



Kenai River Late-Run King Salmon Action Plan

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Presentation to the Alaska Board of Fisheries

FEEDING ALASKANS FEEDING THE WORLD

For generations, Upper Cook Inlet fisherman have helped feed the world a natural and healthy Salmon protein.

85% of Upper Cook Inlet Setnetters are Alaskan residents



EASTSIDE SETNET HISTORY



For over 150 years Upper Cook Inlet salmon have been feeding people both locally and all over the world. This rich, renewable resource was first exported in the 1840's when ships from America and other nations began fishing in Alaskan waters and delivering salted salmon to ports around the world.



The first cannery in Cook Inlet was built at the mouth of the Kasilof River in 1882. Six years later the first salmon cannery was constructed on Kenai River. By 1892, thirty-seven canneries had been built in Alaska.

Gillnets have been used to some degree in the silty waters of Cook Inlet from the beginning. After fish traps were outlawed, independent fishermen caught the salmon for the canneries with gillnets.

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ESSN Fighting to remain viable - Singly bearing the burden of building future yield for Kenai River Late-Run King Salmon



- The closure of the ESSN Sockeye fishery, based on less than 1% of our total harvest of a non-targeted stock, the Kenai River Late-Run King Salmon. This closure, in turn, immediately liberalizes ALL other user groups for targeted sockeye. The ESSN target stock.
- Drift Fleet- Increase sockeye hours
- In-River Fishery- Increase sockeye bag limits
- Kenai River Personal Use Dipnet- Increase hours

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In 2021 the Kenai River Sockeye Sonar Count was **2,441,825**
 The Inriver Goal was **Exceeded** by **1,241,825** sockeye on a 3.8 million run.

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Exceeding Kenai Sockeye Goals

Year	Sonar Count	Inriver Goal	Met/Exceeded
2019	1,849,054	1,000,000-1,300,000	Exceeded
2020	1,714,565	1,000,000-1,200,000	Exceeded
2021	2,441,825	1,000,000-1,200,000	Exceeded over 1.2 million
2022	1,567,750	1,000,000-1,200,000	Exceeded
2023	2,351,020	1,000,000-1,400,000	Exceeded 951,020

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Appendix B10. pg 112 Upper Cook Inlet Commercial Fisheries Annual Management Report, 2022

In 2022 the Kasilof River Sockeye Sonar Count was exceeded by **203%**
 and in 2023 exceeded by **192%**.

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Exceeding Kasilof Sockeye Goals

Year	Sonar Count	BEG	Met/Exceeded
2019	378,416	160,000- 340,000	Exceeded 11%
2020	545,654	140,000- 320,000	Exceeded 71%
2021	521,859	140,000- 320,000	Exceeded 63%
2022	971,604	140,000- 320,000	Exceeded 203%
2023	932,896	140,000- 320,000	Exceeded 192%

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Kenai River Late-Run King Salmon Goals

- 1999-2012 **SEG** 17,800 - 35,700 **ALL** sizes of King Salmon
- 2013-2016 **SEG** 15,000 - 30,000 **ALL** sizes of King Salmon
- 2017- Current **SEG** 13,500 - 27,000 **Large** King Salmon
- 2020 **Board** Developed **OEG** 15,000 - 30,000 **Large** King Salmon

The Kenai River Late-Run King goals and plans have seen some **TREMENDOUS** changes in the last several board cycles. An **SEG** is developed by ADF&G using biological data. An **OEG** is an allocative goal set by the Board of Fisheries. **Sustained Escapement Threshold (SET)** is a limit of escapement. Salmon stocks that are not able to sustain above this level are considered jeopardized. **SET** is lower than the lower bound of the BEG (Biological Escapement Goal) and lower than the lower bound of the SEG (Sustainable Escapement Goal). The SET is established by the department in consultation with the board, as needed, for salmon stock of management or conservation concern.

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KENAI RIVER LATE-RUN KING SALMON IS A YIELD DISCUSSION

This is not a biological risk.

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Management Concern results from a **chronic inability* to maintain escapements within the bounds of a BEG, SEG, or OEG.

Conservation Concern results from a **chronic inability* to maintain escapement above a sustainable escapement threshold (SET).

The estimate of **SMSY** for Late-Run King Salmon 75 cm METF and longer from the updated **1986–2021** (data years) analysis is 18,392 (Table 5; Figure 7), which is similar to the estimate of SMSY from the **1986–2015** analysis (18,477; Fleischman and Reimer 2017). The updated OYP suggests approximately 86% and 60% probabilities of achieving at least 80% of MSY at the **lower** and **upper** bounds of the current SEG (13,500–27,500; Figure 9). The updated analysis suggests the current goal continues to provide **high probabilities** of **maximizing sustained yield** therefore the committee findings **are for no change to the Kenai River Late-Run King Salmon SEG**.

Year	Cook Inlet marine harvest ^a	Eastside setnet harvest ^b	Drift gillnet harvest ^c	Subsis. or Educ. harvest ^d	Personal use dipnet harvest ^e	Inriver sport harvest ^f	Inriver sport catch and release mortality ^g	Inriver run ^h	Spawning escapement ⁱ	Total run ^j	Harvest rate
2016	80	2,906	242	3	364	5,576	228	21,422	15,652	25,023	0.37
2017	61	2,998	144	7	928	5,857	196	26,595	20,583	30,734	0.33
2018	11	555 ^h	106	0	2	97	198	17,691	17,405	18,364	0.05
2019	34	613	58	0	14	857	92	12,637	11,709	13,360	0.12
2020	0	166	35	1	6	0	163	12,014	11,854	12,226	0.03
2021	28	217	40	0	13	141	117	12,489	12,238	12,794	0.04
2022	0	41	53	0	2	0	92	13,981	13,911	14,078	0.01
2023 ⁱ	0	0	35	0	0	0	0	14,502	14,502	14,537	0.00

Year	Eastside Setnet Harvest	Total Run	Total Run - ESSN Harvest	% Run Making past ESSN	Due to conservation measures implemented since 2018, an average of 98% of the Kenai River Late-Run King Salmon successfully migrate to the mouth of the Kenai River. Regardless of whether the Eastside Setnet fishery is open or closed, the data shows a negligible biological impact to the Kenai River Late-Run King Salmon.
2018	555	18,364	17,809	97%	
2019	613	13,360	12,747	95%	
2020	166	12,226	12,060	98%	
2021	217	12,794	12,577	98%	
2022	41	14,078	13,996	99%	
2023	0	14,537	14,537	100%	

ESSN Gear Reduction Comparisons-The Reality

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<p>Current Regulation- Kenai River Late Run Chinook Salmon Plan-Recent Average With 428 Permits Registered</p> <ul style="list-style-type: none"> ● 3 nets per permit = 1,284 nets 45 mesh deep (Full Fishery) ● i) 2 nets 45 mesh deep or 3 nets at 29 mesh deep (856 -1284 nets) ● ii) 1 net 45 mesh deep or 2 nets at 29 mesh deep (428-856 nets) 	<p>Proposed in SOC-ESSN fishing between 13,500 to 15,000- With Approximately 300 Permits</p> <ul style="list-style-type: none"> ● 1 net 29 mesh deep per permit = Estimated 300 nets* ● 1 net per permit allows ALL ESSN permit holder participation <p><i>*Industry knowledge of ESSN Participation is anticipated to be further reduced to approximately 300 permits based on past buoy sticker registration and individual fishing practices</i></p>
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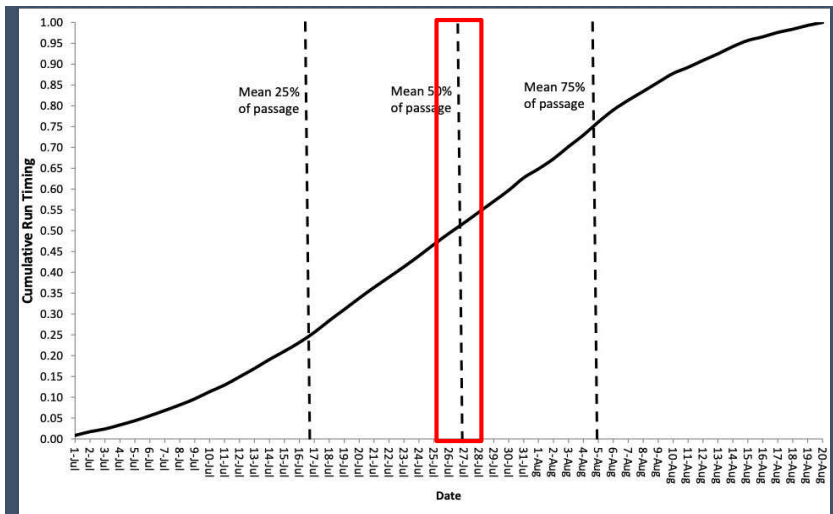


Figure 91-1.-Mean run timing of Kenai River large late-run king salmon as measured at RM14 sonar site 2013–2022.

July 27 is the mean midpoint of passage for Kenai River Large Late-Run Chinook Salmon. **NO** closure should be considered before July 27.

Recent ESSN CLOSURE Dates

Date	Last ESSN Opener	River Closed
2020	July 20	July 24
2021	July 20	July 21
2022	July 14	July 17
2023	No Openers	March 3

Entire ESSN Avg Stat Week 29/30 Highest Sockeye Harvest

ESSN except KSHA	25	26	27	28	29	30	31	32	33	Grand Total
2001		118,149	106,978	137,262	383,633	123,997				870,019
2002		74,087	171,282	213,344	505,921	237,644	86,499	14,381		1,303,158
2003		81,199	141,305	213,680	654,987	466,099	140,903	48,668		1,746,841
2004		126,899	182,701	152,527	681,278	459,284	389,330	238,887		2,230,906
2005		165,627	167,514	146,906	408,490	471,334	477,088	363,492	255,987	2,456,438
2006		114,767	102,511	167,585	239,661		268,104	70,492		963,120
2007		63,053	52,262	148,266	418,849	340,029	168,046	147,271		1,337,776
2008		124,662	162,046	118,466	579,545	258,018				1,242,737
2009		99,175	163,776	137,279	275,269	178,378	28,825	18,269	4,882	905,853
2010			110,820	83,183	304,630	312,492	162,222	88,982	23,460	1,085,789
2011		23,539	68,917	66,020	585,251	745,986	257,195	119,194	11,837	1,877,939
2012			13,807		68,027			12,382	2,459	96,675
2013		48,360	88,533	127,805	570,292	22,393				857,383
2014		80,884	85,082	90,460	187,852	45,520	17,704	18,765		526,267
2015		78,115	112,748	110,078	168,439	293,632	342,283	205,851	68,530	1,379,676
2016		26,679	53,326	65,623	283,201	322,122	104,840	115,312	26,750	997,853
2017	13,049	59,015	97,135	181,805	217,088	69,132	90,900	81,927	22,169	832,220
2018		35,539	28,881	91,808	71,829	50,374				278,431
2019		24,158	32,773	98,199	96,790	193,507	339,116			784,543
2020		37,564	46,147	63,113	62,338	86,179				295,341
2021		51,782	72,018	67,750	67,398	146,631				405,579
2022		13,236	24,952	32,060	34,430					104,678
avg	13,049	72,324	94,796	119,677	312,054	253,829	205,218	110,277	52,009	1,026,328

Stat Week	Begin Date	End Date
25	18-Jun	24-Jun
26	25-Jun	1-Jul
27	2-Jul	8-Jul
28	9-Jul	15-Jul
29	16-Jul	22-Jul
30	23-Jul	29-Jul
31	30-Jul	5-Aug
32	6-Aug	12-Aug
33	13-Aug	19-Aug

Kasilof Section Avg Stat Week 29/30 Highest Sockeye Harvest										Stat Week	Begin Date	End Date	
Kasilof Section except KSHA										25	18-Jun	24-Jun	
Sum of Numl Column Labels													
Row Labels	25	26	27	28	29	30	31	32	33	Grand Total	26	25-Jun	1-Jul
2001		118,149	106,978	129,998	220,565	108,243				683,933			
2002		74,087	171,282	127,262	221,609	104,359	30,242	6,036		734,877			
2003		81,199	141,305	134,357	366,417	220,691	65,457	18,006		1,027,432			
2004		126,899	182,701	145,990	244,643	124,220	110,059	60,231		994,743			
2005		165,627	167,514	146,906	151,255	126,571	207,772	138,161	35,329	1,139,135			
2006		114,767	102,511	150,759	209,933		60,846	16,474		655,290			
2007		63,053	52,262	137,641	245,816	122,454	51,518	46,128		718,872			
2008		124,662	162,046	114,052	331,947	149,072				881,779			
2009		99,175	163,776	122,821	141,206	83,645	22,328	6,961	1,378	641,290			
2010			110,820	69,365	143,953	95,016	62,450	27,178	8,808	517,590			
2011		23,539	68,917	66,020	378,995	376,064	78,978	20,757	3,717	1,016,987			
2012			13,807		12,183			3,477	1,256	30,723			
2013		48,360	88,533	114,763	211,947	10,175				473,778			
2014		80,884	85,082	68,685	127,451	19,644	2,825	2,887		387,458			
2015		78,115	112,748	80,871	138,361	173,246	144,744	53,689	13,177	794,951			
2016		26,679	53,326	65,623	81,679	78,424	26,708	34,980	10,411	377,830			
2017	13,049	59,015	97,135	142,933	110,128	36,157	48,634	41,373	11,678	560,102			
2018		35,539	28,881	56,375	60,833	29,048				210,676			
2019		24,158	32,773	57,132	35,717	54,375	131,509			335,664			
2020		37,564	43,566	53,473	31,023	21,299				186,925			
2021		51,782	66,784	45,060	28,999	25,067				217,692			
2022		13,236	24,952	29,118	14,285					81,591			
avg	13,049	72,324	94,441	98,057	159,498	103,041	74,576	34,024	10,719	575,878			
											27	2-Jul	8-Jul
											28	9-Jul	15-Jul
											29	16-Jul	22-Jul
											30	23-Jul	29-Jul
											31	30-Jul	5-Aug
											32	6-Aug	12-Aug
											33	13-Aug	19-Aug

Kenai Section Avg Stat Week 29/30 Highest Sockeye Harvest										Stat Week	Begin Date	End Date	
Kenai Section										25	18-Jun	24-Jun	
Sum of N Column Labels													
Row Labels	27	28	29	30	31	32	33	Grand Total	26	25-Jun	1-Jul		
2001		6,538	152,819	13,940				173,297					
2002		81,441	267,325	118,258	49,215	6,922		523,161					
2003		73,103	258,703	221,347	67,055	26,886		647,094					
2004		5,833	394,850	309,730	256,797	158,045		1,125,255					
2005			234,667	311,138	225,239	193,737	157,466	1,122,247					
2006		14,746	26,227		184,831	45,470		271,274					
2007		9,862	160,313	193,344	98,730	82,131		544,380					
2008		3,430	218,976	96,797				319,203					
2009		11,641	116,923	82,763	5,393	9,410	2,992	229,122					
2010		12,709	137,981	195,798	89,462	54,207	12,200	502,357					
2011			183,730	329,656	158,593	80,191	6,187	758,357					
2012			51,583			7,215	1,029	59,827					
2013		12,139	329,329	10,841				352,309					
2014		19,429	55,396	21,022	12,447	13,244		121,538					
2015		24,152	25,495	101,108	162,411	119,882	43,906	476,954					
2016			176,430	205,602	67,228	67,925	13,683	530,868					
2017		33,922	95,105	29,376	35,341	32,812	8,763	235,319					
2018		29,419	9,057	17,613				56,089					
2019		32,381	48,272	110,317	150,273			341,243					
2020	2,581	8,751	25,905	47,008				84,245					
2021	5,234	19,316	30,847	97,547				152,944					
2022		2,942	17,292					20,234					
avg	3,908	22,320	137,147	132,274	111,644	64,148	30,778	393,060					
										27	2-Jul	8-Jul	
											28	9-Jul	15-Jul
											29	16-Jul	22-Jul
											30	23-Jul	29-Jul
											31	30-Jul	5-Aug
											32	6-Aug	12-Aug
											33	13-Aug	19-Aug

East Foreland Section Avg Stat Week 30/31 Highest Sockeye Harvest								Stat Week	Begin Date	End Date
East Foreland Section								25	18-Jun	24-Jun
Sum of Numt Column Labels										
Row Labels	28	29	30	31	32	33	Grand Total			
2001	726	10,249	1,814				12,789	26	25-Jun	1-Jul
2002	4,641	16,987	15,027	7,042	1,423		45,120			
2003	6,220	29,867	24,061	8,391	3,776		72,315			
2004	704	41,785	25,334	22,474	20,611		110,908	27	2-Jul	8-Jul
2005		22,568	33,625	44,077	31,594	63,192	195,056			
2006	2,080	3,501		22,427	8,548		36,556			
2007	763	12,720	24,231	17,798	19,012		74,524	28	9-Jul	15-Jul
2008	984	28,622	12,149				41,755			
2009	2,817	17,140	11,970	1,104	1,898	512	35,441			
2010	1,109	22,696	21,678	10,310	7,597	2,452	65,842	29	16-Jul	22-Jul
2011		22,526	40,266	19,624	18,246	1,933	102,595			
2012		4,261			1,690	174	6,125			
2013	903	29,016	1,377				31,296			
2014	2,346	5,005	4,854	2,432	2,634		17,271	30	23-Jul	29-Jul
2015	5,055	4,583	19,278	35,128	32,280	11,447	107,771			
2016		25,092	38,096	10,904	12,407	2,656	89,155			
2017	4,950	11,855	3,599	6,925	7,742	1,728	36,799	31	30-Jul	5-Aug
2018	6,014	1,939	3,713				11,666			
2019	8,686	12,801	28,815	57,334			107,636			
2020	889	5,410	17,872				24,171	32	6-Aug	12-Aug
2021	3,374	7,552	24,017				34,943			
2022		2,853					2,853			
avg	3,074	15,410	18,515	18,998	12,104	10,512	57,390	33	13-Aug	19-Aug

Complex Trade-off: Sockeye Surplus vs King Salmon Low Abundance

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- We recognize that all users bear a responsibility during times of low stock abundance in fisheries. As a historical harvester with a legacy spanning over a century, we know the challenging circumstances we all face. The current status of these stocks are complex, and the trade-off between having a surplus of Sockeye and a low abundance of Late-Run King Salmon is challenging. Despite having millions of harvestable Sockeye, the ESSN targeted stock, we have not been allowed the opportunity to participate in that harvest.
- We acknowledge the Board's management objectives of the 15,000 OEG, also the scientific support for some harvest within the biological SEG, and respectfully ask the Board to recognize the significance of our fishery and its long-standing heritage.
- We propose allowing a limited sockeye fishery with the ESSN's as a non-target king harvester, while striking a balance, when projecting the SEG.