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Nushagak River Chinook Salmon Stock Status, 2023–2025: A Report to the Alaska Board of Fisheries

by

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and

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December 2025

Alaska Department of Fish and Game **Divisions of Sport Fish and Commercial Fisheries**

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Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft^3/s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General

Alaska Administrative Code	AAC
all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.
all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat or long
monetary symbols (U.S.)	$, ¢
months (tables and figures): first three letters	Jan,...,Dec
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Mathematics, statistics

all standard mathematical signs, symbols and abbreviations	
alternate hypothesis	H_A
base of natural logarithm	e
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, χ^2, etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	E
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	$\log_2$, etc.
minute (angular)	′
not significant	NS
null hypothesis	H_O
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	″
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

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ABSTRACT

The Alaska Board of Fisheries designated Nushagak River Chinook salmon as a stock of management concern in November 2022 following an Alaska Department of Fish and Game recommendation under the *Policy for the management of sustainable salmon fisheries* (5 AAC 39.222). A stock of management concern is defined as a stock that chronically fails, over 4 to 5 years, to meet established escapement or management goals despite targeted management actions. The designation was based on the failure to meet the inriver run goal of 95,000 Chinook salmon in 5 of 6 years (2017–2022), despite management actions to reduce harvest in sport and commercial fisheries. The sustainable escapement goal of 55,000–120,000 fish was last achieved in 2018. This report summarizes the state of Nushagak Chinook salmon enumeration, provides an overview of the annual return, and describes the management actions taken since the *Nushagak District King Salmon Stock of Concern Management Plan* (5 AAC 06.391) was adopted.

Keywords: Chinook salmon, *Oncorhynchus tshawytscha*, Nushagak River

INTRODUCTION

The primary management objective for all commercial salmon districts in Bristol Bay (Figure 1) is to achieve escapement goals within established biological ranges while providing harvest opportunities for fish surplus to escapement needs. The Alaska Department of Fish and Game (the department) established a Nushagak Chinook salmon (*Oncorhynchus tshawytscha*) sustainable escapement goal (SEG) in 2007, which was revised to 55,000–120,000 fish in 2012 (Fair et al. 2012). To provide adequate passage for escapement and inriver opportunity, the Alaska Board of Fisheries (board) established an inriver goal of 95,000 Chinook salmon (5 AAC 06.361). The inriver goal was set to allow prosecution of the commercial fishery and provide subsistence and sport opportunity above the sonar while still allowing adequate escapement to achieve the SEG.

HARVEST MANAGEMENT

The Nushagak District salmon fisheries are managed under 4 interrelated management plans governing harvest of sockeye and Chinook salmon across the Nushagak and Wood River systems. Because these plans overlap spatially and temporally, actions taken to conserve one species—such as restrictions to reduce Chinook salmon harvest—can limit harvest opportunities for others, particularly sockeye salmon (*O. nerka*). Management is further complicated by mixed-stock fisheries, overlapping run timing, high interannual variability in abundance, stock composition, and timing. Stock-specific differences in productivity and exploitation rates, combined with limitations to inseason assessment tools such as sonar and test fisheries, further complicate decision making. Balancing harvest among commercial, subsistence, and sport users while conserving depressed Chinook salmon stocks, within overlapping regulatory frameworks, adds additional complexity to management of the Nushagak District fisheries.

The 4 relevant management plans are as follows:

1. *Nushagak District King Salmon Stock of Concern Management Plan* (5 AAC 06.391)
2. *Nushagak-Mulchatna King Salmon Management Plan* (5 AAC 06.361)
3. *Wood River Sockeye Salmon Special Harvest Area Management Plan* (5 AAC 06.358)
4. *Nushagak District Commercial Set and Drift Gillnet Sockeye Salmon Fisheries Management and Allocation Plan* (5 ACC 06.367)

POPULATION INDICATORS

A review of the total Chinook salmon run, combining harvest and escapement estimates, indicates a marked decline across all population indicators relative to long-term averages (Table 1,

Figure 2). Recent estimates of the total run, which averaged 43,429 fish from 2023–2025, were well below the 20-year average (149,082). Both the escapement and harvest components of the total run have observed this decline.

Chinook salmon escapement is calculated postseason by subtracting the upstream sport and subsistence harvests from the inriver Portage Creek sonar index. Inseason management relies on the sonar passage estimate, which serves as the basis for the 95,000 inriver goal. In the 20 years prior to the Chinook salmon stock of concern (SOC) designation (2003–2022), escapement estimates ranged from a low of 40,313 fish in 2020 to a high of 233,422 fish in 2004, with an average of 98,507 fish (Table 1, Figure 2). Chinook salmon run size declined starting in 2017, which coincided with increased sockeye salmon runs to the Nushagak River. The years leading to the SOC designation (2017–2022) had an average escapement of 52,946 Chinook salmon, which has dropped to 32,683 in the 3 years since the Nushagak Chinook salmon SOC management plan was adopted (Table 1).

Historically, Chinook salmon have been harvested across commercial, sport, and subsistence fisheries. In years of high abundance, the commercial fishery had directed Chinook salmon openings, with the last directed Chinook salmon fishery occurring in 2014. Commercial fishing in the Nushagak District targets sockeye, Chinook, and chum salmon originating from the Nushagak, Wood, and Igushik Rivers. Subsistence and sport fisheries occur upstream of the commercial district, and all fisheries have experienced declines in Chinook salmon harvest due to declining abundance.

Total harvest in all fisheries declined from a long-term average of 50,575 fish (2003–2022) to 31,864 fish (2017–2022), and further to 10,746 fish during 2023–2025 (Table 1). Commercial, subsistence, and sport harvests have dropped by 86%, 70%, and 55%, respectively, over this same period. This reduction reflects both intentional management actions to limit harvest and a decrease in overall stock abundance. The sustained declines in harvest and escapement indicate reduced productivity and limited fish availability, probably driven by a combination of ecological and environmental factors affecting Nushagak River Chinook salmon.

ASSESSMENT

Inseason monitoring of Nushagak River Chinook salmon continues to rely on the Portage Creek sonar, which provides the only inseason index count of salmon passage used to manage the Nushagak District. Accurately enumerating Chinook salmon at this site remains challenging due to both physical and biological factors. While the Chinook salmon estimate has always carried substantial uncertainty, recent record sockeye salmon runs have created new challenges that have increased that uncertainty. The sonar ensonifies only a portion of the channel, and the proportion of Chinook salmon migrating within that range can vary annually. In years of high sockeye salmon abundance, sonar shadowing and species apportionment become more uncertain. These sources of uncertainty are structural and challenging to eliminate, but their effects continue to be investigated through ongoing evaluation and refinement of assessment methods, such as the use of Echotastic software[1] for enumeration.

Prior to the recent increased sockeye salmon returns, the department conducted a hydroacoustic study to evaluate the sonar program's ability to enumerate Chinook salmon. Maxwell et al. (2020)

[1] Echotastic software. 2023. Version 3.0.14. Developed by Carl Pfisterer, ADF&G Division of Commercial Fisheries (internal use only).

estimated that 47–65% of the Chinook salmon passed outside the ensonified zone between 2011 and 2014. This study offers a valuable but incomplete perspective on how the sonar index relates to total run size. The proportion of Chinook salmon within the ensonified zone is probably different now than when this study was conducted, due to the large sockeye runs in recent years. The decline in Chinook salmon abundance is attributed to more than a change in the Nushagak sonar index, because it is observed across all metrics of Chinook salmon abundance, i.e., commercial, sport, and subsistence harvest.

The current plan for Chinook salmon assessment and management emphasizes expanding sonar-independent estimates that can be used postseason to estimate inriver abundance and improve brood tables and escapement goal calculation. Ongoing work by the department and Bristol Bay Science and Research Institute (BBSRI) includes aerial surveys of Chinook salmon spawning grounds, increased age-sex-length (ASL) sampling from commercial and sport harvests, operation of upstream weirs, and a future Chinook salmon mark–recapture project.

Future Chinook salmon assessment plans do not include major structural changes to the Portage Creek sonar project. Any methodological change that increases Chinook salmon counts at the sonar would require a corresponding adjustment to escapement goals. The department intends to continue operating the existing sonar to produce the inseason index and postseason escapement estimate and to preserve continuity with historical datasets. Incremental improvements to sonar operations have been implemented in recent years, including updated software and data flow, increased quality control protocols, physical adjustments to the sonar transducer to reduce shadowing, and incorporation of size-selective catch adjustments to improve species apportionment. The department lacks the capacity and funding to undertake significant modifications to the sonar system on the Nushagak River.

In 2023, the department initiated the Nushagak River Chinook salmon creel survey to monitor the sport fishery. Information is collected to index angler-days of effort by type of angler (guided vs. unguided) and gear (bait or no bait), to index catch and harvest rates of Chinook salmon, as well as to estimate age, sex, length, and weight of Chinook salmon in the sport harvest. Data are reported to fisheries managers in Dillingham daily, providing real-time information on sport fishing success and the composition of the harvest. Data from this project is used by managers in season to aid in making management decisions in both the commercial and sport fisheries. Annual Fishery Management Reports are published with the results of each year's surveys (Elison et al. 2025).

CHINOOK SALMON MANAGEMENT ACTIONS BY FISHERY, 2023–2025

COMMERCIAL FISHERIES

Past management actions to conserve Chinook salmon have focused on (1) not opening the directed Chinook salmon fishery, (2) restricting mesh to 5.5-inch mesh or smaller, and (3) reducing incidental catch of Chinook salmon in the sockeye salmon fishery by reducing fishing time. Restrictions have been early in the sockeye salmon run during the peak of Chinook salmon run entry.

Chinook salmon conservation measures implemented since the adoption of the SOC Plan in 2023 are as follows:

2023

- Mesh size restricted to 5.5-inch mesh or smaller prior to any fishing.
- Triggers to open commercial fishing were 420,000 sockeye salmon projected past Nushagak sonar, and 800,000 sockeye salmon projected past Wood River tower.
- Commercial fishing opened on June 25 (Figure 3). Wood River sockeye salmon escapement was projected to exceed the 800,000 trigger. The actual escapement was 1,053,426. Nushagak River sockeye salmon was projected to exceed the 420,000 trigger. The post-fishing projection was 887,215.
- Management delayed the start of commercial fishing by 2 to 3 days. Under previous regulations, commercial fishing would have opened on June 22 or 23, depending on achieving the 100,000 Wood River sockeye salmon trigger. No commercial fishing through 52% of the Chinook salmon run timing and 6% of the sockeye salmon run timing.
- Drift and set gillnet fishing closed twice a day through end of June to allow Chinook salmon to pass through the district.
- Stayed below Wood River optimal escapement goal (OEG) upper end (3 million) with a 2.6 million final escapement. Stayed below Nushagak River 2 million OEG upper end with 1.8 million final escapement.

2024

- Mesh size was restricted to 5.5-inch mesh or smaller prior to any fishing.
- Triggers to open commercial fishing were 210,000 sockeye salmon projected past Nushagak sonar, and 780,000 sockeye salmon projected past Wood River tower.
- Commercial fishing opened on June 26 (Figure 4). This opening was justified because the department projected that the Wood River sockeye salmon escapement trigger of 780,000 was met. Actual escapement was 913,428. The Nushagak River sockeye salmon trigger was projected to exceed 210,000, with the actual escapement calculated at 795,391.
- Management delayed the start of commercial fishing by 5 days. Under previous regulations, commercial fishing would have opened June 21 based on achieving the 100,000 Wood River sockeye salmon trigger. No commercial fishing through 56% of the Chinook salmon run timing and 8% of the sockeye salmon run timing. Drift gillnet was kept closed at least 12 hours per day through July 2. Set gillnet fishing restricted to less than 14 hours per day through July 1 to allow additional Chinook salmon passage.
- Exceeded both Nushagak 1.4 million (1.7 million escapement) and Wood River 3 million (4.4 million escapement) sockeye salmon OEGs.

2025

- Mesh size was restricted to 5.5-inch mesh or smaller prior to any fishing.
- Triggers to open commercial fishing were 635,000 sockeye salmon projected past the sonar, 763,000 sockeye salmon projected past the Wood River tower.

- Wood River sockeye salmon escapement was projected to exceed 763,000. Actual escapement was 797,922. Nushagak River sockeye salmon was projected to exceed 635,000; the after-the-fact escapement was 1,592,775. Commercial fishing opened on June 22 (Figure 5).
- Management delayed the start of commercial fishing by 2 days. Under previous regulations, commercial fishing would have opened June 20 based on achieving the 100,000 Wood River sockeye salmon trigger. No commercial fishing through 38% of the Chinook salmon run timing and 2% of the sockeye salmon run timing.
- Drift gillnet fishing closed twice a day until July 1 to allow Chinook salmon to pass through the district. Set gillnet fishing was significantly restricted through June 30 with an average daily fishing time of 13.2 hours.
- Exceeded Nushagak 2.5 million (3.3 million escapement) sockeye salmon OEG. The Wood River sockeye salmon OEG of 3 million was not exceeded (2.7 million escapement).

SPORT FISHERIES

The commissioner may, by emergency order (EO), change bag and possession limits, annual limits, and alter methods and means in sport fisheries (5 AAC 75.003). These changes may not reduce the allocation of harvest among other user groups.

The department has repeatedly used EO authority to reduce harvest of Nushagak River Chinook salmon in the sport fishery, and such actions have become more frequent since 2010, with restrictive actions being taken in 8 of the last 10 years.

Management measures have been implemented since 2023 as follows:

2023

- Effective July 7, bag and possession limits for fish over 20″ reduced to 1 per day, 1 in possession. Annual limit reduced to 2 fish.
- Effective July 13, retention of all Chinook salmon and the use of bait is prohibited.

2024

- Effective July 3, retention of all Chinook salmon and the use of bait is prohibited.

2025

- Effective July 7, bag and possession limits for fish over 20″ reduced to 1 per day, 1 in possession. Annual limit reduced to 2 fish.

SUBSISTENCE FISHERIES

The board made a positive customary and traditional use finding (C&T) for all salmon in Bristol Bay with an amount reasonably necessary for subsistence (ANS) of 157,000–172,171 salmon, including 55,000–65,000 sockeye salmon in the Kvichak River drainage (not including the Alagnak River; 5 AAC 01.336). The board has not made an ANS finding specifically for Chinook salmon in the Nushagak River drainage or elsewhere in Bristol Bay.

The Alaska subsistence statute 16.05.258 provides for a priority for subsistence uses over other consumptive uses of fish. Under the *Nushagak-Mulchatna King Salmon Management Plan* (5 AAC 06.361), the subsistence fishery is to be the last fishery closed or restricted in the district. If the spawning escapement of Chinook salmon in the Nushagak River is projected to be less than 55,000 fish, the commissioner may establish, by EO, fishing periods during which the time or area is reduced for the inriver Chinook salmon subsistence fishery in the Nushagak River. Since 2023, there have been no management actions taken to reduce the subsistence harvest of Chinook salmon in the Nushagak District subsistence salmon fisheries. There are no subsistence harvest limits for Chinook salmon in the Nushagak District.

In 2024, a total of 963 subsistence salmon fishing permits were issued for the Bristol Bay Management Area; of those, 527 (55%) were returned to the department. The department issued a target number of permits for the Nushagak drainage (587 permits or 61%). Bristol Bay Chinook salmon subsistence harvest totals were 4,596 and well below the most recent 5-year, 10-year, and historical averages of 7,658 Chinook salmon, 11,504 Chinook salmon, and 13,907 Chinook salmon, respectively. The majority of Chinook salmon harvested in the Bristol Bay subsistence fishery in 2024 came from the Nushagak drainage, including the bay, with a total of 3,991 Chinook salmon harvested from this area (Table 1).

The ANS for Bristol Bay has not been met since 1994. The ANS is one guideline used by the board to evaluate if reasonable opportunity for subsistence harvest is being provided under existing regulations. There are many reasons an ANS may not be met, including resource population abundance, regulations, or social and economic factors. The ANS is typically presented as a range based on historical harvest and is developed with public input. The ANS is based on historical harvest data and intended to reflect customary and traditional levels of harvests during times when regulations allowed for full opportunity of harvest as documented by the best available information. The ANS is neither a guarantee of harvest, a quota, or a cap; nor is it an inseason management tool.

In Bristol Bay, subsistence Chinook salmon harvest represents 10% of the total subsistence salmon harvest. Although small relative to subsistence sockeye (80%) harvests, subsistence harvests of Nushagak River Chinook salmon are a well-documented and an important part of subsistence practices in Bristol Bay. If the board recommends developing a Chinook salmon-specific ANS for the Bristol Bay Area or for the Nushagak River drainage specifically, the department will develop ANS options for consideration by the board for the next Bristol Bay board meeting.

CONDITIONS FOR DELISTING A STOCK OF CONCERN

The *Policy for the Management of Sustainable Salmon Fisheries* defines "management concern" as "a concern arising from a chronic inability, despite the use of specific management measures, to maintain escapements for a salmon stock within the bounds of the SEG, BEG, OEG, or other specified management objectives for the fishery." The designation of this stock as a management concern is unusual because it is based on 'other specified management objective,' that is, on the inriver goal and not the escapement goal. Inriver abundance and escapement are estimated from the sonar assessment. That assessment is known to have poor accuracy as a Chinook salmon counting tool with 45–60% of Chinook salmon migrating beyond the area of the river where the sonar can reach. Because of that, there is low confidence in the accuracy of the Chinook salmon inriver abundance estimate. Additionally, Chinook salmon production levels have declined. Chinook salmon productivity has declined to the point where the total Chinook salmon run is less

than the 95,000 fish inriver goal in 4 of the past 10 years. In those years, even if there had been no harvest by any user groups, the inriver goal would still have been unattainable. However, the department does not identify biological sustainability concerns for this stock, given that escapement levels have been at or near the lower bound of the SEG when accounting for assessment uncertainty. The inriver goal of 95,000 was established during a period of higher Chinook salmon productivity. The 95,000 inriver fish goal included the 55,000 low end of the SEG and provides opportunity for sport and subsistence fisheries with recent 10-year (2013–2022) average harvests of 11,000 subsistence and 6,000 sport Chinook salmon harvest. The board may want to revisit the inriver goal to determine if it remains appropriate for the current lower production regime while recognizing the uncertainty associated with the assessment. Because of these issues, the department recommends using the lower bound of the escapement goal as the metric for getting out of stock of management concern status. This allows for static inriver subsistence and sport harvests and achieves the SEG but recognizes the lower productivity regime that currently exists.

The delisting criteria from the Action Plan[2] referenced on record by the board are as follows:

CONDITIONS FOR DELISTING A STOCK OF CONCERN

1. Delisting: If the lower bound of the SEG is met or exceeded in 3 consecutive years and is expected to meet the goal range in the future years or is met in 4 out of 6 consecutive years and is expected to meet the goal range in future years, the department will recommend removing Nushagak River Chinook salmon as a stock of management concern at the first Bristol Bay Alaska Board of Fisheries meeting after this condition is met.
2. Restrictions: Management restrictions may be relaxed based on Chinook salmon run timing and if catch and harvest data indicate restrictions are no longer needed to ensure the escapement goal is met.
3. Restrictions: If 2 consecutive years of escapement are near or above the upper bound of the escapement goal range, management restrictions may be relaxed or set aside using EO authority.

Stock status, action plan performance (including information on harvest rate, distribution, and timing in fisheries), and the results of the escapement goal review will be updated in a report to the board at the 2028 Bristol Bay Alaska Board of Fisheries meeting.

[2] https://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2022-2023/state/rcs/RC053_NRKSC_Substitute_Language_SOC_Action_Plan_Requested_by_Member_Carpenter.pdf (Accessed December 2025).

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TABLES AND FIGURES

Table 1.–Nushagak River Chinook salmon harvest and escapement, above and below the sonar site, 2003–2025.

		Harvests below sonar				Harvests above sonar			
Year	Total run	Commercial	Subsistence	Sport	Inriver sonar estimate	Subsistence	Sport	Spawning escapement	Total harvest
2003	225,594	43,485	13,399	2,203	166,507	4,448	3,752	158,307	67,287
2004	356,240	100,846[a]	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	2,837	52,297	49,786
2018	148,007	36,626	10,427	3,715	97,239	1,408	4,477	91,354	56,653
2019	80,418	22,725	7,162	3,768	46,763	2,967	2,538	41,258	39,160
2020	57,968	7,452	5,988	1,496	43,032	2,265	454	40,313	17,655
2021	65,513	4,820	3,904	1,567	55,222	1,744	1,359	52,119	13,394
2022	54,867	5,431	3,043	1,279	44,434	1,634	2,379	40,334	14,533
2023	41,382	6,849	1,816	1,218	31,499	1,444	1,229	28,826	12,556
2024	47,565[b]	3,259	1,293[b]	1,120	41,893	1,828[b]	1,723	38,342[b]	9,223[b]
2025	41,339[b]	3,534[b]	2,277[c]	1,206[c]	34,322	1,664[c]	1,777[c]	30,881[b]	10,458[b]
Average									
20 year (2003–2022)	149,082	33,026	8,509	2,487	105,026	2,822	3,693	98,507	50,575
2017–2022	84,809	18,405	6,573	2,443	57,275	1,974	2,341	52,946	31,864
2023–2025	43,429	4,547	1,795	1,272	35,905	1,645	1,576	32,683	10,746

Source:1992–2011: Buck et al. (2012), 2012–2025: Cole Weaver, ADF&G Division of Commercial Fisheries Biologist, Anchorage, 2025, unpublished data prepared for the 2026 Bristol Bay Alaska Board of Fisheries meeting.

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

[b] Preliminary estimate.

[c] Preliminary estimate, presented as a 3-year average.

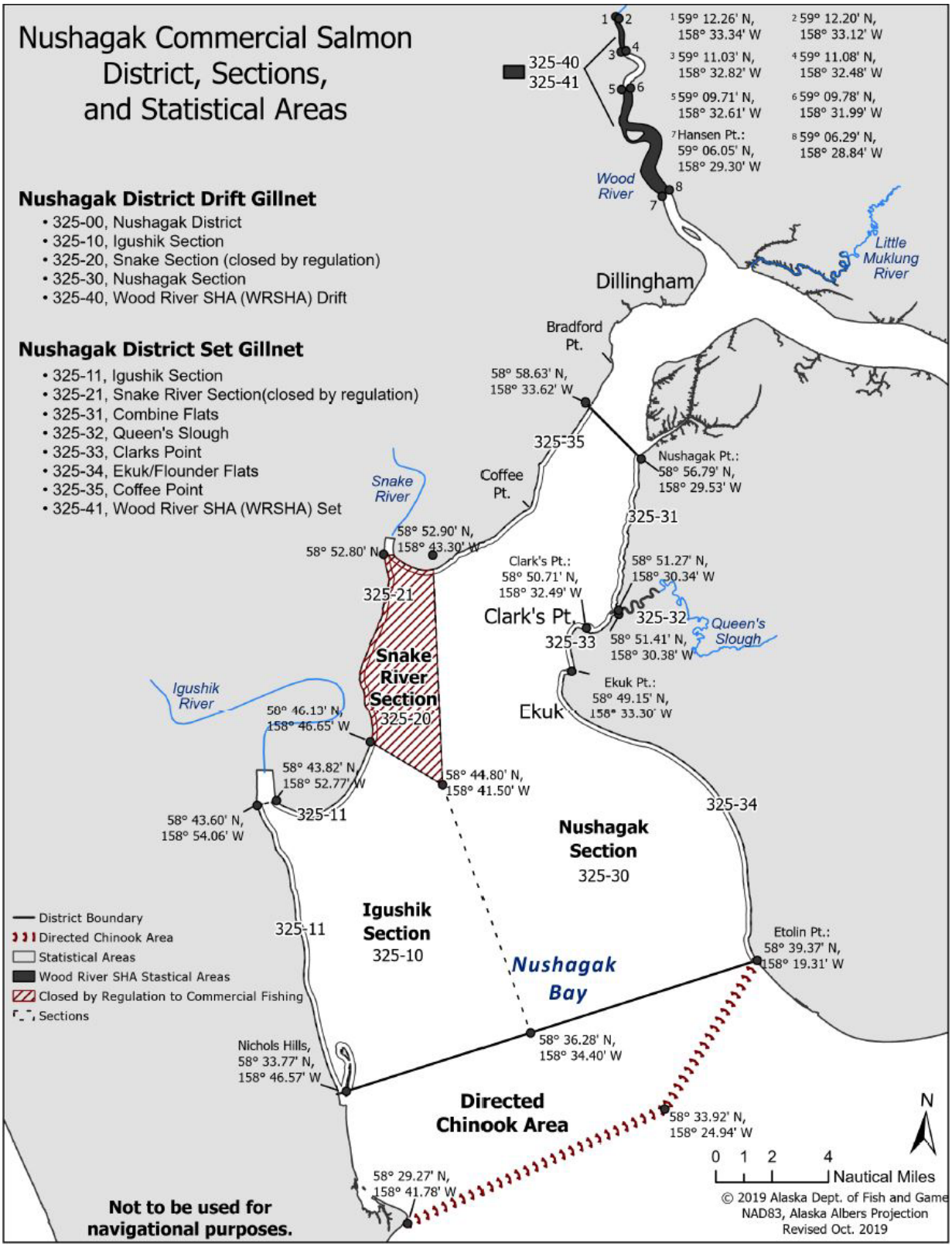

Figure 1.–Nushagak River commercial salmon districts, sections, and statistical areas.

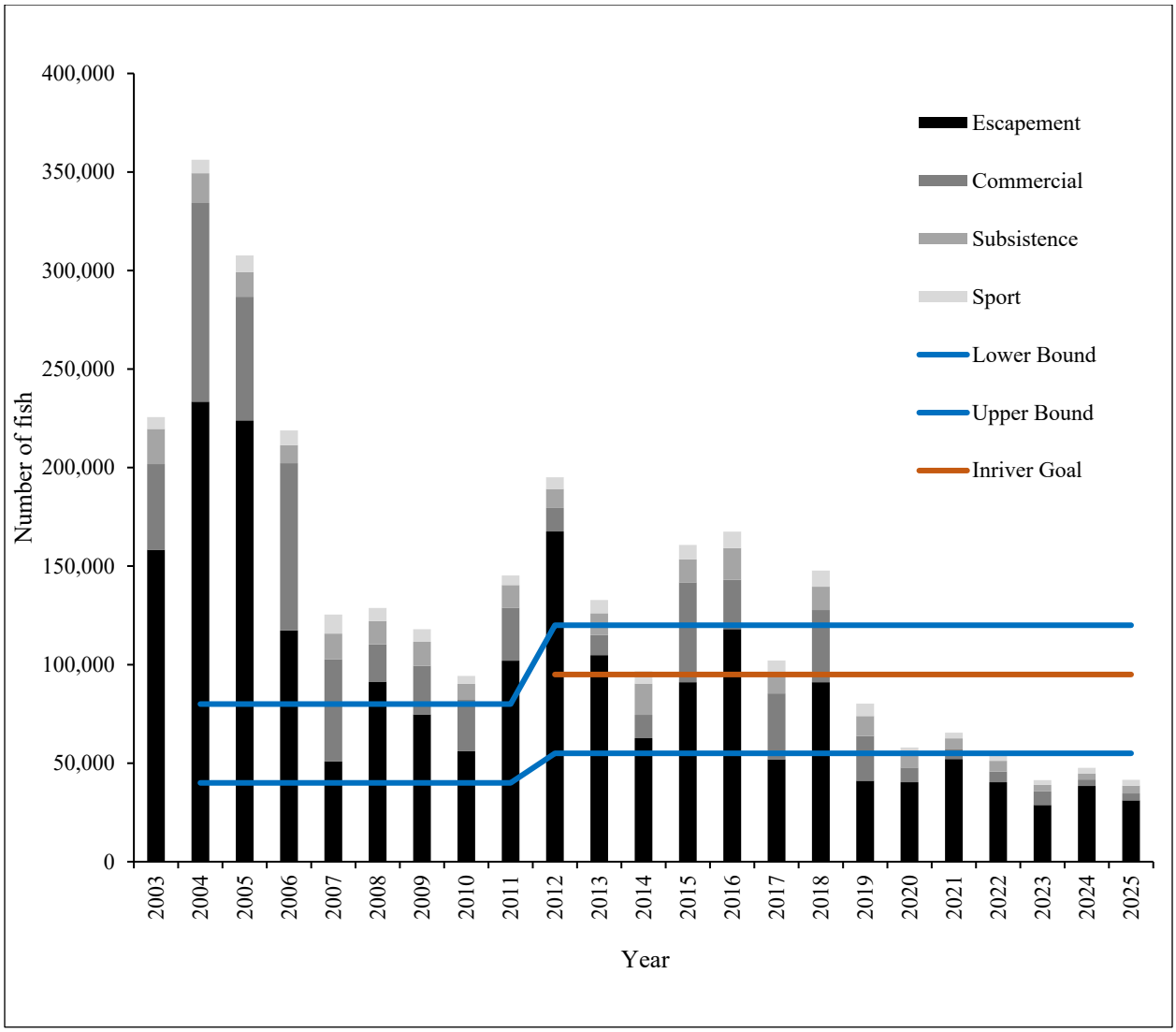

Figure 2.–Escapement goals, inriver goal, and annual components of the Chinook salmon run to the Nushagak River, 2003–2025.

Note: The 2025 commercial harvest data are preliminary, and the 2025 sport and subsistence harvest data are 3-year averages (2022–2024).

	NUSHAGAK DISTRICT FISH SCHEDULE				DAILY AND CUMULATIVE ESCAPEMENT					
	Nushagak District		Nushagak Section		Nushagak R.				Wood R.	
	Nushagak Drift		Nushagak Set							
Date	Open	Hrs	Open	Hrs	King		Sockeye		Sockeye	
6/19	–	–	–	–	72	9,908	5,444	20,064	2,238	5,652
6/20	–	–	–	–	25	9,933	1,582	21,646	966	6,618
6/21	–	–	–	–	620	10,553	9,584	31,230	5,064	11,682
6/22	–	–	–	–	100	10,653	95,388	126,618	91,824	103,506
6/23	–	–	–	–	40	10,693	71,969	198,587	88,602	192,108
6/24	–	–	–	–	3,066	13,759	62,318	260,905	87,456	279,564
6/25	20:00-24:00	4	19:00-24:00	5	4,279	18,038	256,796	517,701	343,806	623,370
6/26	00:00-01:00 08:30-13:00 21:00-24:00	8.5	00:00-01:00 06:30-14:00 19:30-24:00	13	652	18,690	251,174	768,875	430,056	1,053,426
6/27	00:00-2:00 09:30-14:00	6.5	00:00-02:00 07:30-14:30	9	2,233	20,923	118,202	887,077	325,302	1,378,728
6/28	09:30-14:00 14:00-24:00	14.5	08:00-15:00 15:00-24:00	16	1,570	22,493	82,065	969,142	106,860	1,485,588
6/29	00:00-05:00 10:00-15:00 23:30-24:00	10.5	00:00-15:00 22:00-24:00	17	589	23,082	68,788	1,037,930	59,676	1,545,264
6/30	00:00-04:30 11:00-16:30	10	00:00-04:30 09:30-16:30 22:30-24:00	13	278	23,360	33,371	1,071,301	51,810	1,597,074
7/1	00:00-05:30 11:30-18:30 23:30-24:00	13	00:00-05:30 10:30-19:00 19:00-24:00	19	319	23,679	22,019	1,093,320	39,378	1,636,452
7/2	00:00-07:00 11:00-18:30	14.5	00:00-24:00	24	406	24,085	31,986	1,125,306	57,174	1,693,626
7/3	00:00-08:00	8	00:00-11:00	11	1,239	25,324	49,502	1,174,808	60,420	1,754,046
7/4	02:30-10:00 14:00-21:30 21:30-24:00	17.5	01:00-10:00 10:00-24:00	23	1,954	27,278	57,075	1,231,883	66,276	1,820,322
7/5	00:00-16:00 16:00-24:00	24	00:00-12:00 12:00-24:00	24	763	28,041	96,385	1,328,268	77,880	1,898,202
7/6	00:00-16:00 16:00-23:00	23	00:00-12:00 12:00-24:00	24	382	28,423	63,675	1,391,943	74,916	1,973,118

Figure 3.–Nushagak District fishing schedule and Chinook and sockeye salmon escapement for the Nushagak and Wood Rivers, 2023.

	NUSHAGAK DISTRICT FISH SCHEDULE				DAILY AND CUMULATIVE ESCAPEMENT					
	Nushagak District		Nushagak Section		Nushagak R.				Wood R.	
	Nushagak Drift		Nushagak Set							
Date	Open	Hrs	Open	Hrs	King		Sockeye		Sockeye	
6/19	–	–	–	–	1,773	4,316	16,326	24,531	22,584	25,590
6/20	–	–	–	–	3,029	7,345	27,574	52,105	63,300	88,890
6/21	–	–	–	–	1,858	9,203	21,462	73,567	33,330	122,220
6/22	–	–	–	–	225	9,428	15,894	89,461	19,896	142,116
6/23	–	–	–	–	626	10,054	4,208	93,669	11,568	153,684
6/24	–	–	–	–	453	10,507	764	94,433	3,168	156,852
6/25	–	–	–	–	797	11,304	7,496	101,929	33,750	190,602
6/26	18:00-24:00	6	16:30-21:30 21:30-24:00	7.5	1,518	12,822	312,612	414,541	244,422	435,024
6/27	00:00-03:00 18:30-23:30	8	00:00-05:00 17:30-23:30	11	2,748	15,570	250,791	665,332	478,404	913,428
6/28	07:00-12:30 19:30-24:00	10	05:30-12:30 18:30-24:00	12.5	5,048	20,618	129,869	795,201	571,710	1,485,138
6/29	00:00-00:30 07:00-13:00 20:30-24:00	10	00:00-00:30 06:00-13:00 19:30-24:00	12	3,097	23,715	67,123	862,324	457,110	1,942,248
6/30	00:00-03:30 08:00-14:00 21:30-24:00	12	00:00-03:30 07:00-14:00 20:30-24:00	14	1,586	25,301	21,867	884,191	232,422	2,174,670
7/1	00:00-03:30 08:30-15:00 22:30-24:00	11.5	00:00-03:30 07:30-15:00 21:00-24:00	14	849	26,150	43,331	927,522	186,174	2,360,844
7/2	00:00-04:00 10:00-15:30	9.5	00:00-05:30 08:30-16:00 22:00-24:00	15	2,295	28,445	94,774	1,022,296	227,634	2,588,478
7/3	00:30-08:00 12:00-17:00	12.5	00:00-17:00 23:00-24:00	18	873	29,318	50,271	1,072,567	147,750	2,736,228
7/4	00:30-24:00	23.5	00:00-24:00	24	1,096	30,414	47,545	1,120,112	108,486	2,844,714
7/5	00:00-19:00 19:00-24:00	24	00:00-19:00 19:00-24:00	24	306	30,720	106,366	1,226,478	227,118	3,071,832
7/6	00:00-20:00 20:00-23:00	23	00:00-20:00 20:00-24:00	24	1,070	31,790	89,247	1,315,725	219,060	3,290,892

Figure 4.–Nushagak District fishing schedule and Chinook and sockeye salmon escapement for the Nushagak and Wood Rivers, 2024.

	NUSHAGAK DISTRICT FISH SCHEDULE				DAILY AND CUMULATIVE ESCAPEMENT					
	Nushagak District Nushagak Drift		Nushagak Section Nushagak Set		Nushagak R.				Wood R.	
Date	Open	Hrs	Open	Hrs	King		Sockeye		Sockeye	
6/19		–	–	–	637	6,744	61,245	402,161	31,062	83,454
6/20		–	–	–	73	6,817	55,309	457,470	29,928	113,382
6/21		–	–	–	3,124	9,941	298,559	756,029	195,174	308,556
6/22	11:00 - 15:00	4	9:00-15:00 22:00-24:00	8	5,881	15,822	475,238	1,231,267	311,196	619,752
6/23	0:30 -5:30 11:30 - 15:30	9	0:00-5:30 10:00-15:30	11	901	16,723	256,057	1,487,324	178,170	797,922
6/24	12:30-20:00	7.5	11:00-21:00	10	1,200	17,923	111,859	1,599,183	106,314	904,236
6/25	02:30-08:00 13:30-24:00	16	0:00-08:00 12:00-24:00	20	536	18,459	92,842	1,692,025	103,632	1,007,868
6/26	00:00-00:30 14:30-21:00	7	00:00-00:30 13:00-21:00	8.5	931	19,390	157,639	1,849,664	149,400	1,157,268
6/27	04:00-09:00 15:30-20:00	9.5	02:00-09:30 14:00-20:00	13.5	3,398	22,788	186,418	2,036,082	104,970	1,262,238
6/28	05:00-10:00 16:00-21:00	10	03:00-10:30 15:00-21:00	13.5	2,119	24,907	82,390	2,118,472	35,886	1,298,124
6/29	05:00-14:00 18:00-23:30	14.5	03:30-24:00	20.5	999	25,906	58,331	2,176,803	38,346	1,336,470
6/30	06:00-11:30 18:00-24:00	11.5	00:00-00:30 04:30-11:30 17:30-24:00	14	31	25,937	93,531	2,270,334	37,692	1,374,162
7/1	0	24	0	24	49	25,986	159,957	2,430,291	71,412	1,445,574
7/2	00:00-12:30 20:00-24:00	16.5	00:00-13:00 19:30-24:00	17.5	1,164	27,150	103,587	2,533,878	103,008	1,548,582
7/3	00:00-03:00 08:00-16:00	14	00:00-16:00 21:00-24:00	19	522	27,672	101,632	2,635,510	156,354	1,704,936
7/4	00:00-04:30 08:30-17:00 22:00-24:00	15	00:00-24:00	24	20	27,692	76,067	2,711,577	106,812	1,811,748
7/5	00:00-05:30 09:30-18:00 23:00-24:00	15	00:00-24:00	24	566	28,258	51,333	2,762,910	98,742	1,910,490
7/6	00:00-06:30 10:30-1900 23:30-24:00	15.5	00:00-24:00	24	2,132	30,390	58,325	2,821,235	119,238	2,029,728

Figure 5.–Nushagak District fishing schedule and Chinook and sockeye salmon escapement for the Nushagak and Wood Rivers, 2025.