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MEMORANDUM

TO: Members Alaska Board of Fisheries DATE: September 27, 2024

SUBJECT: Southeast Region Salmon Stock of Concern Recommendations

FROM: Forrest R. Bowers, Acting Director, Division of Commercial Fisheries

> Israel Payton, Director, SP 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. A management concern is defined (5 AAC 39.222) as "a concern arising from a chronic inability, despite use of specific management measures, to maintain escapement for a stock within the bounds" of the established escapement goal, and "chronic inability" means "continuing or anticipated inability to meet escapement thresholds over a four-to-five-year period, which is approximately equivalent to the generation time of most salmon species." It is important to note that escapement goals are set at levels of escapement that support sustained yield, well above levels for which a stock has consistently demonstrated its ability to sustain itself; therefore, a stock of management concern designation does not imply risk to the viability of the stock.

This memorandum summarizes the results of the stock of concern evaluation for Southeast Alaska salmon stocks for the 2024/2025 board regulatory cycle. Following the 2024 salmon season, all 47 salmon stocks with formal escapement goals in Southeast Alaska were examined for potential stock of concern status. This included 9 stocks that were previously designated as stocks of management concern at the 2018 and 2022 Southeast and Yakutat Finfish and Shellfish board meetings. This evaluation included input from headquarters, regional, and area staff from both fishery divisions. Department recommendations and brief summaries on the status of underperforming stocks are provided below; more detailed accounting of management prescriptions applied over the last 5 years including additional tables, and maps outlining time and area restrictions are available upon request. The department recommends no change in status for 5 of the existing stocks of management concern and recommends delisting 4 stocks, based on criteria for removing the stock of management concern designation for these stocks outlined in

respective action plans developed at the 2018 and 2022 board meetings (Lum and Fair 2018a, 2018b; Walker et al. 2018; Meredith et al. 2022; Salomone et al. 2022; Hagerman et al. 2022; Hoffman and Thynes 2022). The department also recommends that 2 additional stocks be listed as stocks of management concern.

CURRENT STOCKS OF CONCERN

Chickamin River king salmon

In 2022, the board designated the Chickamin River king salmon run as a stock of management concern. Stock assessment information and management measures were summarized in an action plan developed at the 2022 board meeting (Meredith et al. 2022). The Chickamin River king salmon escapement goal has been achieved in 5 of the past 6 years (2019–2024), and in 5 consecutive years (2020–2024; Figure 1), which meets criteria outlined in the action plan for removing the stock. The department recommends delisting Chickamin River king salmon as a stock of management concern. The department notes that total run sizes for Chickamin River king salmon have been below historical averages in recent years and management actions described in the *Unuk and Chickamin Chinook salmon stock status and action plan, 2022* (Meredith et al. 2022) will continue as needed to ensure escapement goals are consistently met.

Unuk River king salmon

In 2018, the board designated the Unuk River king salmon run as a stock of management concern. Stock assessment information and management measures were summarized in an action plan developed at the 2018 board meeting (Lum and Fair 2018b). The Unuk River king salmon escapement goal has been achieved in 4 of 6 years (2019–2024; Figure 2), which meets criteria outlined in the action plan for removing the stock. **The department recommends delisting Unuk River king salmon as a stock of management concern**. The department notes that total run sizes for Unuk River king salmon have been below historical averages in recent years and management actions described in the *Unuk and Chickamin Chinook salmon stock status and action plan, 2022* (Meredith et al. 2022) will continue as needed to ensure escapement goals are consistently met.

Stikine River king salmon

In 2022, the board designated the Stikine River king salmon run as a stock of management concern. Stock assessment information and management measures were summarized in an action plan developed at the 2022 board meeting (Salomone et al. 2022). The Stikine River king salmon escapement goal has not been achieved since 2015 (2024 estimate pending; Figure 3). The department recommends continuing the stock of management concern designation for this stock.

Andrew Creek king salmon

In 2022, the board designated the Andrew Creek king salmon run as a stock of management concern. Stock assessment information and management measures were summarized in an action plan developed at the 2022 board meeting (Salomone et al. 2022). The Andrew Creek king salmon escapement goal has been achieved in only 2 of the past 6 years (2019–2024; Figure 4). The department recommends continuing the stock of management concern designation for this stock.

King Salmon River king salmon

In 2018, the board designated the King Salmon River king salmon run as a stock of management concern. Stock assessment information and management measures were summarized in an action plan developed at the 2018 board meeting (Lum and Fair 2018a). The King Salmon River king salmon escapement goal has been achieved in only 2 of the past 6 years (2019–2024; Figure 5). The department recommends continuing the stock of management concern designation for this stock.

Taku River king salmon

In 2022, the board designated the Taku River king salmon run as a stock of management concern. Stock assessment information and management measures were summarized in an action plan developed at the 2022 board meeting (Hagerman et al. 2022). The Taku River king salmon escapement goal has been achieved in only 1 of the past 6 years (2019–2024; Figure 6). The department recommends continuing the stock of management concern designation for this stock.

Chilkat River king salmon

In 2018, the board designated the Chilkat River king salmon run as a stock of management concern. Stock assessment information and management measures were summarized in an action plan developed at the 2018 board meeting (Lum and Fair 2018a). The Chilkat River king salmon escapement goal has been achieved in 5 out of 6 years (2019–2024; Figure 7), which meets criteria outlined in the action plan for removing the stock of management concern designation. The department recommends delisting Chilkat River king salmon as a stock of management concern. The department notes that total run sizes for Chilkat River king salmon have been below historical averages in recent years and management actions described in the *Northern Southeast Alaska Chinook salmon stock status and action plan, 2022* (Hagerman et al. 2022) will continue as needed to ensure escapement goals are consistently met. In addition, the continued status of the King Salmon and Taku Rivers as stocks of concern will result in a continuation of management actions that also reduce the harvest of Chilkat River king salmon.

McDonald Lake sockeye salmon

In 2018, the board designated the McDonald Lake sockeye salmon run as a stock of management concern. Stock assessment information and management measures were summarized in an action plan developed at the 2018 board meeting (Walker et al. 2018). The McDonald Lake sockeye salmon escapement goal has been achieved in only 1 of the past 6 years (2019–2024; Figure 8). **The department recommends continuing the stock of management concern designation for this stock.**

Klukshu River sockeye salmon

In 2022, the board designated Klukshu River sockeye salmon run as a stock of management concern. Stock assessment information and management measures were summarized in an action plan developed at the 2022 board meeting (Hoffman and Thynes 2022). The Klukshu River sockeye salmon escapement goal has been achieved in 5 of the past 6 years (2019–2024) and exceeded the upper bound of the goal range in 4 of those years (Figure 9), which meets criteria outlined in the action plan for removing the stock of management concern designation. **The**

department recommends delisting Klukshu River sockeye salmon as a stock of management concern.

RECOMMENDED NEW STOCKS OF CONCERN

Hugh Smith Lake sockeye salmon

Stock Assessment

Hugh Smith Lake is located on mainland Southeast Alaska, 67 km southeast of Ketchikan, in Misty Fjords National Monument. The department has monitored salmon escapements through a weir at the outlet of Hugh Smith Lake from 1967 to 1971 and annually since 1980. Beginning in the early 1980s, the lake was the subject of department sockeye salmon enhancement and rehabilitation efforts that included nutrient enrichment from 1981 to 1984 and fry plants from 1986 to 1997 (Geiger et al. 2003). Most juveniles from these early stocking programs were not marked, so detailed information on the proportion of stocked fish in subsequent escapements is unavailable. Despite lake enrichment and enhancement efforts, sockeye salmon escapements steadily declined from an average of 17,500 fish in the 1980s to 12,000 fish in the 1990s. Escapements averaged only 3,500 fish from 1998 to 2002, including the smallest escapement on record in 1998 (1,138 fish). Poor escapements were thought to be due primarily to high harvest rates in the commercial drift gillnet and purse seine fisheries (Burkett et al. 1989; Geiger et al. 2003). An informal escapement goal of 15,000–35,000 sockeye salmon was established for Hugh Smith Lake in the early 1990s (ADF&G 1993), but the goal was replaced with a biological escapement goal of 8,000–18,000 fish in 2003 (Geiger et al. 2003).

In 2003, the board designated the Hugh Smith Lake sockeye salmon run a stock of management concern, because escapements had been below the new biological escapement goal for 5 consecutive years, 1998–2002 (Geiger et al. 2003). The board set an optimal escapement goal of 8,000–18,000 sockeye salmon (5 AAC 33.390) that included spawning salmon of both wild and hatchery origin, because, at that time, Southern Southeast Regional Aquaculture Association (SSRAA) was conducting a stocking program intended to increase sockeye salmon runs at the lake. The board adopted an action plan¹ that directed the department to review stock assessment and rehabilitation efforts and implemented conservation measures to reduce commercial harvests of Hugh Smith Lake sockeye salmon. Fishery restrictions in the form of time and area closures were implemented in the commercial drift gillnet and purse seine fisheries closest to the entrance of Boca de Quadra when escapements were projected to be below the lower bound of the escapement goal range.

From 2003 to 2007, the department estimated the contribution, distribution, and run timing of stocked Hugh Smith Lake sockeye salmon from recoveries of marked fish in the commercial net fisheries. Results from this project showed that fisheries management restrictions outlined in the action plan were appropriately timed to reduce harvests on this stock (Heinl et al. 2007). The department also conducted studies to identify factors in the freshwater environment that might limit juvenile sockeye salmon survival; however, none of the factors evaluated indicated increased mortality of juvenile sockeye salmon (Piston et al. 2006, 2007; Piston 2008). Adult escapements (1998–2007) steadily improved from a low of 1,138 fish in 1998 to a high of 42,529 fish in 2006 (Piston et al. 2007); however, adults returning from the SSRAA stocking program made up a substantial portion (58–65%) of escapements from 2003 to 2007 (Heinl et al. 2007; Piston 2008).

¹ ADF&G 2003. Hugh Smith Lake sockeye salmon action plan, 2003. Final report to the Alaska Board of Fisheries RC-106. Alaska Department of Fish and Game, Division of Commercial Fisheries.

The board removed the stock of concern designation in 2006 due to an improvement in escapements (Geiger et al. 2005).

Sockeye salmon escapements surpassed the lower bound of the escapement goal in 13 of 15 years from 2003 to 2017 (Brunette and Piston 2019; Figure 10). Escapements dropped abruptly in 2018, likely due to poor marine survival that resulted from anomalously warm sea surface temperatures that persisted throughout the Gulf of Alaska from fall 2013 through much of 2016 (Bond et al. 2015; Di Lorenzo and Mantua 2016; Walsh et al. 2018). Survival of Hugh Smith Lake sockeye salmon was poor in subsequent years, and drought conditions in the fall of 2018 may have reduced spawning success of the very small escapement in that year (Brunette and Piston 2019). Over the past decade, there was also a trend towards reduced size at age in multiple age classes of Hugh Smith Lake sockeye salmon, which was further indication of poor marine conditions (Fish and Piston 2022; Brunette and Piston 2020). In 2023 and 2024, counts of sockeye salmon smolt leaving Hugh Smith Lake increased substantially from very low numbers observed from 2019 through 2022, and in 2024 the preliminary count of jacks was the second highest since 2006, which may indicate runs may begin improving soon. Escapements have been below the lower bound of the escapement goal range in all years since 2018 (Figure 10).

There are no directed commercial fisheries on Hugh Smith Lake sockeye salmon, but the fish are harvested incidentally in several commercial fisheries in southern Southeast Alaska (Districts 101–108). Since 2014, the harvest of Hugh Smith Lake sockeye salmon in Southeast Alaska commercial net fisheries has been estimated using genetic stock identification methods (Brunette and Piston 2019; Fish and Piston 2022). The closest purse seine fishery is approximately 10 miles away and the closest drift gillnet fishery approximately 15 miles from the outlet stream, both within District 101. In most years, the largest harvests of Hugh Smith Lake sockeye salmon occur in District 101 fisheries, averaging 61% of the total harvest from 2014 to 2023. Significant numbers of Hugh Smith Lake sockeye salmon are also harvested in the District 104 purse seine fishery in some years, but harvest estimates from this fishery are generally of very low precision due to the very small proportion of Hugh Smith Lake sockeye salmon in the harvest (Fish and Piston 2022). Harvest of Hugh Smith sockeye salmon is also known to occur in Canadian fisheries (e.g., sockeye salmon tagged and released in northern British Columbia waters during joint U.S./Canada adult tagging studies in 1982 and 1983 were recovered at Hugh Smith Lake weir) but quantitative harvest estimates for these fisheries are not available.

Management Measures

In most years, the largest portion of the documented harvest of Hugh Smith Lake sockeye salmon occurs in the Tree Point gillnet (Section 1-B) and District 101 purse seine fisheries. The Tree Point gillnet fishery is managed according to provisions of the Pacific Salmon Treaty, which specify an annual U.S. share of 13.8% of the annual allowable harvest of the Canadian Nass River sockeye salmon run. The District 1 Pink Salmon Management Plan (5 AAC 33.360) establishes gillnet fishing time in Section 1-B in relation to District 1 purse seine fishing time when both gear types are concurrently harvesting pink salmon in the district, beginning on the third Sunday in July. In addition, the department consistently maintains a complete closure of Boca de Quadra east of a line from Quadra Point to Kah Shakes Point for the purse seine fishery. While this line is for pink salmon management it also provides a significant closure in the near terminal area near Hugh Smith Lake.

Fishery restrictions have been implemented in the District 101 purse seine and drift gillnet fisheries annually since 2019, as outlined in the 2003 Hugh Smith Lake sockeye salmon action plan (Figures 13 and 14). The results of these management actions are difficult to quantify in terms of reducing

the harvest of Hugh Smith sockeye salmon, but studies conducted from 2003 to 2007 to estimate recoveries of stocked thermal marked Hugh Smith Lake sockeye salmon in the District 101 commercial fisheries, found that the restrictions were appropriately timed and located to reduce harvests (Heinl et al. 2007). Despite these fisheries restrictions the estimated commercial fishery harvest rate on Hugh Smith Lake sockeye salmon averaged approximately 60% from 2014 to 2023.

Hugh Smith Lake is recognized as a customary and traditional subsistence fishing area for salmon (5 AAC 01.716 (19)). Subsistence harvests, as measured by returned state subsistence permits, have averaged 234 sockeye salmon harvested annually in years with reported harvest (1985–2023; 15 years of no reported harvest). Reported subsistence harvest over the past 5 years (2019–2023) averaged 154 fish, and there was no reported harvest in 2023. Hugh Smith is not specifically listed on the Statewide Harvest Survey, so no sport fishery harvest information is available, but the sport fishery harvest of sockeye salmon is assumed to be minimal.

Stock of Concern Recommendation

Escapements of Hugh Smith Lake sockeye salmon were below the optimal escapement goal range in all years since 2017. As a result, the department recommends this stock be designated as a stock of management concern. An updated Action Plan will be developed and presented at the January 2025 board meeting.

Northern Southeast Outside Subregion summer-run chum salmon

Stock Assessment

Wild summer-run chum salmon are primarily harvested in mixed stock commercial fisheries that are often distant from spawning grounds, and it is typically not possible to identify stream-specific harvests (Piston and Heinl 2020). Therefore, summer-run chum salmon stocks are assessed over broad subregions and escapement goals are based on aggregates of peak counts (aerial and foot) from multiple index streams. Summer-run chum salmon escapement goals provide an indication of management performance over broad areas of Southeast Alaska. The Northern Southeast Outside Subregion includes summer-run chum salmon index streams on the outside waters of Chichagof and Baranof Islands in northern Southeast Alaska (Piston and Fish *In prep*). The current lower-bound sustainable escapement goal is 25,000 chum salmon counted on peak aerial or foot surveys to nine index streams combined (Figure 15; Piston and Heinl 2014). Escapements were below the current escapement goal in 5 of the past 6 years, 2019–2024 (Figure 11), and were also below the recommended goal in 4 of 6 years for the revised escapement index with the West Crawfish NE Arm Head index stream removed (Piston and Fish *In prep*).

While uncertainty is inherent in chum salmon escapement indices due to the challenges of species identification, especially during aerial surveys, approximately 23% of chum salmon surveys in the Northern Southeast Outside Subregion were foot surveys since 1982, which provides additional confidence in the counts. The presence of a foot survey crew in the Sitka management area allows for consistent ground truthing of aerial survey estimates and the option to obtain peak counts on foot at many chum salmon index streams in this subregion. In addition, most of the chum salmon index streams in this subregion are surveyed multiple times throughout the season, which provides additional support to the conclusion that the low chum salmon escapement indices in recent years reflects a true decline in abundance.

Management Measures

Summer-run chum salmon in the Northern Southeast Outside Subregion are caught in traditional purse seine fisheries (Figure 16), which are managed primarily on pink salmon abundance but occasionally, specific bays or inlets may be open to target summer-run chum salmon when there is an observed high abundance of summer-run chum salmon returning to a specific system (Thynes et al. 2021). Total chum salmon harvests in the Northern Southeast Outside Subregion were relatively low until the onset of hatchery runs in the early 1980s and greatly increased since the 1990s due to increased hatchery production (Piston and Fish In prep). An average of 78% of the total chum salmon harvest in this subregion (2014–2023) now occurs in terminal hatchery areas where the stock composition is almost entirely hatchery fish. Over the same time, an average of 642,000 chum salmon of mixed hatchery and wild origin were harvested outside of hatchery terminal areas, but the proportions of wild and hatchery fish in specific fisheries is unknown. The proportion of hatchery fish is likely very high in traditional fisheries near Sitka Sound and Crawfish Inlet, where hatchery release sites are located. From 1960 to 1980, an average of only 47,000 chum salmon were harvested per year in the Northern Southeast Outside Subregion. Harvest increased dramatically to an average of 2.3 million fish annually since the mid-1990s, when the hatchery program was fully implemented, which is further indication that most of the chum salmon harvested in this subregion are hatchery fish.

In general, pink salmon runs to the Northern Southeast Outside Subregion are later than summerrun chum salmon. Peak chum salmon survey counts typically occur from late July to mid-August. By early August, a substantial proportion of most summer-run chum salmon runs are either in the creeks or staged near the mouth of creeks. Pink salmon peak counts typically occur in late August or early September and there are often still large numbers of fish counted in the mouth and intertidal stream sections at that time. The difference in run timing between summer-run chum salmon and pink salmon in the Northern Southeast Outside Subregion helps ensure that a portion of the chum salmon run is subject to little harvest pressure.

The difference in run timing between pink and summer-run chum salmon and the inter-annual variability in pink salmon abundance results in many of the time and area restrictions placed on the directed pink salmon fishery providing significant protection to summer-run chum salmon. For example, commercial purse seine fisheries targeting pink salmon in southern District 113, south of Sitka Sound, are rarely opened before August, and due to poor pink salmon production, Whale Bay has not been opened for any purse seine fishing opportunity since 2021. North of Sitka Sound, commercial purse seine openings often begin in mid-July, especially in years of high pink salmon abundance. While these pink salmon fisheries can start in mid-July, generally these openings are structured with limited time and area until the pink salmon run fully develops in August. The area restrictions in place early in the season prevent fishing near any of the pink salmon and chum salmon index streams.

In contrast to purse seine fisheries on the inside water of Southeast Alaska, which often harvest fish in migration corridors, long distances from the spawning grounds, purse seine openings along the outer coast of District 113 are typically more terminal, which allows for targeted management actions to increase escapements at poorly performing summer-run chum salmon streams while minimizing potential impacts to pink salmon fisheries. Harvest rates on wild chum salmon in the Northern Southeast Outside Subregion likely vary widely between streams, with some receiving little or no harvest pressure and others receiving more harvest pressure depending on local wild pink and chum salmon returns and associated openings. Direct management actions to reduce summer-run chum salmon harvests are likely to have more impact on summer-run chum salmon index streams in northern District 113 than in the southern portion of District 113. This is largely

due to the relatively low abundance of pink salmon found in fishery areas south of Sitka Sound and the historical timing of pink salmon purse seine fisheries between the two areas.

Stock of Concern Recommendation

Escapements of chum salmon to the Northern Southeast Outside Subregion were below the escapement goal in 5 out of 6 years (2019–2024; Figure 11). While restrictive actions taken during the directed pink salmon fishery have benefited chum salmon in this subregion, the department began implementing additional management actions specifically for this stock in 2024, but the escapement was still below goal. **The department recommends this stock be designated as a stock of management concern.** An Action Plan will be developed and presented at the January 2025 board meeting.

OTHER STOCK RECOMMENDATIONS

Excursion River fall-run chum salmon

Stock Assessment

Escapements have been assessed through aerial surveys since 1960 at the Excursion River, the primary chum salmon producing stream in Excursion Inlet, located along the northeast side of Icy Strait in northern Southeast Alaska (Piston and Fish *In prep*). In 2009, the department established a sustainable escapement goal of 4,000–18,000 chum salmon counted on a peak aerial survey at the Excursion River (Eggers and Heinl 2008). The escapement index was within the current escapement goal range in only one of the past six years, 2019–2024 (Figure 12). Due to the late timing of fall-run chum salmon and generally poor weather in the fall, survey effort often ends when it is determined that no directed fishery is going to occur. This has likely resulted in a greater tendency to underestimate the peak abundance in recent years. (Piston and Fish *In prep*).

Management Measures

Excursion Inlet may open commercial fishing with purse seine gear if chum salmon run strength appears adequate to both meet escapement and provide surplus harvest, however, no directed openings targeting Excursion River fall-run chum salmon have occurred since 2017 (Piston and Fish *In prep*). Because of the late timing of fall-run chum salmon, and the location of Excursion Inlet to the west of most commercial net fisheries, very few of these fish are likely harvested outside of directed openings.

Stock of Concern Recommendation

Escapements of chum salmon to the Excursion River were below the escapement goal range in 5 out of 6 years (2019–2024; Figure 12); however, the survey program has been inconsistent and possibly inadequate to properly gauge the status of Excursion River fall-run chum salmon. As a result, the department will be conducting surveys on this stock until at least the end of September and reevaluating stock status during the 2028 board cycle. In the meantime, no directed fisheries will be opened on this stock unless there is an obvious surplus to escapement needs.

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- 2024 Southeast Alaska Stock of Concern Memo
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	2024 Goal											
	Ra	nge		Escapement								_
			Year added as								Recommended	
Species / System	Lower	Upper	Туре	current SOC	2018	2019	2020	2021	2022	2023	2024 ^a	Action
King Salmon												
												Delist as
Chickamin River	2,150	4,300	BEG	2022	2,052	1,610	2,280	2,404	2,522	3,719	2,176 ^a	Management SOC
												Delist as
Unuk River	1,800	3,800	BEG	2018	1,971	3,115	1,135	2,666	1,304	2,072	1,980ª	Management SOC
											1	Continue as
Stikine River	14,000	28,000	BEG	2022	8,603	13,817	9,753	8,376	9,090	12,795	NA ^b	Management SOC
	(= 0	1 500	DEC	2022	100	600			0.01	201	10.10	Continue as
Andrew Creek	650	1,500	BEG	2022	482	698	470	530	821	386	404 ^a	Management SOC
V' CI D'	120	2.40	DEC	2010	20	27	100	124	100	(0	059	Continue as
King Salmon River	120	240	BEG	2018	30	27	100	134	123	08	83"	Management SOC
T 1 D'	10.000	26 000	DEC	2022	7 071	11 550	15 502	11 2 41	10 700	14755	21 2109	Continue as
Taku River	19,000	36,000	BEG	2022	7,271	11,558	15,593	11,341	12,722	14,755	21,318"	Management SOC
	1 750	2 500	DEC	2019	072	2 0 2 0	2 1 9 0	2 0 2 0	1 500	2 2 2 4	2 0 2 03	Delist as
Chilkat River	1,/50	3,300	BEG	2018	8/3	2,028	3,180	2,038	1,582	2,234	2,038"	Management SOC
Saakaya Salman												
Sockeye Samion												Listos
Hugh Smith I aka	8 000	18 000	OEG		2 030	2 240	3 860	3 735	1 657	1 680	3 500a	List as Management SOC
Hugh Shinii Lake	8,000	18,000	OLU	_	2,037	2,240	5,000	3,233	1,057	1,007	3,300	Continue as
McDonald Lake	55,000	120.000	SEG	2018	11 000	24 200	8 200	44 500	34 100	74 900	32 500ª	Management SOC
WieDonald Lake	55,000	120,000	SLU	2010	11,000	27,200	0,200	1 ,300	54,100	74,900	52,500	Delist as
Klukshu River	7 500	11 000	BEG	2022	7.143	18 749	4.287	25 691	29 629	13 690	10 000ª	Management SOC
	7,500	11,000	DEG	2022	7,110	10,717	1,207	23,071	27,027	15,070	10,000	Management 500
Chum Salmon												
N. Southeast												List as
Outside	25,000		LB SEG	_	19,400	25,500	16,100	11,600	18,000	14,600	21,905	Management SOC
												Do not list as
Excursion River	4,000	18,000	SEG	_	6,200	3,600	200	1,900	800	7,700	600 ^a	Management SOC

Table 1.–Southeast Alaska king, sockeye, and chum salmon current stocks of concern, escapement goals, and escapement summary, 2018–2024. Shaded and bolded cells indicate years where the escapement goal was not met.

^aData from 2024 are preliminary.

^bEstimate not yet available.

°Chilkat River King salmon also have an inriver goal of 1,850 to 3,600 fish that accounts for inriver subsistence harvests, which average less than 100 fish per year.





Figure 1.–Chickamin River king salmon escapements, 1975–2024, and the biological escapement goal range of 2,150–4,300 large spawners.



Figure 2.–Unuk River king salmon escapements, 1977–2024, and the biological escapement goal range of 1,800–3,800 large spawners.



Figure 3.–Stikine River king salmon escapements, 1975–2023, and the biological escapement goal range of 14,000–28,000 large spawners. The 2024 escapement estimate was not available at the time of this memo.



Figure 4.–Andrew Creek king salmon escapements, 1975–2024, and the biological escapement goal range of 650–1,500 large spawners.



Figure 5.–King Salmon River king salmon escapements, 1975–2024, and the biological escapement goal range of 120–240 large spawners.



Figure 6.–Taku River king salmon escapements, 1975–2024, and the biological escapement goal range of 19,000–36,000 large spawners.



Figure 7.–Chilkat River king salmon escapements, 1991–2024, and the biological escapement goal range of 1,750–3,500 large spawners.



Figure 8.–McDonald Lake sockeye salmon escapements, 1980–2024, and the sustainable escapement goal range of 55,000–120,000 spawners.



Figure 9.–Klukshu River sockeye salmon escapements, 1976–2024, and the biological escapement goal range of 7,500–11,000 spawners.



Figure 10.–Hugh Smith Lake sockeye salmon escapements, 1980–2024, and the optimal escapement goal range of 8,000–18,000 spawners. Escapements from 2003 to 2007 show estimated wild (gray bars) and hatchery-stocked (white bars) fish. Estimates of the contributions of wild and hatchery-stocked fish are not available prior to 2003.



Figure 11.–Northern Southeast Outside Subregion chum salmon escapement index, 1982–2024, and lower-bound sustainable escapement goal of 25,000 index fish.



Figure 12.–Excursion River fall-run chum salmon escapement index, 1964–2024, and the sustainable escapement goal range of 4,000 to 18,000 index fish.



Figure 13.–District 101 purse seine closure areas for statistical week 29 and 30 outlined in the 2003 Hugh Smith Lake action plan.



Figure 14.–District 101 purse seine and drift gillnet closure areas for statistical weeks 31–33 outlined in the 2003 Hugh Smith Lake action plan.



Figure 15.–Northern Southeast Outside Subregion chum salmon index streams and hatchery chum salmon release sites.



Figure 16.–Northern Southeast Outside Subregion chum salmon index streams, hatchery chum salmon release sites, and traditional pink salmon purse seine fishing areas.