

**NUSHAGAK RIVER KING SALMON – STOCK STATUS AND
ACTION PLAN**

ALASKA DEPARTMENT OF FISH AND GAME

**REPORT TO THE ALASKA BOARD OF FISHERIES
NOVEMBER 29, 2022**

Table 1.—Nushagak River King salmon harvest and escapement, above and below the sonar site, 1966–2022.^a

Year	Harvests Below Sonar				Inriver Sonar Estimate	Harvests Above Sonar		Spawning Escapement	Total Harvest
	Total Run	Commercial	Subsistence	Sport		Subsistence	Sport		
1966	144,145	58,184	2,515	221	83,224	1,185	578	81,462	62,683
1967	234,216	96,240	2,515	221	135,240	1,185	578	133,477	100,739
1968	228,551	78,201	4,487	221	145,643	2,113	578	142,951	85,600
1969	158,672	80,803	4,826	221	72,821	2,274	578	69,970	88,702
1970	196,081	87,547	4,283	221	104,030	2,017	578	101,435	94,646
1971	169,206	82,769	2,991	221	83,224	1,409	578	81,237	87,968
1972	101,001	46,045	2,719	221	52,015	1,281	578	50,156	50,844
1973	107,999	30,470	4,487	221	72,821	2,113	578	70,130	37,869
1974	183,287	32,053	5,370	221	145,643	2,530	578	142,535	40,752
1975	172,144	21,454	4,826	221	145,643	2,274	578	142,791	29,353
1976	273,657	60,684	4,691	221	208,061	2,209	578	205,273	68,383
1977	224,104	85,074	3,535	256	135,240	1,665	667	132,907	91,197
1978	393,636	118,548	4,487	122	270,479	2,113	320	268,046	125,590
1979	361,210	157,321	6,050	181	197,658	2,850	473	194,335	166,875
1980	366,555	64,958	8,021	210	293,366	3,779	547	289,040	77,515
1981	513,708	193,461	7,818	338	312,091	3,682	882	307,527	206,181
1982	509,867	195,287	8,225	505	305,849	3,875	1,319	300,656	209,211
1983	482,196	137,123	8,021	555	336,497	3,779	1,448	331,270	150,926
1984	237,104	61,378	6,662	659	168,404	3,138	1,723	163,544	73,560
1985	314,434	67,783	5,370	513	240,768	2,530	1,339	236,899	77,535
1986	165,950	65,783	7,875	628	91,663	4,725	4,162	82,777	83,173
1987	231,453	45,983	8,770	1,286	175,414	2,680	3,173	169,562	61,891
1988	141,908	16,648	5,671	1,192	118,397	3,766	1,626	113,006	28,902
1989	187,644	17,637	5,688	1,404	162,916	2,155	2,210	158,551	29,093
1990	156,663	14,812	7,989	797	133,065	3,629	2,689	126,747	29,916
1991	246,718	19,718	8,093	1,793	217,114	3,010	3,758	210,346	36,372
1992	232,103	47,563	10,322	1,844	172,374	2,498	2,911	166,965	65,138
1993	283,393	62,979	14,498	2,408	203,508	2,919	3,492	197,098	86,295
1994	334,606	119,480	11,048	4,436	199,643	3,331	6,191	190,121	144,485
1995	271,127	79,943	10,800	2,238	178,146	2,419	2,713	173,014	98,113
1996	193,141	72,123	10,217	2,346	108,456	3,063	3,045	102,348	90,793
1997	247,327	64,390	11,397	931	170,610	2,981	2,567	165,062 ^b	82,265
1998	371,638	117,820	7,717	1,640	244,461	4,429	4,188	235,845	135,793
1999	149,248	11,178	7,450	934	129,686	2,477	3,304	123,906	25,342

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Year	Total Run	Harvests Below Sonar			Inriver Sonar Estimate	Harvests Above Sonar			Total Harvest
		Commercial	Subsistence	Sport		Subsistence	Sport	Spawning Escapement	
2001	213,306	11,746	7,972	1,600	191,988	3,372	4,299	184,317	28,989
2002	229,485	40,039	6,946	1,193	181,307	4,103	2,500	174,704	54,781
2003	225,594	43,485	13,399	2,203	166,507	4,448	3,752	158,307	67,287
2004	356,240	100,846	10,644	2,567	242,183	4,422	4,339	233,422	122,818
2005	307,701	62,764	7,951	2,863	234,123	4,471	5,702	223,950	83,751
2006	218,861	84,881	6,131	3,166	124,683	3,012	4,307	117,364	101,497
2007	125,435	51,831	9,564	3,581	60,459	3,411	6,088	50,960	74,475
2008	128,752	18,968	9,149	3,305	97,330	2,571	3,395	91,364	37,388
2009	117,936	24,693	9,312	2,451	81,480	2,796	3,903	74,781	43,155
2010	94,245	26,056	6,345	1,659	60,185	1,845	2,248	56,092	38,153
2011	145,232	26,927	8,485	1,542	108,278	2,981	3,302	101,995	43,237
2012	195,106	11,952	7,236	1,833	174,085	2,398	4,098	167,589	27,517
2013	132,782	10,213	6,889	1,971	113,709	4,201	4,714	104,794	27,988
2014	96,639	11,868	11,942	2,369	70,460	3,890	3,891	62,679	33,960
2015	160,713	50,675	9,505	2,514	98,019	2,209	4,720	91,090	69,623
2016	167,540	24,937	14,182	3,053	125,368	1,933	5,358	118,077	49,463
2017	102,083	33,376	8,912	2,834	56,961	1,827	3,161	52,297	50,110
2018	147,742	36,626	10,427	3,450	97,239	1,408	4,742	91,354	56,653
2019	80,250	22,725	7,162	3,600	46,763	2,967	2,706	41,258	39,160
2020	57,968	7,452	5,988	1,496	43,032	2,265	454	40,313	17,655
2021	65,539	4,820	3,922	1,575	55,222	1,297	2,472	51,453	14,086
2022	59,738 ^d	5,431	7,282 ^e	2,591 ^e	44,434	1,953 ^e	2,707 ^e	39,774 ^d	19,964
Average 1966–2021	217,343	58,515	7,482	1,463	149,883	2,798	2,568	144,530	72,826
20 Year (2002–2021)	157,792	34,757	8,705	2,461	111,870	2,923	3,793	105,192	52,638
10 Year (2012–2021)	120,636	21,464	8,617	2,470	88,086	2,440	3,632	82,090	38,622

Note: Subsistence harvest is a subset of the total Chinook salmon harvest in the Nushagak Bay reporting area and attempts to only account for Nushagak River bound Chinook salmon. Harvest within the Igushik, Snake, and Wood Rivers (Above Red Bluff) are not included in this table. As a result, Subsistence harvest numbers from this table may not match up with other subsistence harvest estimates for the area as a whole.

^a Source: 1992–2011 Buck et. al 2012, 2012-2022 Personal Communication Jordan Head (Data prepared for 2021 Escapement Goal Review).

^b Spawning escapement estimated from inriver sonar abundance less upriver harvest for all years except 1997. 1997 estimate based on aerial surveys that have been expanded to DIDSON Equivalents (Buck et al. 2012).

^c Commercial Harvest includes harvest of 4,087 Chinook salmon that were caught in General District 320-05 as they are most likely of Nushagak origin. (Buck et al 2012)