

Board of Fisheries
Group B / RC 158
Comment

RC 175

Group B Chair Al Cain,

Regarding RC 158 I offer the following. The summary details were well written.

Regarding Proposal 126: The proposal requested additional openings per week be made available by E.O. The % of Kenai bound coho was discussed that represents the ESSN total exploitation rate of approx. 3% only.

Additional two /12 hour openings per week only represents approx. 1.2% higher per week per ESSN openings. 4 additional openings in the Pink Plan would be. 2.4% exploitation rate or only a 4.9% ESSN estimate harvest percent of total Kenai coho run in-season.

The Drift percentage on Kenai coho is lower based on Carlon et. al data and reports; i.e. for four additional openings in Pink Plan approx. 1.2% harvest of total Kenai coho run. Note: includes poor run of 1999 harvest level of only .02 percent Kenai coho and the mean average for 5 years in the coho run reconstruction brood years.

Application of Fishery Management Plans "provide for an equitable distribution of the available harvest" (5AAC 39.200). Reasonable measures for the harvest of extremely abundant Pink Salmon stocks on even years coupled with low commercial exploitation rates on Kenai bound coho through August 15th.

Attached is Jay Carlon's exploitation data for your review. Thank you

Jeff Beaudoin



Jeff,

The highlighted table (above) has the correct numbers for estimating the ESSN average contribution to total total return for Kenai River coho salmon (2.5%). Sorry our quick estimate in my office wasn't real precise - use this.

Year	Kenai River										UCI Marine Commercial ^d				Grand total
	Sport ^a			Russian River total	Personal use/ subsistence	Inriver total	Educational ^c	Eastside set gillnet	Drift gillnet	Northern District	Commercial total				
	Mainstem unguided	guided	unk ^b									Hidden and Skilak Lake total			
1993	26,795	23,743		27	50,565	2,290	52,855	1,597 ^e	54,452	427	6,806	930	148	7,884	62,763
1994	45,541	41,170		127	86,838	4,607	91,445	2,535 ^f	93,980	829	14,673	11,732	477	26,882	121,691
1995	22,596	23,587		67	46,250	4,077	50,327	1,261 ^g	51,588	868	13,152	6,956	582	20,690	73,146
1996	28,565	13,728		899	43,192	4,599	47,791	1,932 ^h	49,723	592	11,856	2,671	29	14,556	64,871
1997	13,063	3,101		0	16,164	4,586	20,750	559 ^h	21,309	191	2,093	1,236	36	3,365	24,865
1998	21,750	5,217		0	26,967	4,612	31,579	1,011 ^h	32,590	638	8,096	1,974	175	10,245	43,473
1999	23,550	8,087		7	31,644	3,910	35,554	1,009 ^h	36,563	530		818	171	3,894	40,987
2000	39,170	9,349		32	48,551	3,938	52,489	1,449 ^h	53,938	656		531	83	2,965	57,559
2001	36,264	13,518		0	49,782	5,222	55,004	1,555 ^h	56,559	572		282	1,303	1,934	59,065
2002	45,206	14,444		361	60,011	6,093	66,104	1,721 ^h	67,825	921		1,370	57	6,115	74,861
2003	34,658	11,964		125	46,747	5,197	51,944	1,332 ^h	53,276	439		330	126	2,578	56,293
2004	51,070	14,845	37	39	65,991	6,574	72,565	2,661 ⁱ	75,226	765		4,251	977	11,149	87,140
2005	38,071	12,285		44	50,400	3,868	54,268	2,512 ⁱ	56,780	489	3,310	1,533	176	5,019	62,288
2006	28,281	9,233		136	37,650	5,431	43,081	2,235 ⁱ	45,316	689					
2007	27,705	10,312		77	38,094	3,169	41,263	2,111 ^j	43,374						
Mean	32,152	14,306			46,590	4,545	51,135	1,699	52,833	615	6,025	2,663	334	9,021	63,769

a) Source is Statewide Harvest Survey (Mills 1994; Howe et al. 1995 and 1996; Howe et al. 2001 a-d (1996-2000 are revised estimates); Walker et al. (2003), Jennings et al. (2004); Jennings et al. (2006 a, b); Jennings et al. (2007); Jennings (*In Prep.* a, b) Mainstem unguided includes Skilak Lake and Hidden Lake.

b) Kenai River coho harvest from unknown guide or unguided status

c) Kenai River harvest in the Kenaitze Tribal educational fishery, (Larry Marsh -ADF&G, personal communication) prior to 2002, these harvests include Kasilof and Swanson River harvests.

d) Carlon and Hasbrouck (1994, 1996-1998); Carlon (2000, 2003); Massengill and Carlon (2004 a, b); Massengill and Carlon (2007 a, b); Massengill (2007a, b).

e) Kenai River personal use dipnet fishery harvest (Mills 1994).

f) Kenai River subsistence dipnet fishery harvest (Brannian and Fox 1996).

g) Kenai River personal use dipnet fishery harvest (Reusch and Fox 1996).

h) Reimer and Sigurdsson (2004).

i) Dunker and Lafferty (2007).

j) Dunker, K.J. *In Prep.*

Estimate	1999	2000	2001	2002	2003	2004
Abundance at Fish Wheels ^a	23,001	89,918	93,524	156,960	99,309	120,489
SE	5,154	9,295	16,502	20,256	36,085	9,008
Downstream Sport Harvest ^{b,c}	20,442	35,868	37,142	43,724	32,759	49,576
SE	1,454	1,740	1,878	2,516	1,908	10,577
Personal Use Harvest	1,009	1,449	1,555	1,721	1,332	2,661
SE	108	62	105	96	68	66
Commercial Harvest ^d	3,894	2,965	1,934	6,115	2,578	11,149
SE	326	255	176	499	263	1,232
Total Run	48,346	130,200	134,155	208,520	135,978	183,875
SE	5,366	9,460	16,610	20,418	36,137	13,948
Total Harvest ^e	40,457	56,903	58,493	73,940	55,854	86,375
SE	1,898	2,110	2,438	2,908	2,329	10,984
Exploitation Rate ^f	0.837	0.437	0.436	0.355	0.411	0.470
SE	0.101	0.036	0.057	0.037	0.110	0.020
Smolt Abundance in Prior Year ^d	799,687	578,355	601,236	641,693	626,335	1,196,310
SE	42,111	19,884	25,454	14,436	27,409	37,100
Marine Survival	0.060	0.225	0.223	0.325	0.217	0.150
SE	0.007	0.018	0.029	0.033	0.058	0.010

a Repeated from Table 22 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 2000-2004, 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 - 2004, 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 *In Prep.* a; 2000 and 2001-Massengill and Carlon 2004 a and b; 2002 and 2003-Massengill and Carlon *In Prep.* b and c; 2004-Massengill *In Prep.* b.

e Aggregate of all harvest estimates (sport, commercial, and personal-use/subsistence); repeated for convenience.

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