



MEMORANDUM

TO: Members
Alaska Board of Fisheries

From: Sam Rabung, Director *SR*
Division of Commercial Fisheries

Date: September 20, 2023

Subject: Kodiak Management
Area Stock of Concern
Recommendations

and

Israel Payton, Director *IP*
Division of Sport Fish

The *Policy for the management of sustainable salmon fisheries* (SSFP; 5 AAC 39.222) directs the Alaska Department of Fish and Game (department) to report to the Alaska Board of Fisheries (board) on the status of salmon stocks and identify any stocks that present a concern related to yield, management, or conservation during regular board meetings. This memorandum summarizes the results of the stock of concern evaluation for Kodiak Management Area (KMA) salmon stocks for the 2023–2024 board regulatory cycle. The evaluation includes input from management and research staff from both fishery divisions.

Following the 2023 salmon season all king, sockeye, pink, coho, and chum salmon stocks in the KMA were examined for potential stock of concern status. Currently, there are 2 stocks of concern in KMA (Munro 2022; Table 1), both of which are stocks of management concern for king salmon.

King salmon

Karluk River

This stock was first designated a stock of management concern in 2011. King salmon escapement has not met the Karluk River biological escapement goal (BEG: 3,000–6,000) in 3 of the past 5 years (Table 1). The department is recommending continuing the stock of management concern designation.

Ayakulik River

This stock was first designated a stock of management concern in 2020. King salmon escapement has not met the Ayakulik River biological escapement goal (BEG: 4,800–8,400) in

the last 7 years (Table 1). The department is recommending continuing the stock of management concern designation.

Coho salmon

American River

This stock is on the Kodiak road system and is assessed via a foot survey. Assessment via this method has become more problematic in recent years due to periods of very low water, followed by periods of very high water in which many fish of this stock move upstream, and are not assessed. Coho salmon escapement via this assessment has not met the escapement goal (LB SEG: 400) in 4 of the 5 most recent surveyed years (Table 1). As the assessment of this stock has become questionable, the department does not recommend designation of American River coho salmon as a stock of concern.

References Cited

Munro, A. R. 2022. Summary of Pacific salmon escapement goals in Alaska with a review of escapements from 2013 to 2021. Alaska Department of Fish and Game, Fishery Manuscript Series No. 18-04, Anchorage. <https://www.adfg.alaska.gov/FedAidPDFs/FMS22-02.pdf>

Table 1.—Escapement goals and escapements observed from 2013 through 2023 for king, sockeye, coho, pink, and chum salmon stocks of the Kodiak Management Area. Shaded cells indicate the escapement goal was not met, for the goal that was in place at the time. Karluk and Ayakulik River king salmon stocks are both stocks of management concern.

System	2023 Goal Range		Initial Year	Year											
	Lower	Upper		Type	2013	2014	2015	2016	2017	2018	2019 ^a	2020	2021	2022	2023 ^b
KING SALMON															
Karluk River	3,000	6,000	BEG	2011	1,824	1,182	2,777	3,434	2,600	3,155	3,898	3,344	2,796	2,629	376
Ayakulik River ^c	4,800	8,400	BEG	2017	2,349	897	2,392	4,574	3,712	2,149	1,948	2,402	2,961	2,845	587
SOCKEYE SALMON															
Malina Creek	1,000	10,000	SEG	2005	3,800	4,900	1,000	2,000	1,000	500	100	NC	1,450	1,500	NC
Afognak (Litnik) River ^b	20,000	50,000	SEG	2020	42,153	36,345	38,151	33,167	22,151	17,601	26,817	25,383	31,997	29,509	35,559
Karluk River Early Run	150,000	250,000	BEG	2017	234,880	252,097	260,758	173,874	242,599	205,054	190,168	158,846	131,775	177,008	188,980
Karluk River Late Run	200,000	450,000	BEG	2017	336,479	543,469	368,896	314,935	385,896	428,225	317,381	293,147	376,209	326,801	INC
Ayakulik River Early Run	140,000	280,000	SEG	2011	214,969	210,040	218,178	182,589	204,497	189,008	162,430	220,935	265,756	251,690	200,143
Ayakulik River Late Run	60,000	120,000	SEG	2011	67,195	87,671	108,257	72,378	120,361	77,325	117,209	81,660	118,418	100,772	117,956
Upper Station River Early Run ^d	43,000	93,000	BEG	2011	27,712	36,823	54,473	48,047	83,614	61,732	49,517	56,190	108,225	82,824	63,129
Upper Station River Late Run	120,000	265,000	SEG	2020	125,573	181,411	132,864	145,013	209,298	235,669	165,146	195,147	355,507	168,880	163,890
Frazer Lake	75,000	170,000	BEG	2008	136,059	200,296	219,093	122,585	129,227	201,161	169,627	137,570	186,632	137,565	100,477
Saltrey Lake ^d	15,000	35,000	BEG	2011	35,939	29,047	39,920	54,377	35,218	19,299	20,783	22,637	61,824	22,228	44,936
Pasagshak River	3,000	8,000	LB SEG	2011	9,750	350	600	3,200	4,800	1,100	NC	1,000	700	NC	NC
Buskin Lake	5,000	8,000	BEG	2011	16,189	13,976	8,719	11,584	7,222	4,284	12,297	7,741	2,330	8,121	1,754
COHO SALMON															
Pasagshak River	1,200	9,600	LB SEG	2011	1,648	4,934	1,790	737	701	3,186	488	2,031	4,721	618	INC
Buskin River ^f	4,700	9,600	SEG	2020	4,974	7,335	NC ^e	2,134	5,092	4,164	5,350	NC	7,427	NC	INC
Olds River	500		LB SEG	2020	2,145	1,320	1,357	1,634	1,054	878	NC	794	923	1,129	INC
American River	400		LB SEG	2011	841	1,595	530	500	410	78	NC	279	297	360	INC
PINK SALMON															
Mainland District	250,000	1,000,000	SEG	2011	628,680	254,650	754,600	65,305	1,010,100	280,400	904,400	1,484,000	478,250	579,900	INC
Kodiak Archipelago (odd year)	2,000,000	5,000,000	SEG	2011	4,450,711		5,614,531		5,079,016		4,688,688		4,562,998		INC
Kodiak Archipelago (even year)	3,000,000	7,000,000	SEG	2011	2,733,282			1,699,281		4,874,342		9,429,396		5,153,824	
CHUM SALMON															
Kodiak Archipelago ^g	101,000		LB SEG	2017	NA	84,700	171,800	89,700	184,500	115,100	99,400	64,200	113,300	102,300	INC

^a Final escapements include estimated weir counts due to flooding at weir during the king salmon run. King salmon escapement estimated for Ayakulik River includes an estimated 20 kings harvested above the weir when a fishery has occurred. Harvest estimates are typically not available for Ayakulik River sport harvest. King salmon sport harvest since 2011 is assumed to be zero as the fishery was closed to retention. All years include fish counts from post-weir aerial surveys. From 2011-2016 the BEG 4,000-7,000 fish.

^b Afognak (Litnik) River sockeye salmon escapement does not incorporate egg take removals.

^c OEG for Upper Station River early run sockeye salmon was 25,000 from 1999-2013, the OEG was increased to 30,000 from 2014-2016 and managed for only if the department determined that the upper end of the Frazer escapement goal would be exceeded. The OEG was eliminated in 2017.

^d Salthey Lake sockeye salmon escapements are weir counts minus fish removed for egg-takes (2023 egg take estimated at 3,000 fish).

^e Buskin River coho salmon escapements include estimated weir counts due to flooding.

^f Buskin River coho salmon escapement in 2015 was incomplete as the weir was washed out for much of the season.

^g Buskin River coho salmon escapement preliminary for 2018 as escapements include 20% of the Statewide Harvest Survey estimate of Buskin River coho salmon estimated to be harvested above the weir.

^h These are preliminary escapement estimates through 9/15/23, and may include estimates for missed passage, but do not include reductions from harvest in river.

ⁱ The Kodiak Archipelago aggregate chum salmon goal was revised in 2016, which included a different index approach than previously used. The values in this row are using the new index method, so values prior to 2017 should not be read relative to the previous goal.

Note: NC = No Count; INC = Incomplete Count