose River to Skilak Outlet	8/29/2006	0	1	43	29	7	6
Kenai River - Moose River to Skilak Outlet	8/30/2006	0	0	45	34	2	28
Kenai River - Moose River to Skilak Outlet	8/31/2006	0	0	53	16	1	21
Kenai River - Moose River to Skilak Outlet	9/1/2006	0	0	38	22	0	22
Kenai River - Moose River to Skilak Outlet	9/2/2006	0	0	9	1	0	7
Kenai River - Moose River to Skilak Outlet	9/3/2006	0	1	29	7	0	18
Kenai River - Moose River to Skilak Outlet	9/4/2006	0	2	0	0	0	22
Kenai River - Moose River to Skilak Outlet	9/5/2006	0	0	18	7	0	0
Kenai River - Moose River to Skilak Outlet	9/6/2006	0	0	29	1	0	20
Kenai River - Moose River to Skilak Outlet	9/7/2006	0	0	25	2	0	30
Kenai River - Moose River to Skilak Outlet	9/8/2006	0	0	9	3	0	5
Kenai River - Moose River to Skilak Outlet	9/9/2006	0	0	17	4	0	29
Kenai River - Moose River to Skilak Outlet	9/10/2006	0	0	10	4	0	14
Kenai River - Moose River to Skilak Outlet	9/11/2006	0	0	7	0	0	7
Kenai River - Moose River to Skilak Outlet	9/12/2006	0	0	17	3	0	12
Kenai River - Moose River to Skilak Outlet	9/13/2006	0	0	17	12	0	42
Kenai River - Moose River to Skilak Outlet	9/14/2006	0	0	4	1	0	16
Kenai River - Moose River to Skilak Outlet	9/15/2006	0	0	8	13	0	8
Kenai River - Moose River to Skilak Outlet	9/16/2006	0	0	0	0	0	5
Kenai River - Moose River to Skilak Outlet	9/17/2006	0	0	6	0	0	23
Kenai River - Moose River to Skilak Outlet	9/18/2006	0	0	0	0	0	12
Kenai River - Moose River to Skilak Outlet	9/19/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	9/20/2006	0	0	8	34	0	0
Kenai River - Moose River to Skilak Outlet	9/21/2006	0	0	22	6	0	0
Kenai River - Moose River to Skilak Outlet	9/22/2006	0	0	24	3	0	0
Kenai River - Moose River to Skilak Outlet	9/23/2006	0	0	18	4	0	0
Kenai River - Moose River to Skilak Outlet	9/24/2006	0	0	14	4	0	4
Kenai River - Moose River to Skilak Outlet	9/25/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	9/26/2006	0	0	17	3	0	1
Kenai River - Moose River to Skilak Outlet	9/27/2006	0	0	20	1	0	6
Kenai River - Moose River to Skilak Outlet	9/28/2006	0	0	18	13	0	0
Kenai River - Moose River to Skilak Outlet	9/29/2006	0	0	9	7	0	0
Kenai River - Moose River to Skilak Outlet	9/30/2006	0	0	8	0	0	0
Kenai River - Moose River to Skilak Outlet	10/1/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/2/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/3/2006	0	0	6	2	0	0
Kenai River - Moose River to Skilak Outlet	10/4/2006	0	0	8	4	0	0
Kenai River - Moose River to Skilak Outlet	10/5/2006	0	0	6	2	0	0
Kenai River - Moose River to Skilak Outlet	10/6/2006	0	0	14	6	0	0
Kenai River - Moose River to Skilak Outlet	10/7/2006	9	6	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/8/2006	0	0	4	3	0	0
Kenai River - Moose River to Skilak Outlet	10/12/2006	0	0	6	1	0	0
Kenai River - Moose River to Skilak Outlet	10/16/2006	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/17/2006	0	0	6	4	0	0
Kenai River - Moose River to Skilak Outlet	10/18/2006	0	0	6	4	0	0
Kenai River - Moose River to Skilak Outlet	10/19/2006	0	0	8	5	0	0
Kenai River - Moose River to Skilak Outlet	10/21/2006	0	0	4	4	0	0
Kenai River - Moose River to Skilak Outlet	10/22/2006	0	0	7	0	0	0
Kenai River - Moose River to Skilak Outlet	10/23/2006	0	0	4	5	0	0
Kenai River - Skilak Inlet to Kenai Lake		0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	5/11/2006	2	0	0	0	6	0
Kenai River - Skilak Inlet to Kenai Lake	6/4/2006	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/5/2006	0	0	0	0	4	0
Kenai River - Skilak Inlet to Kenai Lake	6/9/2006	0	0	0	0	1	0
Kenai River - Skilak Inlet to Kenai Lake	6/11/2006	0	0	0	0	30	6
Kenai River - Skilak Inlet to Kenai Lake	6/12/2006	0	0	0	0	19	7
Kenai River - Skilak Inlet to Kenai Lake	6/13/2006	0	0	0	0	34	17
Kenai River - Skilak Inlet to Kenai Lake	6/14/2006	0	0	0	0	47	33
Kenai River - Skilak Inlet to Kenai Lake	6/15/2006	0	0	0	0	34	15

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2006						
Kenai River - Skilak Inlet to Kenai Lake	6/16/2006	0	0	0	0	75	17
Kenai River - Skilak Inlet to Kenai Lake	6/17/2006	0	0	0	0	45	21
Kenai River - Skilak Inlet to Kenai Lake	6/18/2006	0	0	0	0	66	32
Kenai River - Skilak Inlet to Kenai Lake	6/19/2006	0	0	0	0	90	46
Kenai River - Skilak Inlet to Kenai Lake	6/20/2006	0	0	0	0	44	12
Kenai River - Skilak Inlet to Kenai Lake	6/21/2006	0	0	0	0	93	48
Kenai River - Skilak Inlet to Kenai Lake	6/22/2006	0	0	0	0	106	99
Kenai River - Skilak Inlet to Kenai Lake	6/23/2006	0	0	0	0	61	51
Kenai River - Skilak Inlet to Kenai Lake	6/24/2006	0	0	0	0	45	2
Kenai River - Skilak Inlet to Kenai Lake	6/25/2006	0	0	0	0	88	26
Kenai River - Skilak Inlet to Kenai Lake	6/26/2006	0	0	0	0	83	51
Kenai River - Skilak Inlet to Kenai Lake	6/27/2006	0	0	0	2	97	31
Kenai River - Skilak Inlet to Kenai Lake	6/28/2006	0	0	0	0	86	40
Kenai River - Skilak Inlet to Kenai Lake	6/29/2006	2	0	0	0	71	44
Kenai River - Skilak Inlet to Kenai Lake	6/30/2006	0	0	0	0	121	57
Kenai River - Skilak Inlet to Kenai Lake	7/1/2006	2	0	0	0	76	106
Kenai River - Skilak Inlet to Kenai Lake	7/2/2006	0	0	0	0	37	21
Kenai River - Skilak Inlet to Kenai Lake	7/3/2006	0	0	0	0	102	35
Kenai River - Skilak Inlet to Kenai Lake	7/4/2006	0	0	0	0	42	34
Kenai River - Skilak Inlet to Kenai Lake	7/5/2006	0	0	0	0	21	22
Kenai River - Skilak Inlet to Kenai Lake	7/6/2006	0	0	0	0	25	0
Kenai River - Skilak Inlet to Kenai Lake	7/7/2006	0	0	0	0	20	28
Kenai River - Skilak Inlet to Kenai Lake	7/8/2006	0	0	0	0	3	3
Kenai River - Skilak Inlet to Kenai Lake	7/9/2006	0	0	0	0	2	0
Kenai River - Skilak Inlet to Kenai Lake	7/10/2006	0	0	0	0	23	1
Kenai River - Skilak Inlet to Kenai Lake	7/11/2006	0	0	0	0	11	1
Kenai River - Skilak Inlet to Kenai Lake	7/12/2006	0	0	0	0	19	0
Kenai River - Skilak Inlet to Kenai Lake	7/13/2006	1	0	0	0	9	7
Kenai River - Skilak Inlet to Kenai Lake	7/14/2006	0	1	0	0	5	0
Kenai River - Skilak Inlet to Kenai Lake	7/15/2006	0	0	0	0	9	0
Kenai River - Skilak Inlet to Kenai Lake	7/16/2006	0	1	0	0	6	2
Kenai River - Skilak Inlet to Kenai Lake	7/17/2006	0	0	0	0	24	2
Kenai River - Skilak Inlet to Kenai Lake	7/18/2006	0	0	0	0	11	1
Kenai River - Skilak Inlet to Kenai Lake	7/19/2006	1	0	0	0	5	9
Kenai River - Skilak Inlet to Kenai Lake	7/20/2006	0	0	0	0	14	1
Kenai River - Skilak Inlet to Kenai Lake	7/21/2006	0	0	0	0	5	7
Kenai River - Skilak Inlet to Kenai Lake	7/22/2006	0	0	0	0	8	4
Kenai River - Skilak Inlet to Kenai Lake	7/23/2006	0	1	0	0	16	9
Kenai River - Skilak Inlet to Kenai Lake	7/24/2006	0	0	0	0	34	39
Kenai River - Skilak Inlet to Kenai Lake	7/25/2006	3	1	0	0	3	6
Kenai River - Skilak Inlet to Kenai Lake	7/26/2006	0	0	0	0	26	8
Kenai River - Skilak Inlet to Kenai Lake	7/27/2006	1	1	0	0	10	6
Kenai River - Skilak Inlet to Kenai Lake	7/28/2006	0	0	1	1	27	9
Kenai River - Skilak Inlet to Kenai Lake	7/29/2006	0	0	0	0	14	10
Kenai River - Skilak Inlet to Kenai Lake	7/30/2006	0	0	0	0	17	33
Kenai River - Skilak Inlet to Kenai Lake	7/31/2006	0	0	0	0	59	28
Kenai River - Skilak Inlet to Kenai Lake	8/1/2006	0	0	12	0	45	54
Kenai River - Skilak Inlet to Kenai Lake	8/2/2006	0	0	2	0	80	131
Kenai River - Skilak Inlet to Kenai Lake	8/3/2006	2	16	0	0	51	24
Kenai River - Skilak Inlet to Kenai Lake	8/4/2006	0	0	1	0	58	159
Kenai River - Skilak Inlet to Kenai Lake	8/5/2006	0	0	2	0	73	126
Kenai River - Skilak Inlet to Kenai Lake	8/6/2006	0	0	0	0	34	160
Kenai River - Skilak Inlet to Kenai Lake	8/7/2006	0	0	0	0	60	108
Kenai River - Skilak Inlet to Kenai Lake	8/8/2006	2	0	0	0	70	177
Kenai River - Skilak Inlet to Kenai Lake	8/9/2006	0	0	1	0	42	109
Kenai River - Skilak Inlet to Kenai Lake	8/10/2006	0	0	1	0	47	132
Kenai River - Skilak Inlet to Kenai Lake	8/11/2006	0	0	2	2	43	137
Kenai River - Skilak Inlet to Kenai Lake	8/12/2006	0	0	0	0	6	62
Kenai River - Skilak Inlet to Kenai Lake	8/13/2006	0	0	0	0	9	49
Kenai River - Skilak Inlet to Kenai Lake	8/14/2006	0	0	2	0	40	50

Source: ADF&G Freshwater Logbook

		King		Coho		Sockeye	
Site	Date	Kept	Rele	Kept	Rele	Kept	Rele
	2006						
Kenai River - Skilak Inlet to Kenai Lake	8/15/2006	0	0	1	1	6	62
Kenai River - Skilak Inlet to Kenai Lake	8/16/2006	0	0	1	0	0	38
Kenai River - Skilak Inlet to Kenai Lake	8/17/2006	0	0	0	0	4	13
Kenai River - Skilak Inlet to Kenai Lake	8/18/2006	0	0	0	0	0	7
Kenai River - Skilak Inlet to Kenai Lake	8/19/2006	0	0	4	2	1	10
Kenai River - Skilak Inlet to Kenai Lake	8/20/2006	0	0	0	0	0	9
Kenai River - Skilak Inlet to Kenai Lake	8/21/2006	0	0	0	0	0	11
Kenai River - Skilak Inlet to Kenai Lake	8/22/2006	0	0	3	0	1	9
Kenai River - Skilak Inlet to Kenai Lake	8/23/2006	0	0	0	2	0	25
Kenai River - Skilak Inlet to Kenai Lake	8/24/2006	0	0	0	0	0	1
Kenai River - Skilak Inlet to Kenai Lake	8/25/2006	0	0	6	1	10	26
Kenai River - Skilak Inlet to Kenai Lake	8/26/2006	0	0	4	0	0	5
Kenai River - Skilak Inlet to Kenai Lake	8/27/2006	0	0	5	1	0	24
Kenai River - Skilak Inlet to Kenai Lake	8/28/2006	0	0	4	0	0	28
Kenai River - Skilak Inlet to Kenai Lake	8/29/2006	0	0	11	1	0	63
Kenai River - Skilak Inlet to Kenai Lake	8/30/2006	0	0	0	4	0	13
Kenai River - Skilak Inlet to Kenai Lake	8/31/2006	0	0	9	0	0	5
Kenai River - Skilak Inlet to Kenai Lake	9/1/2006	0	0	5	1	0	13
Kenai River - Skilak Inlet to Kenai Lake	9/2/2006	0	0	9	2	0	34
Kenai River - Skilak Inlet to Kenai Lake	9/3/2006	0	0	2	2	0	14
Kenai River - Skilak Inlet to Kenai Lake	9/4/2006	0	0	4	1	0	43
Kenai River - Skilak Inlet to Kenai Lake	9/5/2006	0	0	1	8	0	32
Kenai River - Skilak Inlet to Kenai Lake	9/6/2006	0	0	2	2	0	17
Kenai River - Skilak Inlet to Kenai Lake	9/7/2006	0	0	4	1	0	10
Kenai River - Skilak Inlet to Kenai Lake	9/8/2006	0	0	6	4	0	47
Kenai River - Skilak Inlet to Kenai Lake	9/9/2006	0	0	3	0	0	18
Kenai River - Skilak Inlet to Kenai Lake	9/10/2006	0	0	4	5	0	11
Kenai River - Skilak Inlet to Kenai Lake	9/11/2006	0	0	1	11	0	21
Kenai River - Skilak Inlet to Kenai Lake	9/12/2006	0	0	13	13	0	35
Kenai River - Skilak Inlet to Kenai Lake	9/13/2006	0	0	0	12	0	17
Kenai River - Skilak Inlet to Kenai Lake	9/14/2006	0	0	4	14	0	15
Kenai River - Skilak Inlet to Kenai Lake	9/15/2006	0	0	1	12	0	31
Kenai River - Skilak Inlet to Kenai Lake	9/16/2006	0	0	8	2	0	63
Kenai River - Skilak Inlet to Kenai Lake	9/17/2006	0	0	8	4	0	13
Kenai River - Skilak Inlet to Kenai Lake	9/18/2006	0	0	0	0	0	26
Kenai River - Skilak Inlet to Kenai Lake	9/19/2006	0	0	1	1	0	15
Kenai River - Skilak Inlet to Kenai Lake	9/20/2006	0	0	4	0	0	14
Kenai River - Skilak Inlet to Kenai Lake	9/21/2006	0	0	0	5	0	26
Kenai River - Skilak Inlet to Kenai Lake	9/22/2006	0	0	3	2	0	18
Kenai River - Skilak Inlet to Kenai Lake	9/23/2006	0	0	1	1	0	4
Kenai River - Skilak Inlet to Kenai Lake	9/24/2006	0	0	1	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/25/2006	0	0	1	0	0	6
Kenai River - Skilak Inlet to Kenai Lake	9/26/2006	0	0	0	0	0	3
Kenai River - Skilak Inlet to Kenai Lake	9/27/2006	0	0	4	0	0	6
Kenai River - Skilak Inlet to Kenai Lake	9/28/2006	0	0	5	0	0	11
Kenai River - Skilak Inlet to Kenai Lake	9/29/2006	0	0	0	0	0	1
Kenai River - Skilak Inlet to Kenai Lake	9/30/2006	0	0	4	8	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/2/2006	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/3/2006	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/4/2006	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/6/2006	0	0	1	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/7/2006	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/8/2006	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/12/2006	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/21/2006	0	0	4	0	0	0

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2007						
Kenai River - Cook Inlet to Soldotna Bridge	5/11/2007	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/13/2007	3	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/15/2007	1	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/16/2007	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/17/2007	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/18/2007	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/19/2007	1	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/20/2007	1	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/22/2007	3	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/23/2007	6	2	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/24/2007	3	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/25/2007	3	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/26/2007	3	2	0	0	0	21
Kenai River - Cook Inlet to Soldotna Bridge	5/27/2007	1	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/28/2007	4	1	0	0	0	14
Kenai River - Cook Inlet to Soldotna Bridge	5/29/2007	4	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	5/30/2007	12	6	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	5/31/2007	8	5	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/1/2007	9	7	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/2/2007	10	8	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	6/3/2007	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/4/2007	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/5/2007	10	10	0	0	2	1
Kenai River - Cook Inlet to Soldotna Bridge	6/6/2007	3	4	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/7/2007	5	8	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	6/8/2007	12	10	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	6/9/2007	31	7	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/10/2007	4	3	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/11/2007	6	4	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/12/2007	124	114	0	0	8	0
Kenai River - Cook Inlet to Soldotna Bridge	6/13/2007	118	85	0	0	3	0
Kenai River - Cook Inlet to Soldotna Bridge	6/14/2007	110	78	0	0	2	0
Kenai River - Cook Inlet to Soldotna Bridge	6/15/2007	105	59	2	0	3	0
Kenai River - Cook Inlet to Soldotna Bridge	6/16/2007	81	47	0	0	4	1
Kenai River - Cook Inlet to Soldotna Bridge	6/17/2007	5	2	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/18/2007	1	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/19/2007	171	95	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/20/2007	120	54	0	0	2	0
Kenai River - Cook Inlet to Soldotna Bridge	6/21/2007	67	29	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/22/2007	42	21	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/23/2007	54	31	0	0	3	0
Kenai River - Cook Inlet to Soldotna Bridge	6/24/2007	2	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	6/25/2007	0	4	0	0	2	0
Kenai River - Cook Inlet to Soldotna Bridge	6/26/2007	107	66	0	0	3	1
Kenai River - Cook Inlet to Soldotna Bridge	6/27/2007	60	27	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	6/28/2007	71	45	0	0	8	0
Kenai River - Cook Inlet to Soldotna Bridge	6/29/2007	74	41	0	0	3	1
Kenai River - Cook Inlet to Soldotna Bridge	6/30/2007	44	59	0	0	6	0
Kenai River - Cook Inlet to Soldotna Bridge	7/1/2007	7	5	0	0	2	0
Kenai River - Cook Inlet to Soldotna Bridge	7/2/2007	11	9	0	0	1	0
Kenai River - Cook Inlet to Soldotna Bridge	7/3/2007	121	53	1	0	14	1
Kenai River - Cook Inlet to Soldotna Bridge	7/4/2007	84	41	2	0	9	2
Kenai River - Cook Inlet to Soldotna Bridge	7/5/2007	111	47	0	0	10	0
Kenai River - Cook Inlet to Soldotna Bridge	7/6/2007	94	79	2	1	2	0
Kenai River - Cook Inlet to Soldotna Bridge	7/7/2007	111	77	6	0	5	1
Kenai River - Cook Inlet to Soldotna Bridge	7/8/2007	4	5	13	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	7/9/2007	2	5	5	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	7/10/2007	206	135	0	0	10	4
Kenai River - Cook Inlet to Soldotna Bridge	7/11/2007	253	149	0	0	8	1
Kenai River - Cook Inlet to Soldotna Bridge	7/12/2007	232	142	0	0	2	2

Source: ADF&G Freshwater Logbook

		King		Coho		Sockeye	
Site	Date	Kept	Rele	Kept	Rele	Kept	Rele
	2007						
Kenai River - Cook Inlet to Soldotna Bridge	7/13/2007	195	153	0	0	2	1
Kenai River - Cook Inlet to Soldotna Bridge	7/14/2007	194	140	0	0	9	3
Kenai River - Cook Inlet to Soldotna Bridge	7/15/2007	3	3	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	7/16/2007	5	1	0	0	16	4
Kenai River - Cook Inlet to Soldotna Bridge	7/17/2007	320	193	1	1	9	1
Kenai River - Cook Inlet to Soldotna Bridge	7/18/2007	360	234	1	0	43	1
Kenai River - Cook Inlet to Soldotna Bridge	7/19/2007	307	218	2	0	54	5
Kenai River - Cook Inlet to Soldotna Bridge	7/20/2007	318	196	0	0	21	2
Kenai River - Cook Inlet to Soldotna Bridge	7/21/2007	297	208	1	1	53	4
Kenai River - Cook Inlet to Soldotna Bridge	7/22/2007	12	0	1	1	9	12
Kenai River - Cook Inlet to Soldotna Bridge	7/23/2007	5	3	0	0	30	22
Kenai River - Cook Inlet to Soldotna Bridge	7/24/2007	334	188	6	1	24	3
Kenai River - Cook Inlet to Soldotna Bridge	7/25/2007	319	218	4	0	67	2
Kenai River - Cook Inlet to Soldotna Bridge	7/26/2007	319	196	3	2	85	2
Kenai River - Cook Inlet to Soldotna Bridge	7/27/2007	296	211	6	3	75	6
Kenai River - Cook Inlet to Soldotna Bridge	7/28/2007	199	149	6	0	73	3
Kenai River - Cook Inlet to Soldotna Bridge	7/29/2007	1	2	0	0	19	8
Kenai River - Cook Inlet to Soldotna Bridge	7/30/2007	2	3	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	7/31/2007	274	129	4	1	11	1
Kenai River - Cook Inlet to Soldotna Bridge	8/1/2007	2	22	39	0	42	1
Kenai River - Cook Inlet to Soldotna Bridge	8/2/2007	1	21	50	2	31	10
Kenai River - Cook Inlet to Soldotna Bridge	8/3/2007	0	38	20	1	42	1
Kenai River - Cook Inlet to Soldotna Bridge	8/4/2007	1	27	40	1	34	0
Kenai River - Cook Inlet to Soldotna Bridge	8/5/2007	0	7	49	0	30	0
Kenai River - Cook Inlet to Soldotna Bridge	8/6/2007	0	0	0	0	74	12
Kenai River - Cook Inlet to Soldotna Bridge	8/7/2007	4	42	132	11	78	5
Kenai River - Cook Inlet to Soldotna Bridge	8/8/2007	3	28	155	4	45	5
Kenai River - Cook Inlet to Soldotna Bridge	8/9/2007	7	22	170	8	32	1
Kenai River - Cook Inlet to Soldotna Bridge	8/10/2007	0	37	129	6	20	1
Kenai River - Cook Inlet to Soldotna Bridge	8/11/2007	5	11	271	1	22	0
Kenai River - Cook Inlet to Soldotna Bridge	8/12/2007	2	16	213	16	29	0
Kenai River - Cook Inlet to Soldotna Bridge	8/14/2007	10	4	328	16	11	2
Kenai River - Cook Inlet to Soldotna Bridge	8/15/2007	7	12	408	0	14	7
Kenai River - Cook Inlet to Soldotna Bridge	8/16/2007	6	9	326	6	6	0
Kenai River - Cook Inlet to Soldotna Bridge	8/17/2007	6	7	239	22	4	0
Kenai River - Cook Inlet to Soldotna Bridge	8/18/2007	4	2	252	20	2	1
Kenai River - Cook Inlet to Soldotna Bridge	8/19/2007	9	12	255	2	11	1
Kenai River - Cook Inlet to Soldotna Bridge	8/20/2007	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	8/21/2007	0	7	206	11	2	0
Kenai River - Cook Inlet to Soldotna Bridge	8/22/2007	7	7	293	13	3	0
Kenai River - Cook Inlet to Soldotna Bridge	8/23/2007	7	5	231	5	2	0
Kenai River - Cook Inlet to Soldotna Bridge	8/24/2007	16	10	178	3	3	0
Kenai River - Cook Inlet to Soldotna Bridge	8/25/2007	0	3	152	2	3	0
Kenai River - Cook Inlet to Soldotna Bridge	8/26/2007	3	2	105	5	2	1
Kenai River - Cook Inlet to Soldotna Bridge	8/27/2007	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	8/28/2007	0	0	115	24	3	1
Kenai River - Cook Inlet to Soldotna Bridge	8/29/2007	1	0	94	0	1	1
Kenai River - Cook Inlet to Soldotna Bridge	8/30/2007	0	2	129	1	4	1
Kenai River - Cook Inlet to Soldotna Bridge	8/31/2007	0	2	108	3	2	1
Kenai River - Cook Inlet to Soldotna Bridge	9/1/2007	0	1	87	0	0	1
Kenai River - Cook Inlet to Soldotna Bridge	9/2/2007	0	1	65	3	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/4/2007	0	1	83	7	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/5/2007	0	0	75	2	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/6/2007	0	1	67	3	0	1
Kenai River - Cook Inlet to Soldotna Bridge	9/7/2007	0	0	80	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/8/2007	0	0	57	4	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/9/2007	7	0	29	1	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/10/2007	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/11/2007	0	0	49	2	2	4
Kenai River - Cook Inlet to Soldotna Bridge	9/12/2007	0	0	31	0	0	0

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2007						
Kenai River - Cook Inlet to Soldotna Bridge	9/13/2007	0	0	22	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/14/2007	0	0	26	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/15/2007	0	0	21	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/16/2007	0	0	17	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/17/2007	0	0	0	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/18/2007	0	0	14	3	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/19/2007	0	0	17	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/20/2007	0	0	9	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/21/2007	0	0	16	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/22/2007	0	0	17	9	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/23/2007	0	0	10	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/25/2007	0	0	15	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/26/2007	0	0	9	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	9/27/2007	0	0	4	0	0	0
Kenai River - Cook Inlet to Soldotna Bridge	10/5/2007	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/16/2007	3	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/25/2007	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/26/2007	1	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/28/2007	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	5/30/2007	2	4	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/1/2007	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/2/2007	2	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/5/2007	4	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/6/2007	0	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/7/2007	1	2	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/8/2007	5	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/9/2007	12	13	0	2	0	0
Kenai River - Soldotna Bridge to Moose River	6/11/2007	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/12/2007	14	44	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/13/2007	16	17	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/14/2007	22	47	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/15/2007	14	22	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/16/2007	16	13	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/17/2007	2	1	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/18/2007	2	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/19/2007	41	37	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/20/2007	27	17	1	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/21/2007	17	11	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/22/2007	18	19	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/23/2007	9	8	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/25/2007	2	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/26/2007	17	32	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/27/2007	27	30	0	0	2	0
Kenai River - Soldotna Bridge to Moose River	6/28/2007	21	23	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	6/29/2007	10	8	0	0	2	0
Kenai River - Soldotna Bridge to Moose River	6/30/2007	11	6	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	7/3/2007	16	16	0	0	3	0
Kenai River - Soldotna Bridge to Moose River	7/4/2007	10	5	0	0	2	0
Kenai River - Soldotna Bridge to Moose River	7/5/2007	13	5	0	0	2	0
Kenai River - Soldotna Bridge to Moose River	7/6/2007	3	4	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/7/2007	1	5	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/9/2007	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/10/2007	8	7	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	7/11/2007	6	3	0	0	12	7
Kenai River - Soldotna Bridge to Moose River	7/12/2007	3	1	0	0	12	17
Kenai River - Soldotna Bridge to Moose River	7/13/2007	2	2	0	4	5	8
Kenai River - Soldotna Bridge to Moose River	7/14/2007	18	5	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	7/15/2007	0	0	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	7/16/2007	0	0	0	0	1	0
Kenai River - Soldotna Bridge to Moose River	7/17/2007	8	9	0	0	1	0

Source: ADF&G Freshwater Logbook

		King		Coho		Sockeye	
Site	Date	Kept	Rele	Kept	Rele	Kept	Rele
	2007						
Kenai River - Soldotna Bridge to Moose River	7/18/2007	6	4	0	0	9	0
Kenai River - Soldotna Bridge to Moose River	7/19/2007	3	1	0	0	19	0
Kenai River - Soldotna Bridge to Moose River	7/20/2007	4	4	0	0	15	8
Kenai River - Soldotna Bridge to Moose River	7/21/2007	5	2	0	0	9	11
Kenai River - Soldotna Bridge to Moose River	7/22/2007	0	0	3	0	48	10
Kenai River - Soldotna Bridge to Moose River	7/23/2007	0	0	0	0	38	17
Kenai River - Soldotna Bridge to Moose River	7/24/2007	13	9	0	0	10	0
Kenai River - Soldotna Bridge to Moose River	7/25/2007	8	5	2	0	20	15
Kenai River - Soldotna Bridge to Moose River	7/26/2007	15	4	0	0	69	17
Kenai River - Soldotna Bridge to Moose River	7/27/2007	7	3	0	0	66	21
Kenai River - Soldotna Bridge to Moose River	7/28/2007	3	4	0	0	17	0
Kenai River - Soldotna Bridge to Moose River	7/29/2007	0	0	0	0	43	0
Kenai River - Soldotna Bridge to Moose River	7/30/2007	0	0	0	0	64	34
Kenai River - Soldotna Bridge to Moose River	7/31/2007	17	9	0	0	34	34
Kenai River - Soldotna Bridge to Moose River	8/1/2007	0	2	0	0	43	12
Kenai River - Soldotna Bridge to Moose River	8/2/2007	0	1	2	0	71	37
Kenai River - Soldotna Bridge to Moose River	8/3/2007	0	2	1	0	73	31
Kenai River - Soldotna Bridge to Moose River	8/4/2007	0	0	1	0	38	32
Kenai River - Soldotna Bridge to Moose River	8/5/2007	0	0	2	1	41	23
Kenai River - Soldotna Bridge to Moose River	8/6/2007	0	0	0	0	49	31
Kenai River - Soldotna Bridge to Moose River	8/7/2007	0	0	7	0	100	38
Kenai River - Soldotna Bridge to Moose River	8/8/2007	0	0	11	0	83	40
Kenai River - Soldotna Bridge to Moose River	8/9/2007	0	0	28	3	40	44
Kenai River - Soldotna Bridge to Moose River	8/10/2007	0	4	25	1	78	34
Kenai River - Soldotna Bridge to Moose River	8/11/2007	0	0	24	3	62	66
Kenai River - Soldotna Bridge to Moose River	8/12/2007	0	0	18	0	49	0
Kenai River - Soldotna Bridge to Moose River	8/13/2007	0	0	1	1	54	26
Kenai River - Soldotna Bridge to Moose River	8/14/2007	0	1	48	9	64	70
Kenai River - Soldotna Bridge to Moose River	8/15/2007	0	2	44	9	83	62
Kenai River - Soldotna Bridge to Moose River	8/16/2007	0	1	56	15	2	6
Kenai River - Soldotna Bridge to Moose River	8/17/2007	0	2	46	6	45	27
Kenai River - Soldotna Bridge to Moose River	8/18/2007	0	1	52	11	12	7
Kenai River - Soldotna Bridge to Moose River	8/19/2007	0	0	14	6	0	0
Kenai River - Soldotna Bridge to Moose River	8/20/2007	0	0	3	0	0	2
Kenai River - Soldotna Bridge to Moose River	8/21/2007	0	0	55	12	28	14
Kenai River - Soldotna Bridge to Moose River	8/22/2007	0	0	31	1	1	0
Kenai River - Soldotna Bridge to Moose River	8/23/2007	0	1	65	4	11	7
Kenai River - Soldotna Bridge to Moose River	8/24/2007	0	0	47	1	8	8
Kenai River - Soldotna Bridge to Moose River	8/25/2007	0	0	20	0	0	1
Kenai River - Soldotna Bridge to Moose River	8/26/2007	0	0	32	3	5	3
Kenai River - Soldotna Bridge to Moose River	8/27/2007	0	2	21	7	0	2
Kenai River - Soldotna Bridge to Moose River	8/28/2007	0	0	31	9	0	0
Kenai River - Soldotna Bridge to Moose River	8/29/2007	0	0	16	0	0	0
Kenai River - Soldotna Bridge to Moose River	8/30/2007	0	0	18	0	0	0
Kenai River - Soldotna Bridge to Moose River	8/31/2007	0	0	8	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/1/2007	0	0	4	1	0	0
Kenai River - Soldotna Bridge to Moose River	9/2/2007	0	0	7	1	0	0
Kenai River - Soldotna Bridge to Moose River	9/3/2007	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/4/2007	0	0	7	1	0	0
Kenai River - Soldotna Bridge to Moose River	9/5/2007	0	0	12	3	0	0
Kenai River - Soldotna Bridge to Moose River	9/6/2007	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/7/2007	0	0	12	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/8/2007	0	0	10	1	0	0
Kenai River - Soldotna Bridge to Moose River	9/9/2007	0	0	4	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/10/2007	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/11/2007	0	0	11	2	0	0
Kenai River - Soldotna Bridge to Moose River	9/13/2007	0	0	4	3	0	0
Kenai River - Soldotna Bridge to Moose River	9/14/2007	0	0	8	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/15/2007	0	0	18	1	0	0
Kenai River - Soldotna Bridge to Moose River	9/16/2007	0	0	10	0	0	0

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2007						
Kenai River - Soldotna Bridge to Moose River	9/17/2007	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/18/2007	0	0	8	6	0	0
Kenai River - Soldotna Bridge to Moose River	9/19/2007	0	0	26	28	0	0
Kenai River - Soldotna Bridge to Moose River	9/20/2007	0	0	20	9	0	0
Kenai River - Soldotna Bridge to Moose River	9/21/2007	0	0	6	6	0	0
Kenai River - Soldotna Bridge to Moose River	9/22/2007	0	0	12	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/23/2007	0	0	6	4	0	14
Kenai River - Soldotna Bridge to Moose River	9/24/2007	0	0	0	0	0	6
Kenai River - Soldotna Bridge to Moose River	9/25/2007	0	0	10	13	0	0
Kenai River - Soldotna Bridge to Moose River	9/26/2007	0	0	10	4	0	3
Kenai River - Soldotna Bridge to Moose River	9/27/2007	0	0	6	7	0	0
Kenai River - Soldotna Bridge to Moose River	9/28/2007	0	0	8	0	0	0
Kenai River - Soldotna Bridge to Moose River	9/29/2007	0	0	8	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/2/2007	0	0	4	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/6/2007	0	0	6	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/7/2007	0	0	6	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/9/2007	0	0	6	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/11/2007	0	0	0	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/13/2007	0	0	6	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/14/2007	0	0	6	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/15/2007	0	0	8	0	0	0
Kenai River - Soldotna Bridge to Moose River	10/22/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/12/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/15/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/17/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/19/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/21/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/23/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/24/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/28/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/29/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	5/30/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/2/2007	0	0	0	1	0	0
Kenai River - Moose River to Skilak Outlet	6/5/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/6/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/7/2007	1	2	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/8/2007	3	0	0	0	0	1
Kenai River - Moose River to Skilak Outlet	6/9/2007	3	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/12/2007	1	3	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/13/2007	2	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/14/2007	0	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/15/2007	5	1	0	0	1	0
Kenai River - Moose River to Skilak Outlet	6/16/2007	4	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/17/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/19/2007	3	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/20/2007	3	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/21/2007	1	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/22/2007	6	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/23/2007	4	4	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/24/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/25/2007	0	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/26/2007	1	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/27/2007	2	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/28/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/29/2007	2	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	6/30/2007	0	1	0	0	0	3
Kenai River - Moose River to Skilak Outlet	7/1/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/2/2007	1	0	0	0	24	33
Kenai River - Moose River to Skilak Outlet	7/3/2007	2	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/4/2007	5	0	0	0	0	1

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2007						
Kenai River - Moose River to Skilak Outlet	7/5/2007	1	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/6/2007	3	7	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/7/2007	2	1	0	0	0	4
Kenai River - Moose River to Skilak Outlet	7/9/2007	0	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/10/2007	5	1	0	0	0	4
Kenai River - Moose River to Skilak Outlet	7/11/2007	4	3	0	0	1	0
Kenai River - Moose River to Skilak Outlet	7/12/2007	2	4	0	0	3	0
Kenai River - Moose River to Skilak Outlet	7/13/2007	0	0	0	0	2	4
Kenai River - Moose River to Skilak Outlet	7/14/2007	1	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/15/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/16/2007	1	1	0	0	0	0
Kenai River - Moose River to Skilak Outlet	7/17/2007	4	4	0	0	1	3
Kenai River - Moose River to Skilak Outlet	7/18/2007	1	0	0	0	1	4
Kenai River - Moose River to Skilak Outlet	7/19/2007	0	0	0	4	1	4
Kenai River - Moose River to Skilak Outlet	7/20/2007	3	0	0	0	15	7
Kenai River - Moose River to Skilak Outlet	7/21/2007	6	0	0	0	39	0
Kenai River - Moose River to Skilak Outlet	7/23/2007	1	0	0	0	29	4
Kenai River - Moose River to Skilak Outlet	7/24/2007	1	0	0	0	70	11
Kenai River - Moose River to Skilak Outlet	7/25/2007	6	2	0	0	88	28
Kenai River - Moose River to Skilak Outlet	7/26/2007	3	0	0	0	92	59
Kenai River - Moose River to Skilak Outlet	7/27/2007	6	1	0	0	100	48
Kenai River - Moose River to Skilak Outlet	7/28/2007	3	0	0	0	63	18
Kenai River - Moose River to Skilak Outlet	7/29/2007	0	0	0	0	15	0
Kenai River - Moose River to Skilak Outlet	7/30/2007	3	5	0	0	89	22
Kenai River - Moose River to Skilak Outlet	7/31/2007	6	5	0	0	44	14
Kenai River - Moose River to Skilak Outlet	8/1/2007	0	0	0	0	145	57
Kenai River - Moose River to Skilak Outlet	8/2/2007	0	0	1	0	145	42
Kenai River - Moose River to Skilak Outlet	8/3/2007	0	1	1	0	65	20
Kenai River - Moose River to Skilak Outlet	8/4/2007	0	2	0	0	82	32
Kenai River - Moose River to Skilak Outlet	8/5/2007	0	0	0	0	25	9
Kenai River - Moose River to Skilak Outlet	8/6/2007	0	0	0	1	32	28
Kenai River - Moose River to Skilak Outlet	8/7/2007	2	2	5	1	105	68
Kenai River - Moose River to Skilak Outlet	8/8/2007	0	0	7	1	68	9
Kenai River - Moose River to Skilak Outlet	8/9/2007	0	1	18	5	181	78
Kenai River - Moose River to Skilak Outlet	8/10/2007	0	3	11	3	135	19
Kenai River - Moose River to Skilak Outlet	8/11/2007	0	3	12	1	72	61
Kenai River - Moose River to Skilak Outlet	8/12/2007	0	0	7	0	35	10
Kenai River - Moose River to Skilak Outlet	8/13/2007	0	0	4	2	86	71
Kenai River - Moose River to Skilak Outlet	8/14/2007	0	3	41	10	27	36
Kenai River - Moose River to Skilak Outlet	8/15/2007	0	4	32	9	38	20
Kenai River - Moose River to Skilak Outlet	8/16/2007	2	3	52	6	10	17
Kenai River - Moose River to Skilak Outlet	8/17/2007	0	4	43	6	10	1
Kenai River - Moose River to Skilak Outlet	8/18/2007	0	1	46	11	33	39
Kenai River - Moose River to Skilak Outlet	8/19/2007	0	4	29	10	6	4
Kenai River - Moose River to Skilak Outlet	8/20/2007	0	4	9	1	0	9
Kenai River - Moose River to Skilak Outlet	8/21/2007	0	0	103	27	6	7
Kenai River - Moose River to Skilak Outlet	8/22/2007	0	3	88	35	27	20
Kenai River - Moose River to Skilak Outlet	8/23/2007	0	3	51	22	0	3
Kenai River - Moose River to Skilak Outlet	8/24/2007	8	4	83	13	21	20
Kenai River - Moose River to Skilak Outlet	8/25/2007	0	0	49	9	2	0
Kenai River - Moose River to Skilak Outlet	8/26/2007	0	0	30	6	0	4
Kenai River - Moose River to Skilak Outlet	8/27/2007	0	1	11	6	0	2
Kenai River - Moose River to Skilak Outlet	8/28/2007	0	3	74	18	0	1
Kenai River - Moose River to Skilak Outlet	8/29/2007	0	1	33	16	0	0
Kenai River - Moose River to Skilak Outlet	8/30/2007	0	15	31	9	0	2
Kenai River - Moose River to Skilak Outlet	8/31/2007	0	0	28	14	0	5
Kenai River - Moose River to Skilak Outlet	9/1/2007	0	2	25	4	1	0
Kenai River - Moose River to Skilak Outlet	9/2/2007	0	0	7	13	0	0
Kenai River - Moose River to Skilak Outlet	9/3/2007	0	0	0	0	0	1
Kenai River - Moose River to Skilak Outlet	9/4/2007	0	0	21	9	0	0

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2007						
Kenai River - Moose River to Skilak Outlet	9/5/2007	0	1	28	13	0	0
Kenai River - Moose River to Skilak Outlet	9/6/2007	0	0	30	18	0	0
Kenai River - Moose River to Skilak Outlet	9/7/2007	0	0	12	7	0	7
Kenai River - Moose River to Skilak Outlet	9/8/2007	0	0	20	5	0	7
Kenai River - Moose River to Skilak Outlet	9/9/2007	0	0	26	13	0	0
Kenai River - Moose River to Skilak Outlet	9/10/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	9/11/2007	0	0	20	2	0	7
Kenai River - Moose River to Skilak Outlet	9/12/2007	0	0	32	5	0	6
Kenai River - Moose River to Skilak Outlet	9/13/2007	0	1	31	4	0	0
Kenai River - Moose River to Skilak Outlet	9/14/2007	0	0	20	0	0	2
Kenai River - Moose River to Skilak Outlet	9/15/2007	0	0	28	7	0	11
Kenai River - Moose River to Skilak Outlet	9/16/2007	0	0	4	3	0	13
Kenai River - Moose River to Skilak Outlet	9/17/2007	0	0	0	1	0	3
Kenai River - Moose River to Skilak Outlet	9/18/2007	0	0	13	0	2	1
Kenai River - Moose River to Skilak Outlet	9/19/2007	0	0	26	4	0	6
Kenai River - Moose River to Skilak Outlet	9/20/2007	0	0	31	9	0	0
Kenai River - Moose River to Skilak Outlet	9/21/2007	0	0	32	13	0	0
Kenai River - Moose River to Skilak Outlet	9/22/2007	0	0	41	10	0	0
Kenai River - Moose River to Skilak Outlet	9/23/2007	0	0	9	1	0	3
Kenai River - Moose River to Skilak Outlet	9/24/2007	0	0	4	4	0	0
Kenai River - Moose River to Skilak Outlet	9/25/2007	0	0	23	0	0	6
Kenai River - Moose River to Skilak Outlet	9/26/2007	0	0	34	9	0	0
Kenai River - Moose River to Skilak Outlet	9/27/2007	0	0	14	1	0	10
Kenai River - Moose River to Skilak Outlet	9/28/2007	0	0	28	3	0	0
Kenai River - Moose River to Skilak Outlet	9/29/2007	0	0	16	1	0	0
Kenai River - Moose River to Skilak Outlet	9/30/2007	0	0	16	5	0	0
Kenai River - Moose River to Skilak Outlet	10/1/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/2/2007	0	0	4	21	0	0
Kenai River - Moose River to Skilak Outlet	10/3/2007	0	0	10	0	0	0
Kenai River - Moose River to Skilak Outlet	10/4/2007	1	0	10	8	0	0
Kenai River - Moose River to Skilak Outlet	10/5/2007	0	0	8	12	0	0
Kenai River - Moose River to Skilak Outlet	10/6/2007	0	0	20	3	0	0
Kenai River - Moose River to Skilak Outlet	10/7/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/8/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/9/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/10/2007	0	0	8	10	0	0
Kenai River - Moose River to Skilak Outlet	10/11/2007	0	0	1	1	0	0
Kenai River - Moose River to Skilak Outlet	10/12/2007	0	0	0	0	0	0
Kenai River - Moose River to Skilak Outlet	10/20/2007	0	0	1	2	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/3/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/4/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/5/2007	0	0	0	0	4	0
Kenai River - Skilak Inlet to Kenai Lake	6/10/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	6/11/2007	0	0	0	0	23	0
Kenai River - Skilak Inlet to Kenai Lake	6/12/2007	0	0	0	0	27	14
Kenai River - Skilak Inlet to Kenai Lake	6/13/2007	0	0	0	0	55	12
Kenai River - Skilak Inlet to Kenai Lake	6/14/2007	0	0	0	0	71	63
Kenai River - Skilak Inlet to Kenai Lake	6/15/2007	0	0	0	0	72	16
Kenai River - Skilak Inlet to Kenai Lake	6/16/2007	0	4	0	0	64	14
Kenai River - Skilak Inlet to Kenai Lake	6/17/2007	0	0	0	0	37	11
Kenai River - Skilak Inlet to Kenai Lake	6/18/2007	0	0	0	0	113	82
Kenai River - Skilak Inlet to Kenai Lake	6/19/2007	0	0	0	0	104	67
Kenai River - Skilak Inlet to Kenai Lake	6/20/2007	0	0	0	0	113	49
Kenai River - Skilak Inlet to Kenai Lake	6/21/2007	0	0	0	0	92	3
Kenai River - Skilak Inlet to Kenai Lake	6/22/2007	0	0	0	0	61	5
Kenai River - Skilak Inlet to Kenai Lake	6/23/2007	0	0	0	0	61	23
Kenai River - Skilak Inlet to Kenai Lake	6/24/2007	0	0	0	0	20	15
Kenai River - Skilak Inlet to Kenai Lake	6/25/2007	0	0	0	0	38	7
Kenai River - Skilak Inlet to Kenai Lake	6/26/2007	0	0	0	0	35	10
Kenai River - Skilak Inlet to Kenai Lake	6/27/2007	0	0	0	0	43	18

Source: ADF&G Freshwater Logbook

Site	Date	King		Coho		Sockeye	
		Kept	Rele	Kept	Rele	Kept	Rele
	2007						
Kenai River - Skilak Inlet to Kenai Lake	6/28/2007	0	0	0	0	30	6
Kenai River - Skilak Inlet to Kenai Lake	6/29/2007	0	0	0	0	31	1
Kenai River - Skilak Inlet to Kenai Lake	6/30/2007	0	0	0	0	20	8
Kenai River - Skilak Inlet to Kenai Lake	7/1/2007	0	0	0	0	1	1
Kenai River - Skilak Inlet to Kenai Lake	7/2/2007	0	0	0	0	15	1
Kenai River - Skilak Inlet to Kenai Lake	7/3/2007	0	0	0	0	6	1
Kenai River - Skilak Inlet to Kenai Lake	7/4/2007	0	0	0	0	8	0
Kenai River - Skilak Inlet to Kenai Lake	7/5/2007	0	0	0	0	10	0
Kenai River - Skilak Inlet to Kenai Lake	7/6/2007	0	0	0	0	22	0
Kenai River - Skilak Inlet to Kenai Lake	7/7/2007	0	0	0	0	9	1
Kenai River - Skilak Inlet to Kenai Lake	7/8/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	7/9/2007	0	0	0	0	9	1
Kenai River - Skilak Inlet to Kenai Lake	7/10/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	7/11/2007	0	0	0	0	9	3
Kenai River - Skilak Inlet to Kenai Lake	7/12/2007	0	0	0	0	15	5
Kenai River - Skilak Inlet to Kenai Lake	7/13/2007	0	0	0	0	7	3
Kenai River - Skilak Inlet to Kenai Lake	7/14/2007	0	0	0	0	2	13
Kenai River - Skilak Inlet to Kenai Lake	7/15/2007	0	0	0	0	2	7
Kenai River - Skilak Inlet to Kenai Lake	7/16/2007	0	0	0	0	6	4
Kenai River - Skilak Inlet to Kenai Lake	7/17/2007	2	0	0	0	7	2
Kenai River - Skilak Inlet to Kenai Lake	7/18/2007	0	0	0	0	7	18
Kenai River - Skilak Inlet to Kenai Lake	7/19/2007	0	0	0	0	12	0
Kenai River - Skilak Inlet to Kenai Lake	7/20/2007	0	0	0	0	20	25
Kenai River - Skilak Inlet to Kenai Lake	7/21/2007	0	1	0	0	2	9
Kenai River - Skilak Inlet to Kenai Lake	7/22/2007	0	0	0	0	3	17
Kenai River - Skilak Inlet to Kenai Lake	7/23/2007	0	0	0	0	34	40
Kenai River - Skilak Inlet to Kenai Lake	7/24/2007	0	0	0	0	48	90
Kenai River - Skilak Inlet to Kenai Lake	7/25/2007	0	0	0	0	45	98
Kenai River - Skilak Inlet to Kenai Lake	7/26/2007	0	0	0	0	46	92
Kenai River - Skilak Inlet to Kenai Lake	7/27/2007	0	0	0	0	140	93
Kenai River - Skilak Inlet to Kenai Lake	7/28/2007	0	1	0	0	80	71
Kenai River - Skilak Inlet to Kenai Lake	7/29/2007	0	0	0	0	22	22
Kenai River - Skilak Inlet to Kenai Lake	7/30/2007	0	1	0	0	62	137
Kenai River - Skilak Inlet to Kenai Lake	7/31/2007	0	0	0	0	53	76
Kenai River - Skilak Inlet to Kenai Lake	8/1/2007	0	0	0	0	77	55
Kenai River - Skilak Inlet to Kenai Lake	8/2/2007	0	0	4	0	72	44
Kenai River - Skilak Inlet to Kenai Lake	8/3/2007	0	0	0	0	24	59
Kenai River - Skilak Inlet to Kenai Lake	8/4/2007	0	1	0	0	36	49
Kenai River - Skilak Inlet to Kenai Lake	8/5/2007	0	0	0	0	6	42
Kenai River - Skilak Inlet to Kenai Lake	8/6/2007	1	0	0	0	27	46
Kenai River - Skilak Inlet to Kenai Lake	8/7/2007	0	0	0	0	19	56
Kenai River - Skilak Inlet to Kenai Lake	8/8/2007	0	0	0	0	11	40
Kenai River - Skilak Inlet to Kenai Lake	8/9/2007	0	0	0	7	8	13
Kenai River - Skilak Inlet to Kenai Lake	8/10/2007	0	0	1	0	22	84
Kenai River - Skilak Inlet to Kenai Lake	8/11/2007	0	0	0	0	1	16
Kenai River - Skilak Inlet to Kenai Lake	8/12/2007	0	0	0	0	16	39
Kenai River - Skilak Inlet to Kenai Lake	8/13/2007	0	0	0	0	5	21
Kenai River - Skilak Inlet to Kenai Lake	8/14/2007	0	0	0	0	4	13
Kenai River - Skilak Inlet to Kenai Lake	8/15/2007	0	0	0	0	0	13
Kenai River - Skilak Inlet to Kenai Lake	8/16/2007	0	0	0	0	0	16
Kenai River - Skilak Inlet to Kenai Lake	8/17/2007	0	0	0	0	0	6
Kenai River - Skilak Inlet to Kenai Lake	8/18/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	8/19/2007	0	0	0	0	0	5
Kenai River - Skilak Inlet to Kenai Lake	8/20/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	8/21/2007	0	0	0	0	0	11
Kenai River - Skilak Inlet to Kenai Lake	8/22/2007	0	0	3	1	0	6
Kenai River - Skilak Inlet to Kenai Lake	8/23/2007	0	0	4	0	0	10
Kenai River - Skilak Inlet to Kenai Lake	8/24/2007	7	0	3	0	0	6
Kenai River - Skilak Inlet to Kenai Lake	8/25/2007	0	0	2	2	0	22
Kenai River - Skilak Inlet to Kenai Lake	8/26/2007	0	0	8	0	0	4

Source: ADF&G Freshwater Logbook

		King		Coho		Sockeye	
Site	Date	Kept	Rele	Kept	Rele	Kept	Rele
	2007						
Kenai River - Skilak Inlet to Kenai Lake	8/27/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	8/28/2007	0	0	1	2	0	5
Kenai River - Skilak Inlet to Kenai Lake	8/29/2007	0	0	5	1	0	10
Kenai River - Skilak Inlet to Kenai Lake	8/30/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	8/31/2007	0	0	2	1	0	7
Kenai River - Skilak Inlet to Kenai Lake	9/1/2007	0	0	5	0	0	2
Kenai River - Skilak Inlet to Kenai Lake	9/2/2007	0	0	4	0	0	13
Kenai River - Skilak Inlet to Kenai Lake	9/3/2007	0	0	4	1	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/4/2007	0	0	0	0	0	3
Kenai River - Skilak Inlet to Kenai Lake	9/5/2007	0	0	2	0	0	13
Kenai River - Skilak Inlet to Kenai Lake	9/6/2007	0	0	1	1	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/7/2007	0	0	6	0	0	17
Kenai River - Skilak Inlet to Kenai Lake	9/8/2007	0	0	0	1	0	12
Kenai River - Skilak Inlet to Kenai Lake	9/9/2007	0	0	2	0	0	6
Kenai River - Skilak Inlet to Kenai Lake	9/10/2007	0	0	1	6	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/11/2007	0	0	0	1	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/12/2007	0	0	1	4	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/13/2007	0	0	5	3	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/14/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/15/2007	0	0	5	2	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/16/2007	0	0	1	1	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/17/2007	0	0	0	0	0	14
Kenai River - Skilak Inlet to Kenai Lake	9/18/2007	0	0	2	0	0	4
Kenai River - Skilak Inlet to Kenai Lake	9/19/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/20/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/21/2007	0	0	0	0	0	3
Kenai River - Skilak Inlet to Kenai Lake	9/22/2007	0	0	0	0	0	7
Kenai River - Skilak Inlet to Kenai Lake	9/23/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/24/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/25/2007	0	0	1	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/26/2007	0	0	4	0	0	4
Kenai River - Skilak Inlet to Kenai Lake	9/27/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/28/2007	0	0	0	0	0	3
Kenai River - Skilak Inlet to Kenai Lake	9/29/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	9/30/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/1/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/2/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/3/2007	0	0	1	0	1	0
Kenai River - Skilak Inlet to Kenai Lake	10/4/2007	0	0	2	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/5/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/6/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/7/2007	0	0	5	3	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/9/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/11/2007	0	0	0	0	0	3
Kenai River - Skilak Inlet to Kenai Lake	10/12/2007	0	0	0	0	0	1
Kenai River - Skilak Inlet to Kenai Lake	10/13/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/14/2007	0	0	0	1	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/18/2007	0	0	1	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/28/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	10/30/2007	0	0	0	0	0	0
Kenai River - Skilak Inlet to Kenai Lake	11/3/2007	0	0	0	0	0	0

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2007

Kenai River Dipnet Fishery

July 10 - 31

Greg Gabriel
Submitted
by Christine Brandt

North Beach

South Beach

North Beach

North Beach

South Beach

North Beach

The thousands of people pictured in this photo highlight the need for more then two (2) SEOs to manage the fishery

Kasilof River mouth parking area.

Kasilof River dunes.

Kasilof River dunes.

Kenai River mouth.

Kenai River north beach.

Kenai River – north and south river mouth.

Various views of impact of dip net fishery on shore sand dunes and beaches at Kenai and Kasilof river mouths.

Please reference my testimony and the sustainable fishery policy 5 AAC 39.222(d)(6).

Greg Gabriel

Submitted by Christine Brandt