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Norton Sound and Port Clarence Stock Status and Fishery Overview: A Report to the Alaska Board of Fisheries, November 2025

by

Luke Henslee

and

Kevin Clark

October 2025

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

Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

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

SPECIAL PUBLICATION NO. 25-14

NORTON SOUND AND PORT CLARENCE SALMON STOCK STATUS AND FISHERY OVERVIEW: A REPORT TO THE ALASKA BOARD OF FISHERIES, NOVEMBER 2025

by
Luke Henslee and Kevin Clark
Alaska Department of Fish and Game, Division of Commercial Fisheries, Nome

Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road, Anchorage, Alaska, 99518-1565

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Luke Henslee and Kevin Clark
Alaska Department of Fish and Game, Division of Commercial Fisheries,
P.O. Box 1148 Nome, AK 99762, USA

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ABSTRACT

This report provides the Alaska Board of Fisheries (BOF) with a salmon stock status update and overview of subsistence and commercial fisheries in the Norton Sound–Port Clarence Districts for the November 2025 regulatory meeting. Subsistence salmon harvest occurs in marine and fresh waters throughout the region, whereas commercial salmon fishing is restricted to the marine waters of the 6 Subdistricts of the Norton Sound District and the Grantly Harbor Subdistrict in the Port Clarence District. Salmon escapement is estimated from projects that monitor index streams, with at least 1 project operated by the Alaska Department of Fish and Game (ADF&G) or the Norton Sound Economic Development Corporation (NSEDC) in each subdistrict. In response to the guidelines established in the *Policy for the Management of Sustainable Salmon Fisheries* (SSFP; 5 AAC 39.222), the BOF classified Norton Sound Subdistrict 5 (Shaktoolik) and Norton Sound Subdistrict 6 (Unalakleet) Chinook salmon *Oncorhynchus tshawytscha* as a stock of yield concern during the January 2004 meeting. In 2007, the BOF continued classifying Chinook salmon in Subdistricts 5 and 6 as a stock of yield concern and adopted a Chinook salmon management plan (5 AAC 04.395) to increase escapements and restore the stock to historical levels of abundance. In 2010 and 2013, the BOF continued the stock of concern designation and modified the management plan to provide direction for targeting commercial chum (*O. keta*) and pink (*O. gorbuscha*) salmon fisheries in times of low Chinook salmon abundance. During 2023–2025, Subdistricts 5 and 6 Chinook salmon stock yields remained well below historical averages (1994–1999), despite the use of specific management measures. Therefore, Subdistricts 5 and 6 Chinook salmon continue to meet the definition for a stock of yield concern as defined in the SSFP, and ADF&G recommends continuing the stock of yield concern classification.

Keywords: Chinook salmon, *Oncorhynchus tshawytscha*, chum salmon, *Oncorhynchus keta*, stock of concern, commercial fishing, subsistence, sustainable salmon fisheries policy, Alaska Board of Fisheries, Port Clarence, Norton Sound

INTRODUCTION

In the Norton Sound–Port Clarence Districts in northwest Alaska, residents rely on salmon for food security, cultural well-being, and economic livelihood. The Norton Sound District consists of all waters between Point Romanof in the south and Cape Douglas in the north (Figure 1). The district is divided into 6 subdistricts to facilitate management of individual salmon stocks, and each subdistrict contains at least 1 major salmon-producing stream: Nome Subdistrict 1, Golovin Subdistrict 2, Elim Subdistrict 3, Norton Bay Subdistrict 4, Shaktoolik Subdistrict 5, and Unalakleet Subdistrict 6. Subsistence salmon harvests occur in marine and fresh waters throughout the region, whereas commercial salmon fishing is restricted to marine waters. The Port Clarence District encompasses all waters from Cape Douglas north to Cape Prince of Wales, including Salmon Lake and Pilgrim River drainages (Figure 1). The Port Clarence District has not had a commercial fishery since 2008 due to a lack of market interest, although the area supports a robust subsistence salmon fishery in marine and fresh waters.

The *Policy for the Management of Sustainable Salmon Fisheries* (SSFP; 5 AAC 39.222) directs the Alaska Department of Fish and Game (ADF&G) to provide the Alaska Board of Fisheries (BOF) with reports on the status of salmon stocks and identify any salmon stocks that present a concern related to yield, management, or conservation during regular BOF meetings (ADF&G 2000). This report provides ADF&G's assessment of the Norton Sound and Port Clarence Districts' stocks.

The BOF designated Chinook salmon as a stock of yield concern in Subdistricts 5 and 6 in 2004 and maintained this designation during each subsequent regulatory cycle. The BOF acted upon an action plan developed by ADF&G (Jones 2003) in January 2004. ADF&G recommended continuing the stock of yield concern classification in 2007, following 3 consecutive years (2004–2006) of failing to meet escapement goals despite reductions in harvests and the continuing inability to meet expected yields over a 5-year period (Kent and Bergstrom 2006). The BOF agreed

with this determination at its February 2007 meeting and adopted *Subdistricts 5 and 6 of the Norton Sound District and the Unalakleet River Chinook Salmon Management Plan* (5 AAC 04.395) to further conserve Chinook salmon and restore the stock to historical levels. The management plan incorporated a subsistence fishing schedule and 50% reductions in possession and annual sport fish bag limits. The plan specified that subsistence fishing from June 15 to July 15 in Subdistricts 5 and 6 would be limited to no more than two 48-hour periods per week in the marine waters, and two 36-hour periods per week in the Unalakleet River. Likewise, the Unalakleet River sport fish bag and possession limit for Chinook salmon, 20 inches or greater, was reduced to 1 fish per day, and the annual harvest limit was reduced from 4 to 2 fish. The management plan also provides ADF&G authority to liberalize subsistence fishing time and sport fishing annual limits when the midpoint of the Chinook salmon escapement goal range for the North River is projected to be exceeded.

Continued poor Chinook salmon abundance has led ADF&G to frequently reduce or suspend subsistence fishing periods over the past decade. Despite these intensive management actions, escapement objectives for Chinook salmon in the North River have been infrequently met since the goals were first established in 2004. In accordance with the SSFP, ADF&G recommended, and the BOF approved, continuing the designation of Norton Sound Subdistricts 5 and 6 Chinook salmon as a stock of yield concern at the October 2022 BOF work session.

NORTON SOUND ASSESSMENT BACKGROUND

Since 1965, ground-based stock assessment projects monitoring salmon escapement in the Norton Sound–Port Clarence Districts have been operated by ADF&G in cooperation with the Bureau of Land Management, the Office of Subsistence Management (OSM), Kawerak Inc., Native Village of Unalakleet, Unalakleet Native Corporation, Native Village of White Mountain, Native Village of Elim, Bering Straits Native Corporation, and Norton Sound Economic Development Corporation (NSEDC). There are currently 9 ground-based salmon monitoring projects operating in the region (Figure 2). These annual salmon monitoring efforts gauge ADF&G's success in achieving the 15 escapement goals that exist in the Norton Sound–Port Clarence Districts (Table 1).

In Subdistrict 1, there are currently 3 ground-based escapement projects enumerating salmon. Ground-based salmon assessment in Subdistrict 1 started in 1993 with a counting tower on the Nome River, which was replaced by a fixed-picket weir in 1996. In 1995, a tower project was initiated on the Snake River, which was converted to a fixed-picket weir in 2003. The Eldorado River had a counting tower project initiated in 1997, which was converted to a fixed-picket weir in 2003. The Eldorado River serves as an index for chum salmon escapement for Safety Sound east of Cape Nome. Other projects that have operated in Subdistrict 1 and are no longer active include a fixed-picket weir at Glacial Lake enumerating sockeye salmon (2001–2015), a fixed-picket weir on the Bonanza River (2018–2020), and a fixed-picket weir on the Solomon River (2013–2022).

In Subdistrict 2, ground-based enumeration for salmon occurs at the Niukluk River counting tower that operates downstream from the village of Council. This project acts as an index stream for the Fish River and has operated from 1995 to 2012, and since 2022. A counting tower operated on the Fish River mainstem from 2014 to 2020, but the location proved to be inadequate for counting tower operations due to the size of the river, numerous high-water events, and staffing issues.

In Subdistrict 3, the Kwiniuk River counting tower is the only ground-based enumeration project and has operated consistently as a counting tower since 1965. The tower operates from mid-June to mid-September to enumerate all salmon species.

In Subdistrict 4, NSEDC initiated 2 projects in Norton Bay: the Inglutalik River and Ungalik River counting towers. The Inglutalik River counting tower was operated from 2011 to 2023. In 2019, a tower project was initiated to enumerate salmon escapement to the Ungalik River and remains the only monitoring project in Norton Bay.

Only 1 ground-based assessment project operates in Subdistrict 5. The Shaktoolik River tower was first attempted from 1996 to 1998. NSEDC restarted the project and has operated it as a counting tower since 2014.

In Subdistrict 6, 1 project operates in the Unalakleet River drainage, the North River counting tower. The North River tower began operations in 1972, ran intermittently until 1986, and has been operated annually since 1996. Telemetry studies during 1997–1998 estimated that 39% of Chinook salmon spawning in the Unalakleet drainage utilize the North River (Wuttig 1999). This information was used to expand North River escapements to estimate drainagewide returns (Estensen and Evenson 2006). However, later investigations found evidence that in some years, up to 58% of Unalakleet drainage Chinook were bound for North River (Joy and Reed 2014), introducing uncertainty into previous drainagewide escapement estimates. A floating weir on the mainstem Unalakleet River was initiated in 2010 with funding from OSM to estimate Chinook salmon escapement and collect Chinook salmon age, sex, and length samples (ASL). The project ran until local concerns about the effect of weir methodology on boat traffic, Chinook salmon passage, and run timing halted the project after the 2024 season. ADF&G is currently running a sonar feasibility study located at the previous weir site (Henslee 2024), and is investigating other salmon escapement monitoring methods for the mainstem Unalakleet River.

Within the Port Clarence District, escapements in the Pilgrim River have been monitored using ground-based estimates since 1995. Various techniques have been used, including a fixed weir (1995–1996), a counting tower (1997, 1999–2000, 2002), and a floating weir annually since 2003.

In addition to ground-based salmon assessment projects, ADF&G has flown aerial salmon stock assessment surveys since 1959 on 61 different rivers, tributaries, and lakes in the region, and many of these surveys are conducted as part of an initial inventory project initiated at statehood. Since statehood, ADF&G has concentrated aerial survey efforts on systems that are major contributors to subsistence or commercial fishing. Currently, there are 5 sustainable escapement goals (SEGs) in Norton Sound assessed by aerial survey: Glacier Lake sockeye salmon, Tubutulik River chum salmon, Kwiniuk River coho salmon, Niukluk River coho salmon, and North River coho salmon. Aerial surveys have not been flown consistently in Norton Sound for all species because of inclement weather, aircraft availability, budget constraints, and staff availability have hampered ADF&G's ability to conduct aerial surveys in some years. Additionally, in years of high pink salmon abundance, pink salmon obscure other salmon species. Aerial surveys of salmon spawning areas have been flown to help evaluate tower and weir counts and make comparisons with historical data.

Subsistence salmon harvest estimates are collected annually using subsistence permits issued for Port Clarence District and Norton Sound Subdistricts 1–3. In Subdistricts 4–6, annual subsistence household surveys are conducted in the villages of Koyuk, Shaktoolik, and Unalakleet. Commercial harvest occurs in all Norton Sound subdistricts, and the total harvest is available from

fish tickets. Sport fishing harvest and effort information is collected from anglers by ADF&G using the statewide sport fish harvest survey.[1]

ESCAPEMENT

There are currently 15 SEGs in the Norton Sound–Port Clarence Districts (Table 1). There are 2 escapement goals for Chinook salmon in the Norton Sound District based on tower project assessment: ≥250 fish on the Kwiniuk River and 1,200–2,600 fish on the North River. For chum salmon, there are 5 established goals: 2,000–4,200 fish past the Snake River weir, 1,600–5,300 fish past the Nome River weir, 4,400–14,200 fish past the Eldorado weir, 9,100–32,600 fish past the Kwiniuk tower, and 3,100–9,900 fish in the Tubutulik River based on a peak aerial survey. There are 3 coho salmon escapement goals assessed by peak aerial surveys: a combined count of 750–1,600 fish for the Niukluk River and Ophir Creek, 560–1,300 fish for the Kwiniuk River, and 550–1,100 fish for the North River. There are 3 pink salmon goals: ≥13,000 fish (even years) and ≥3,200 fish (odd years) past the Nome River weir, ≥8,400 fish past the Kwiniuk River tower, and ≥25,000 fish past the North River tower. There is 1 sockeye salmon goal in the Norton Sound District: 800–1,600 fish in Glacial Lake, assessed by a peak aerial survey. In the Port Clarence District, there is 1 escapement goal of 6,800–36,000 fish for Pilgrim River sockeye salmon.

Chinook salmon

Chinook salmon have been documented in several systems draining into Norton Sound and Port Clarence, and the largest runs occur in Norton Sound Subdistricts 5 and 6. These runs support subsistence and sport fisheries in some years, as well as commercial fisheries historically.[2] Currently, 2 systems in the Norton Sound District have escapement goals for Chinook salmon: the Kwiniuk and North Rivers.

The Kwiniuk River has a lower bound SEG of 250 Chinook salmon. The escapement goal has not been met since 2020 and has only been achieved 8 times since a goal was established in 1999.[3] Since 1990, Chinook salmon escapement has ranged from a high of 974 in 1997 to a low of 15 in 2013 (Table 2).

The North River SEG has been met in 1 of the last 5 years (2022), and in 7 other years (2009–2010, 2014–2015, 2018–2019, and 2022) since the goal was established in 2005. Escapements ranged from 3,315 fish in 2019 to 234 in 2025 (Table 3, Figure 3). From 2010 to 2024, the Unalakleet River mainstem Chinook salmon escapement was monitored using a resistance-board weir. Chinook salmon escapement from the Unalakleet River weir project ranged from 66 fish in 2023 to 6,641 fish in 2019 (Table 3).

Chum salmon

Chum salmon are a major species in most systems that drain into Norton Sound and Port Clarence and are utilized by subsistence, commercial, and sport fisheries. Within Norton Sound

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[1] Alaska Sport Fishing Survey database [Internet]. 1996–. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish. Available from: http://www.adfg.alaska.gov/sf/sportfishingsurvey/ (accessed October 18, 2025).

[2] Historical details are published in the ADF&G Fishery Management Report series: *Annual management report for Norton Sound–Port Clarence and Arctic–Kotzebue Management Areas* (e.g., Menard et al. 2022).

[3] Lowell Fair (Division of Commercial Fisheries, Fisheries Biologist, Region III), Charlie Lean (Division of Commercial Fisheries, Area Management Biologist, Region III), Fred DeCicco (Division of Sport Fish, Area Management Biologist, Region III), Jim Magdanz (Division of Subsistence, Resource Specialist, Region III), and Robert McLean (Habitat Division, Habitat Biologist, Region III). Alaska Department of Fish and Game, Division of Commercial Fisheries. Proposed Salmon BEGs for Norton Sound and Kotzebue Sound, March 24, 1999 memorandum.

Subdistrict 1, there are currently 3 SEGs that are assessed using fixed-picket weirs. The Nome River SEG of 1,600–5,300 chum salmon was established in 2019 and has been met in 2 of the last 5 years and met or exceeded in 7 of the last 10 years. Escapements have ranged from 216 in 2021 to 8,340 in 2017 (Table 4). The Snake River SEG of 2,000–4,200 chum salmon established in 2019 has been met in 1 of the last 5 years, and in 5 of the last 10 years. Escapements ranged from 802 in 2020 to 6,978 in 2010 (Table 4). The Eldorado River SEG of 4,400–14,200 chum salmon established in 2019 has been met every year since 2004, except in 2025. In the past 10 years, escapements have ranged from 3,971 in 2025 to 73,882 in 2017 (Table 4).

In Subdistrict 2, there are currently no escapement goals for systems draining into Golovnin Bay. A counting tower project was restarted on the Niukluk River in 2022. Historically, there was an escapement goal of 23,000 chum salmon for the Niukluk River, which was discontinued when the project stopped in 2012. In 2025, an estimated 21,711 chum salmon passed the tower.

In Subdistrict 3, there are 2 systems, the Kwiniuk and Tubutulik Rivers, with chum salmon escapement goals. These escapement goals are currently based on tower counts for the Kwiniuk River and on aerial survey estimates for the Tubutulik River. The Kwiniuk River SEG of 9,100–32,600 fish, established in 2019, has been met or exceeded in 1 of the past 5 years and 4 out of the last 10 years. Escapement has ranged from 1,644 in 2025 to 40,055 in 2014 (Table 2). The Tubutulik River SEG of 3,100–9,000 fish, which was established in 2019, has been assessed sporadically, primarily due to the availability of aircraft, inclement weather, and large runs of pink salmon obscuring chum salmon inriver. It is assumed that spawning populations of chum salmon in the Tubutulik and Kwiniuk Rivers have similar run timing and run strength, allowing the Kwiniuk River escapement to act as a proxy for the Tubutulik River.

Pink salmon

Pink salmon in Norton Sound have an odd–even year abundance cycle, with even years generally being more abundant than odd years. Currently, there are 3 systems in Norton Sound with established escapement goals: Nome River (lower bound SEG of ≥3,200 fish in odd-years and lower bound SEG of ≥13,000 fish in even years), Kwiniuk River (lower bound SEG of ≥8,400 fish), and the North River (lower bound SEG of ≥25,000). In 2025, the escapement goal for an odd year on the Nome River was not achieved for the first time since the goal was established in 2005. Likewise, the only years that the North River escapement goal has not been achieved were both odd years: 2023 and 2025. Escapement goals have been met every year on the Kwiniuk River since the goal was established in 2005 (Table 5).

Coho salmon

Coho salmon spawn in most systems that drain into Norton Sound and there are currently 3 systems that have established coho salmon escapement goals, which are based on peak aerial survey counts: Kwiniuk River (SEG of 650–1,300 fish), Niukluk River and Ophir Creek (SEG of 750–1,600 fish), and North River (SEG of 550–1,100 fish). Aerial surveys of these systems have been problematic in recent years due to aircraft availability, adverse fall weather, and high and murky water, making counts impossible in some years. In the last 10 years, surveys were conducted in 2016, 2022, and 2024–2025 on the Kwiniuk River, and the escapement goal was exceeded in each of these years. The Niukluk River and Ophir Creek systems were surveyed in 2016 and 2022–2025, and the goal was achieved in 2016 and 2024. Escapement data from the Niukluk River counting tower suggests that the goal was also likely achieved in 2022 and 2025. The North River coho salmon aerial survey was conducted only in 2024 and 2025, achieving the goal both times over the last 10 years. Until

recently, the North River tower project was usually operated late enough into September that escapement could be estimated, but the 2021–2025 average end date for the project was August 16, mainly due to high-water events. The project ending in mid-August caused the project to miss a large proportion of the coho salmon run.

Sockeye salmon

Sockeye salmon occur throughout Norton Sound and Port Clarence. There are currently 2 stocks with established escapement goals: Pilgrim River in the Port Clarence District and Glacial Lake in the Sinuk River drainage in Subdistrict 1 of the Norton Sound District. The Pilgrim River SEG of 6,800–36,000 sockeye salmon was established in 2019. The Pilgrim River has met its goal in 2 of the last 5 years and in 7 of the last 10 years. Escapements have ranged from 1,508 in 2022 to 55,764 in 2017, during the last 10 years (Table 6).

Glacial Lake has a peak aerial survey of 800–1,600 sockeye salmon, established in 2005. The escapement goal for Glacial Lake sockeye salmon has been met in all but 2 years in which an aerial survey was conducted within the last 10 years. In 2023, only 200 fish were counted in the lake, and in 2024, the escapement goal was missed by 1 fish. Peak aerial survey counts have ranged from 200 in 2023 to 5,100 in 2019 during the last 10 years (Table 7).

HARVEST

Chinook salmon

Chinook salmon harvests and escapements are minor for most systems draining into Norton Sound and Port Clarence, apart from Subdistricts 5 and 6 in southern Norton Sound. Failure to meet the escapement goal for Unalakleet River Chinook salmon resulted in commercial fishery closures and a reduction in total harvest in Subdistricts 5 and 6. Although historical total run data are limited, there is evidence of a significant decline in abundance since 1997 (Table 3). Commercial harvest of Chinook salmon in Subdistricts 5 and 6 has been incidental to directed chum pink and coho salmon fisheries since 2001, except for a small directed commercial harvest in 2005.

Due to the recent weak Chinook salmon returns, ADF&G has foregone chum salmon commercial harvest opportunities to conserve Chinook salmon escapement (Table 8). Incidental commercial harvests during 2021–2025 averaged 12 Chinook salmon, which represents a decline from the 2011–2020 average of 426 fish (Table 8). Subsistence fishing closures in Subdistricts 5 and 6 were implemented in 2003, 2004, 2006–2019, and 2022–2025 because of decreased run sizes and difficulty achieving the North River tower SEG (Figures 3, Table 3). Subsistence and commercial restrictions implemented due to critically low run sizes have resulted in drastically decreased harvests (Figure 4). For example, in 2024, the most recent year of complete data, the harvest of 142 fish was the lowest on record (Table 9).

Chum salmon

Directed chum salmon subsistence and commercial fisheries occur in all 6 subdistricts of the Norton Sound District. Subsistence chum salmon harvest averaged 5,904 fish during 2020–2024, which was nearly half of the 2011–2020 historical average of 11,531 chum salmon. Commercial harvest averaged 13,739 chum salmon during 2021–2025, which was a decrease from the 2011–2020 harvest of 118,481 fish. Chum salmon harvests have declined since 2019 to levels comparable to those of the late 1990s and early 2000s (Table 10).

In Subdistrict 1, the Nome Subdistrict, commercial salmon fishing was halted in 1997 in response to low salmon abundance and was classified as a Tier II subsistence fishery in 1999. In 2006, the Tier II designation was removed, and commercial fishing resumed in 2013. Commercial harvest averaged 1,418 chum salmon during the last 5 years, a decrease from the 2011–2020 average of 5,150 fish (Table 11).

In Subdistricts 2 and 3, chum salmon commercial harvests in the first decade of the 2000s were minimal. However, since 2008, commercial fisheries targeting chum salmon have occurred in both Subdistricts 2 and 3, but harvests have significantly decreased in recent years. In Subdistrict 2, the 2021–2025 average harvest of 5,704 fish was a large departure from the 2011–2020 average of 13,577 chum salmon (Table 12). In Subdistrict 3, the 2021–2025 average of 1,209 chum salmon was a significant decrease from the 2011–2020 average of 14,646 fish (Table 13).

In Subdistrict 4, commercial harvests averaged 725 chum salmon during 2021–2025 and averaged 15,163 chum salmon during 2011–2020 (Table 14).

Subdistricts 5 and 6 chum salmon commercial harvests have declined since the record years of 2017–2019, which partially explains the large difference between the 2021–2025 averages of 3,272 in Subdistrict 5 and 1,413 in Subdistrict 6 compared to the 2011–2020 historical averages of 26,774 in Subdistrict 5 and 43,686 fish in Subdistrict 6 (Tables 15 and 16). Recent decreases in chum salmon abundance and conservation concerns for Chinook salmon have led ADF&G to limit chum salmon commercial fishing opportunities in Subdistricts 5 and 6.

Pink salmon

Pink salmon commercial harvest has been incidental to commercial fisheries for chum and coho salmon in Norton Sound because a consistent market for pink salmon has not existed in most years. However, there was an experimental purse seine fishery that harvested 10% (28,789) of the 289,912 commercial pink salmon harvest in 2021 (Table 10). Pink salmon harvests in Norton Sound are dependent on market availability and capacity more than abundance in any given year. Residents harvest pink salmon throughout the region for subsistence, but harvest numbers do not always reflect abundance. Yearly pink salmon subsistence harvests from 2000 through 2024 are detailed in Tables 11–16.

Coho salmon

Directed commercial and subsistence fisheries occur for coho salmon throughout the Norton Sound District and, in some years, make up the majority of the total harvest for salmon (Table 10). Coho salmon subsistence and commercial harvests have declined since the high harvest years of 2018 and 2019 and are similar to the early 2000s. Coho salmon commercial harvest averaged 15,178 fish during 2021–2025 and averaged 112,591 during 2011–2020 (Table 10).

Sockeye salmon

No directed sockeye salmon commercial harvests occur in the Norton Sound or Port Clarence Districts, and commercial harvests are incidental to fisheries targeting chum and coho salmon. Subsistence net fisheries targeting sockeye salmon occur in the lower sections of the Sinuk River and in the entirety of the Pilgrim River drainage. Subsistence harvest of Pilgrim River sockeye salmon 2011–2020 historical average was 8,613 fish, and the 2021–2025 average decreased to 2,512 (Table 17). The 2021–2025 average is highly influenced by low harvests from the 2021–2023 seasons. However, the average will probably increase when 2025 subsistence data are

available, because household limits for sockeye salmon were waived in early July when escapement objectives were projected to be met.

MANAGEMENT REVIEW

Historically, markets for salmon in Norton Sound subdistricts have been sporadic because buyers are only available in some years in certain subdistricts. The combination of low salmon runs and no available market for salmon resulted in some subdistricts in Norton Sound not having commercial fisheries. A consistent market for salmon developed when Norton Sound Economic Development Corporation (NSEDC) began buying operations in Norton Sound in 2007; however, market demand for pink salmon has remained limited.

Subdistrict 1 was closed to commercial harvest of chum salmon in 1999 when the subdistrict was declared a Tier II subsistence fishery. Commercial fishing resumed in 2013 in Subdistrict 1. Record harvests of chum and coho salmon from 2017 to 2019 occurred in Subdistrict 1, but harvests were limited by processing capacity during those years. Recently, declines in abundance have caused ADF&G to limit commercial fishing time in Subdistrict 1 to allow for escapement and subsistence uses.

Commercial salmon fishing opened in Subdistrict 3 in 2007, following renewed commercial interest in the subdistrict after a 5-year hiatus. This renewed interest expanded to Subdistrict 2 in 2008. In 2008 and 2009, the chum salmon runs would not support a directed commercial fishery, but in 2010 and 2011, chum salmon fishing was record-setting. In 2012 and 2013, weak chum salmon runs were followed by 5 strong chum salmon runs in 2014 and 2015, and 2017–2019. However, limited tendering and processing capacity were available to harvest surplus chum salmon in those years. Since 2019, the abundance of chum and coho salmon has declined from the large runs during 2017–2019, and commercial fishing time has been reduced or closed to ensure adequate escapement and subsistence harvests.

Commercial fishing in Subdistrict 4 has had little effort compared to other subdistricts in Norton Sound (Table 18). Chum and coho salmon are the primary species targeted in Subdistrict 4. Since commercial interest in buying salmon returned in 2008, the subdistrict has had commercial fishing opportunities annually. Low effort has resulted in little commercial harvest in Subdistrict 4.

Historically, directed commercial Chinook salmon fishing in Subdistricts 5 and 6 consisted of biweekly 24-hour periods to prevent overfishing on milling Chinook salmon stocks, ensuring escapement and subsistence needs were met. However, diminishing returns in the 2000s necessitated a conservative management approach to meet escapement goals and subsistence needs. In 2007, the management plan was modified to allow directed commercial Chinook salmon fishing only when the midpoint of the North River tower Chinook salmon escapement goal range was projected to be obtained. Directed Chinook salmon commercial fishing has not occurred since 2005 due to low stock abundance and the implementation of conservative management measures intended to meet escapement goals and subsistence needs.

Chum and pink salmon stocks in Subdistricts 5 and 6 could sustain higher commercial harvest rates in some years; however, the fishery has been managed conservatively to minimize incidental harvest of Chinook salmon. This has involved delaying openings for directed chum salmon fishing, limiting gillnet mesh size to 6 inches or less, and restricting fishing periods to 24–36 hours. Weak chum salmon runs from 2020 to 2025 prompted ADF&G to manage the commercial fishery in these 2 subdistricts conservatively, delaying and reducing commercial fishing time. Coho

abundance in 2025 was robust, allowing ADF&G to schedule two 48-hour commercial fishing periods per week beginning in early August through the regulatory closure on September 7.

Incidental harvests of Chinook salmon during directed chum and pink salmon opportunities have been minimal. In accordance with the management plan, commercial sales of Chinook salmon from 2013 to 2017 and again from 2022 to 2025 were prohibited in Subdistricts 5 and 6 because of low abundance. When commercial sales are prohibited, incidentally caught Chinook salmon may be retained for personal use and must be reported on fish tickets.

There have been numerous large pink salmon runs in even-numbered years, but few pink salmon directed commercial fishing periods because of little market interest and limited processing capacity. Pink salmon are mainly harvested as incidental catch when targeting chum or coho salmon. Pink salmon fisheries generally occur when chum and coho salmon runs are low and require ADF&G to limit fishing time. Fishing time and openings for directed pink salmon fishing are generally limited by processing capacity and tender limitations. In 2021, 2 buyers expressed interest in harvesting pink salmon, and an experimental purse seine fishery was allowed by a commissioner's permit. Harvests for the experimental fishery were minimal, and incidental harvests were insignificant.

Subsistence fishing schedules are in place for Subdistricts 1, 5, and 6 of the Norton Sound District. In Subdistrict 1, subsistence fishing is scheduled in marine waters west of Cape Nome and all fresh waters from June 15 through August 31 with gillnets from 6:00 PM Wednesdays to 6:00 PM on Mondays. Marine waters east of Cape Nome are open to subsistence fishing continuously, unless altered by an emergency order. No additional restrictions to subsistence fishing in Subdistrict 1 have been enacted by emergency order in recent years. In Subdistricts 5 and 6, the subsistence fishing schedule in the marine waters, established by emergency order on June 15, consists of two 24-hour periods starting at 6:00 PM on Mondays and 6:00 PM on Fridays when sufficient numbers of Chinook salmon are available to ensure escapement needs. Additionally, ADF&G may, by emergency order, open the Unalakleet River to subsistence fishing for two 24-hour periods starting at 8:00 PM on Mondays and 8:00 PM on Fridays when sufficient numbers of Chinook salmon are available to meet the escapement goal. Beach seines are also allowed in Subdistricts 5 and 6 to target species other than Chinook salmon from July 1 through August 10; however, any Chinook salmon captured when beach seining must be returned to the water immediately unharmed. Subsistence fishing for Chinook salmon has been limited in recent years in an effort to increase escapement, and restrictions have included limited openings, restricting gillnet fishing in marine waters, restricting mesh size to 6 inches or less, and allowing beach seines with the nonretention of Chinook salmon in Subdistricts 5 and 6. Except for restrictions in Subdistricts 5 and 6 to conserve Chinook salmon and subsistence schedules in Subdistrict 1, there have been no subsistence fishing restrictions in Subdistricts 2–4 in recent years.

Subsistence fishing in the Port Clarence District has no restrictions except for a household limit of 3 Chinook salmon and 25 sockeye salmon per household for the Pilgrim River. In years when escapement in the Pilgrim River will support additional harvest of sockeye salmon, ADF&G waives the sockeye salmon household limit on the Pilgrim River and may, by emergency order, allow subsistence fishing in Salmon Lake. Low returns of sockeye salmon in the Pilgrim River prompted ADF&G, in recent years, to close the Pilgrim River to subsistence net fishing in mid-July in 2021, in early July in 2022, and after June 15 in 2023; restrict net fishing in the Pilgrim River after June 15, and limit the remainder of the Port Clarence District to beach seines only with the nonretention of sockeye salmon from June 15 to July 1 in 2024. Inseason sockeye salmon

escapement in 2024 was much more robust than the preseason forecast, and net restrictions were rescinded in the Port Clarence and Pilgrim River in early July. No additional restrictions were enacted in 2025 for the Port Clarence District and Pilgrim River. Household limits for sockeye salmon in the Pilgrim River were waived in early July 2025 when the sockeye salmon run was projected to meet escapement goals.

RESEARCH

Salmon research in Norton Sound is currently focused on assessment methodologies to expand monitoring capabilities. Within the Unalakleet River drainage, sonar technology is being examined as a potential way to count coho salmon. In the coming years, this project will be expanded to test the capabilities of using sonar earlier in the season to monitor Chinook, chum, and pink salmon. Autonomous video monitoring is also being evaluated as a comparatively low-cost alternative to traditional ground-based assessment projects. This technology is being used on Glacial Lake to monitor sockeye salmon. If successful, it will renew estimated escapements for this system, which were halted in 2015 due to budget cuts. Salmon research within Norton Sound is conducted in cooperation with NSEDC, Bering Straits Native Corporation, Unalakleet Native Corporation, and the Native Village of Unalakleet. The efforts of these organizations contribute to strengthening knowledge of these stocks and improving the management capabilities of ADF&G.

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TABLES AND FIGURES

Table 1.–Summary of current sustainable escapement goals (SEG) for salmon stocks in the Norton Sound–Port Clarence District.

Stock unit	Assessment method	Goal	Type	Year established or last revised
Chinook salmon				
Kwinuk River	Tower	≥250	SEG	2016
North River	Tower	1,200–2,600	SEG	2005
Chum salmon				
Eldorado River	Weir	4,400–14,200	SEG	2019
Nome River	Weir	1,600–5,300	SEG	2019
Snake River	Weir	2,000–4,200	SEG	2019
Kwiniuk River	Tower	9,100–32,600	SEG	2019
Tubutulik River	Peak aerial survey	3,100–9,900	SEG	2019
Coho salmon				
Kwiniuk River	Peak aerial survey	650–1,300	SEG	2005
Niukluk River–Ophir Creek	Peak aerial survey	750–1,600	SEG	2016
North River	Peak aerial survey	550–1,100	SEG	2005
Pink salmon				
Kwiniuk River (all years)	Tower	≥8,400	SEG	2005
Nome River (even year)	Weir	≥13,000	SEG	2005
Nome River (odd year)	Weir	≥3,200	SEG	2005
North River (all years)	Tower	≥25,000	SEG	2005
Sockeye salmon				
Pilgrim River (Salmon Lake)	Weir	6,800–36,000	SEG	2019
Glacial Lake	Peak aerial survey	800–1,600	SEG	2019

Table 2.–Historical salmon migration at Kwiniuk River counting tower, 1990–2025.

Year	Start date	End date	Chum	Pink	Chinook	Coho
1990	6/21	7/26	14,377	388,114	893	6
1991	6/18	7/28	23,261	77,513	658	2
1992	6/27	7/28	12,863	1,324,397	492	202
1993	6/27	7/27	15,922	50,655	654	0
1994	6/23	8/10	31,867	2,372,787	653	3,004
1995	6/21	7/27	35,991	23,451	491	114
1996	6/20	7/26	24,443	1,031,690	538	362
1997	6/18	7/27	21,847	10,474	1,022	0
1998	6/18	7/27	18,069	668,798	370	0
1999	6/25	7/29	9,353	434	103	0
2000	6/22	7/28	14,975	1,416,770	138	2
2001	6/27	9/16	16,607	8,286	256	9,098
2002	6/17	9/12	38,054	1,114,428	787	6,789
2003	6/15	9/16	12,124	22,329	747	5,502
2004	6/16	9/15	10,359	3,044,489	639	10,740
2005	6/17	9/14	12,084	340,899	342	12,965
2006	6/22	9/13	39,553	1,347,075	195	22,390
2007	6/21	9/11	27,756	54,255	258	9,554
2008	6/23	9/8	9,480	1,443,831	237	10,492
2009	6/24	9/14	8,739	42,960	444	8,602
2010	6/25	9/8	72,162	634,190	138	8,412
2011	6/20	9/12	32,240	30,999	57	3,352
2012	6/23	8/17	5,587	415,174	57	2,766
2013	6/24	9/12	5,686	13,212	15	3,751
2014	6/15	9/8	39,774	326,054	429	14,617
2015	6/15	9/3	37,812	67,294	312	7,592
2016	6/17	9/17	8,531	1,933,803	135	9,072
2017	6/15	9/13	32,560	507,685	63	14,030
2018	7/4	9/17	41,849	1,835,039	94	17,172
2019	7/2	9/7	20,140	710,901	129	6,064
2020	6/25	9/8	4,973	1,767,447	417	5,488
2021	7/1	9/8	4,199	56,625	225	4,949
2022	6/23	9/13	10,337	408,704	42	6,588
2023	7/5	9/4	6,041	18,778	21	6,086
2024	6/30	8/16	1,805	509,841	53	3,859
2025	6/26	8/25	1,644	23,446	42	8,786
2021–2025 Average	6/29	8/31	4,805	203,479	77	6,054
2011–2020 Average	6/22	9/8	22,915	760,761	171	8,390

Table 3.–Estimated escapement, harvest, total run, and exploitation rate of Chinook salmon in Unalakleet River drainage, 1996–2025.

Year	North River tower	Unalakleet River weir	Total escapement	North River proportion (%)	Total harvest	Total run	Exploitation rate (%)
1996	1,059	–	–	–	6,667	–	–
1997	3,051	–	8,246	37.0	13,258	21,504	61.7
1998	2,093	–	5,233	40.0	10,479	15,712	66.7
1999	1,513	–	–	–	4,618	–	–
2000	1,057	–	–	–	3,011	–	–
2001	1,126	–	–	–	2,926	–	–
2002	1,532	–	–	–	2,371	–	–
2003	1,409	–	–	–	2,595	–	–
2004	1,104	–	–	–	2,851	–	–
2005	1,041	–	–	–	2,294	–	–
2006	853	–	–	–	2,549	–	–
2007	1,962	–	–	–	1,678	–	–
2008	946	–	–	–	1,467	–	–
2009	2,766	–	8,135	34.0	1,972	10,107	19.5
2010	1,388	1,031	2,419	57.4	1,381	3,800	36.3
2011	883	1,078	1,961	45.0	731	2,692	27.2
2012	972	812	1,784	54.5	965	2,749	35.1
2013	586	941	1,527	38.4	599	2,126	28.2
2014	2,242	1,128	3,370	66.5	512	3,882	13.2
2015	1,944	2,789	4,733	41.1	1,523	6,256	24.3
2016	521	455	976	53.4	938	1,914	49.0
2017	1,044	2,968	4,012	26.0	836	4,848	17.2
2018	2,584	3,359	5,943	43.5	1,458	7,401	19.7
2019	3,315	6,641	9,956	33.3	2,494	12,450	20.0
2020	1,069	–	–	–	2,269	–	–
2021	925	499	1,424	65.0	1,485	2,909	51.0
2022	1,336	119	1,455	91.8	481	1,936	24.8
2023	552	66	618	89.3	500	1,118	44.7
2024	462	320	782	59.1	62	844	7.3
2025	234	–	–	–	–	–	–
2021–2025 Average	702	251	1,070	76.3	632	1,702	32.0
2011–2020 Average	1,516	2,241	3,807	44.6	1,233	4,924	26.0

Note: Harvest estimates assume all Chinook taken from marine waters are Unalakleet stock. Total escapement in 1997–1998 and 2009 were estimated from radiotelemetry studies (Wuttig 1999; Joy and Reed 2014). En dashes indicate years when no data is available. Total escapement, total run, and exploitation rate are not estimated in years with insufficient data.

Table 4.–Historical escapement of chum salmon at Nome River, Snake River, and Eldorado River in the Nome Subdistrict, 1995–2025.

Year	Nome River	Snake River	Eldorado River
1995	6,904	3,888	33,353
1996	3,341	2,483	10,992
1997	5,151	5,021	10,112
1998	1,937	8,118	9,781
1999	1,055	536	3,502
2000	4,061	2,208	9,520
2001	3,043	3,308	9,585
2002	1,725	2,669	10,215
2003	1,967	2,198	3,589
2004	4,151	2,146	3,273
2005	5,603	2,967	10,369
2006	5,021	4,160	42,105
2007	7,065	8,148	21,312
2008	2,622	1,277	6,577
2009	1,575	898	4,943
2010	5,948	6,978	21,211
2011	3,871	4,535	12,506
2012	2,228	673	13,348
2013	4,857	2,884	26,131
2014	5,854	4,494	27,054
2015	6,177	4,522	25,560
2016	7,153	3,683	18,938
2017	8,341	5,060	73,882
2018	5,285	3,111	42,361
2019	5,952	2,375	28,427
2020	2,817	802	11,333
2021	216	619	6,283
2022	2,951	5,442	7,520
2023	2,587	1,369	8,084
2024	650	443	8,339
2025	1,000	804	3,971
2021–2025 Average	1,481	1,735	6,839
2011–2020 Average	5,254	3,214	27,954

Table 5.–Pink salmon escapement from the Nome, Kwiniuk, and North Rivers, 1996–2025.

Year	Nome River	Kwiniuk River	North River
1996	95,681	1,031,690	284,406
1997	8,035	10,474	92,200
1998	359,469	668,798	54,713
1999	2,033	434	29,648
2000	41,673	1,416,770	62,194
2001	3,138	8,286	20,144
2002	35,057	1,114,428	316,592
2003	11,402	22,329	262,292
2004	1,051,146	3,044,489	1,150,094
2005	285,759	340,899	1,606,842
2006	538,555	1,347,075	2,049,222
2007	24,395	54,255	577,682
2008	1,186,554	1,443,831	240,883
2009	16,490	42,960	189,906
2010	165,933	634,190	149,334
2011	11,402	30,999	123,852
2012	121,557	415,174	137,006
2013	10,257	13,212	46,728
2014	96,397	326,054	146,844
2015	76,374	67,294	463,068
2016	1,174,726	1,933,803	1,045,512
2017	717,770	507,685	1,530,582
2018	3,245,381	1,835,039	475,140
2019	656,033	710,901	2,070,267
2020	2,076,607	1,767,447	673,218
2021	4,615	56,625	372,843
2022	50,492	408,704	686,895
2023	4,485	18,778	11,852
2024	112,475	509,841	311,839
2025	1,089	23,446	12,504
Average 2021–2025 odd years	3,396	32,950	132,400
Average 2011–2019 odd years	294,367	266,018	846,899
Average 2022–2024 even years	81,484	459,273	499,367
Average 2012–2020 even years	1,342,934	1,255,503	495,544

Table 6.−Historical migration of salmon and Dolly Varden at Pilgrim River counting tower, 1996–2002, and the weir, 2003–2025.

Year	Start date	End date	Chinook	Chum	Pink	Coho	Sockeye	Dolly Varden
1996	7/7	8/20	–	–	–	–	10,845	–
1997	7/12	8/21	356	15,652	5,557	452	950	–
1998				Did not operate				
1999	7/13	8/6	6	2,617	35,577	104	2,148	–
2000	7/5	8/18	72	861	374	21	9,326	–
2001				Did not operate				
2002	7/4	8/4	150	5,590	3,882	246	3,888	
2003	6/21	9/14	1,016	15,200	14,100	677	42,729	550
2004	6/21	9/14	925	10,239	50,760	1,573[b]	85,543	264
2005	6/24	9/5	216	9,685	13,218	304	55,952	112
2006	6/30	9/9	275	45,361	17,701	973	52,329	505
2007	6/29	9/10	501	35,334	3,616	605	43,432	339
2008	6/25	9/1	133	25,008	92,641	260	20,456	409
2009	6/26	8/31	52	5,427	483	18	953	130
2010	6/24	9/1	44	25,379	29,239	272	1,654	285
2011	6/28	9/1	44	41,740	3,364	269	9,164	229
2012	6/26	8/18	65	25,733	46,201	95	7,877	65
2013	6/27	9/8	37	47,557	1,060	890	12,428	27
2014	6/25	8/27	48	25,634	4,197	425	9,745	66
2015	7/2	8/25	99	41,121	2,807	296	36,547	76
2016	6/23	8/25	34	21,379	2,986	554	15,066	135
2017	6/21	8/22	101	50,189	80,124	665	55,764	450
2018	7/4	8/16	88	33,135	46,490	239	38,549	294
2019	7/11	8/18	164	18,480	387,799	240	33,354	206
2020	6/23	8/13	55	5,580	105,686	184	16,230	193
2021	7/6	8/18	13	2,608	749	60	4,664	6
2022	6/24	8/15	35	4,930	5,472	2	1,508	4
2023	7/6	8/16	12	7,175	652	24	1,684	7
2024	7/8	8/16	13	5,136	16,541	15	35,973	75
2025	6/26	8/24	12	1,956	321	346	18,741	0
2021–2025 Average	7/2	8/17	17	4,361	4,747	89	12,514	18
2011–2020 Average	6/28	8/23	74	31,055	68,071	386	23,472	174

Note: En dashes indicate unavailable data.

Table 7.–Historical salmon escapement at Glacial Lake weir, 2000–2015, and aerial surveys, 2016–2025.

Year	Sockeye
2000	884
2001	2,487
2002	1,047
2003	2,004
2004	8,115
2005	11,135
2006	6,849
2007	4,533
2008	1,794
2009	826
2010	1,047
2011	1,697
2012	1,636
2013	2,544
2014	4,211
2015	9,257
2016	1,582
2017	4,250
2018	1,570
2019	5,100
2020	943
2021	–
2022	1,170
2023	200
2024	799
2025	960
2021–2025 Average	782
2011–2020 Average	3,279

Note: En dash means unavailable data.

Table 8.–Combined Subdistricts 5 and 6 incidental Chinook salmon harvest data compared to commercial chum salmon harvests during directed chum salmon openings, Norton Sound District, 2018–2025.

			Subdistricts 5 and 6 combined			
			Incidental Chinook salmon harvest data			
Year	Date of first commercial opening	Number of periods	Caught and sold	Caught but not sold	Total Chinook salmon harvest	Chum salmon harvest
2007	7/18	5	12	2	18	11,734
2008	7/17	4	43	17	71	15,588
2009	7/10	8	0	61	84	22,724
2010	7/2	9	92	106	128	59,497
2011	7/2	9	114	33	169	53,094
2012	7/5	7	0	182	182	43,212
2013	7/1	9	0	130	137	68,720
2014	7/1	8	0	69	86	53,402
2015	7/1	9	0	205	433	62,400
2016	7/1	13	0	62	124	19,701
2017	7/1	12	51	229	379	94,310
2018	7/1	8	47	534	667	99,387
2019	7/1	19	1,224	129	1,353	101,817
2020	6/24	10	711	18	729	6,506
2021	7/16	14	11	0	11	2,133
2022	7/7	16	0	26	26	11,083
2023	7/7	6	0	12	12	1,982
2024	7/20	12	0	9	9	1,892
2025	7/30	11	0	2	2	1,335
2021–2025 Average	7/16	12	2	10	12	3,685
2011–2020 Average	6/30	10	215	159	426	60,255

Table 9.–Subdistricts 5 (Shaktoolik) and 6 (Unalakleet) commercial and subsistence Chinook salmon harvest, Norton Sound District, 2000–2025.

	Shaktoolik (5)			Unalakleet (6)			Subdistricts 5 and 6		
Year	Commercial	Subsistence	Total	Commercial	Subsistence	Total	Commercial	Subsistence	Total
2000	160	440	600	582	2,429	3,011	742	2,869	3,611
2001	90	936	1,026	116	2,810	2,926	206	3,746	3,952
2002	1	1,230	1,231	4	2,367	2,371	5	3,597	3,602
2003	2	806	808	10	2,585	2,595	12	3,391	3,403
2004	0	943	943	0	2,829	2,829	0	3,772	3,772
2005	50	807	857	101	2,193	2,294	151	3,000	3,151
2006	0	382	382	12	2,537	2,549	12	2,919	2,931
2007	5	515	520	13	1,666	1,679	18	2,181	2,199
2008	6	422	428	65	1,402	1,467	71	1,824	1,895
2009	4	417	421	80	1,892	1,972	84	2,309	2,393
2010	4	327	331	124	1,257	1,381	128	1,584	1,712
2011	45	235	280	124	607	731	169	842	1,011
2012	25	214	239	157	808	965	182	1,022	1,204
2013	6	136	142	131	468	599	137	604	741
2014	16	158	174	70	442	512	86	600	686
2015	49	178	227	384	1,139	1,523	433	1,317	1,750
2016	23	290	313	101	837	938	124	1,127	1,251
2017	52	177	229	327	496	823	379	673	1,052
2018	19	208	227	648	1,017	1,665	667	1,225	1,892
2019	318	317	635	1,035	1,459	2,494	1,353	1,776	3,129
2020	238	[a]	238	491	1,778	2,269	729	1,778	2,507
2021	5	[a]	5	6	1,479	1,485	11	1,479	1,490
2022	10	215	225	16	465	481	26	680	706
2023	1	213	214	11	489	500	12	702	714
2024	2	78	80	7	55	62	9	133	142
2025	0	[b]	[b]	2	[b]	[b]	2	[b]	[b]
2021–2024 Average	5	169	131	10	622	632	15	749	763
2011–2020 Average	79	213	270	347	905	1,252	426	1,096	1,522

[a] Subsistence harvest surveys were not conducted due to COVID-19 pandemic restrictions.

[b] Data unavailable.

Table 10.–Commercial salmon catch by species, Norton Sound District, 1990–2025.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1990	8,895	434	56,712	501	65,123	131,665
1991	6,068	203	63,647	0	86,871	156,789
1992	4,541	296	105,418	6,284	83,394	199,933
1993	8,972	279	43,283	157,574	53,562	263,670
1994	5,285	80	102,140	982,389	18,290	1,108,184
1995	8,860	128	47,863	81,644	42,898	181,393
1996	4,984	1	68,206	487,441	10,609	571,241
1997	12,573	161	32,284	20	34,103	79,141
1998	7,429	7	29,623	588,013	16,324	641,396
1999	2,508	0	12,662	0	7,881	23,051
2000	752	14	44,409	166,548	6,150	217,873
2001	213	44	19,492	0	11,100	30,849
2002	5	1	1,759	0	600	2,365
2003	12	21	17,060	0	3,560	20,653
2004	22	47	42,016	0	6,296	48,381
2005	151	12	85,523	0	3,983	89,669
2006	20	3	130,808	0	10,042	140,873
2007	19	2	126,136	3,769	22,431	152,357
2008	83	60	120,309	75,525	25,124	221,101
2009	84	126	87,041	17,364	34,122	138,737
2010	140	103	62,079	31,557	117,743	211,622
2011	185	369	58,917	7,141	110,555	177,167
2012	197	134	37,056	205,498	62,772	305,657
2013	151	247	53,802	8,338	118,709	181,247
2014	289	519	112,756	182,406	107,745	403,715
2015	1,288	4,119	153,928	62,888	147,497	369,720
2016	321	2,888	102,890	208,961	51,176	366,236
2017	538	2,975	191,254	20,321	163,473	378,561
2018	906	3,623	260,707	40,449	238,029	543,714
2019	1,557	7,203	139,914	77,016	158,474	384,164
2020	986	2,062	14,689	7,919	26,379	52,035
2021	15	473	7,189	289,912	6,410	303,999
2022	29	1,288	13,494	84,324	31,351	130,486
2023	21	741	9,872	4,260	20,701	35,595
2024	15	319	13,812	3,242	4,264	21,652
2025	0	651	31,523	46	5,969	38,189
2021–2025 Average	16	694	15,178	76,357	13,739	105,984
2011–2020 Average	642	2,414	112,591	82,094	118,481	316,222

Table 11.–Commercial and subsistence salmon catch by species, by year in Subdistrict 1, Norton Sound District, 2000–2025.

	Subdistrict 1 (Nome)																	
	Commercial						Subsistence						Combined					
Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total
2000	0	0	0	0	0	0	7	26	747	2,657	535	3,972	7	26	747	2,657	535	3,972
2001	0	0	0	0	0	0	2	92	425	113	858	1,490	2	92	425	113	858	1,490
2002	0	0	0	0	0	0	4	79	666	3,161	1,114	5,024	4	79	666	3,161	1,114	5,024
2003	0	0	0	0	0	0	63	76	351	507	565	1,562	63	76	351	507	565	1,562
2004	0	0	0	0	0	0	100	106	1,574	15,047	685	17,512	100	106	1,574	15,047	685	17,512
2005	0	0	0	0	0	0	62	177	1,287	5,075	803	7,404	62	177	1,287	5,075	803	7,404
2006	0	0	0	0	0	0	24	159	3,865	9,329	890	14,267	24	159	3,865	9,329	890	14,267
2007	0	0	0	0	0	0	18	297	1,103	850	2,938	5,206	18	297	1,103	850	2,938	5,206
2008	0	0	0	0	0	0	39	127	3,423	12,592	739	16,920	39	127	3,423	12,592	739	16,920
2009	0	0	0	0	0	0	32	64	1,132	487	387	2,102	32	64	1,132	487	387	2,102
2010	0	0	0	0	0	0	39	77	1,983	6,281	3,124	11,504	39	77	1,983	6,281	3,124	11,504
2011	0	0	0	0	0	0	19	47	1,229	1,389	1,428	4,112	19	47	1,229	1,389	1,428	4,112
2012	0	0	0	0	0	0	11	171	1,150	8,376	2,521	12,229	11	171	1,150	8,376	2,521	12,229
2013	–	–	–	–	–	–	48	211	1,804	845	3,065	5,973	48	211	1,804	845	3,065	5,973
2014	3	7	39	1,169	1,456	2,674	31	405	3,042	6,648	3,844	13,970	34	412	3,081	7,817	5,300	16,644
2015	4	244	13	509	4,861	5,631	21	1,081	1,790	3,180	3,967	6,072	25	1,325	1,803	3,689	8,828	15,670
2016	0	10	118	1,456	662	2,246	26	601	2,274	10,069	3,260	16,230	26	611	2,392	11,525	3,922	18,476
2017	43	522	5,973	1,605	6,788	14,931	8	605	3,943	5,211	1,326	11,093	51	1,127	9,916	6,816	8,114	26,024
2018	18	426	9,080	3,930	10,205	23,659	11	336	4,940	10,786	1,196	17,269	29	762	14,020	14,716	11,401	40,928
2019	42	816	7,832	4,941	15,274	28,905	14	366	3,389	5,351	629	9,749	56	1,182	11,221	10,292	15,903	38,654
2020	37	861	6,663	1,007	7,101	15,669	66	462	2,869	11,184	1,002	15,583	103	1,323	9,532	12,191	8,103	31,252
2021	2	26	408	0	250	686	13	101	1,675	1,631	405	3,825	15	127	2,083	1,631	655	4,511
2022	1	128	613	56	4,060	4,858	9	496	1,798	5,157	2,069	9,529	10	624	2,411	5,213	6,129	14,387
2023	1	49	759	28	1,554	2,391	1	123	917	873	1,292	3,206	2	172	1,676	901	2,846	5,597
2024	1	41	109	175	154	480	2	259	722	3,865	558	5,406	3	300	831	4,040	712	5,886
2025	5	155	1	12	1,074	1,247	–	–	–	–	–	–	–	–	–	–	–	–
2021–2025 Average	2	80	378	54	1,418	1,932	6	245	1,278	2,882	1,081	5,492	8	306	1,750	2,946	2,586	7,595
2011–2020 Average	16	321	3,302	1,624	5,150	10,413	26	429	2,643	6,304	2,224	11,228	40	717	5,615	7,766	6,859	20,996

Note: En dashes indicate unavailable data.

Table 12.–Commercial and subsistence salmon catch by species, by year in Subdistrict 2, Norton Sound District, 2000–2025.

	Subdistrict 2 (Golovin)																	
	Commercial						Subsistence						Combined					
Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total
2000	0	0	1,645	17,408	164	19,217	169	18	2,335	10,906	1,155	14,583	169	18	3,980	28,314	1,319	33,800
2001	0	43	30	0	7,094	7,167	89	72	880	1,665	3,291	5,997	89	115	910	1,665	10,385	13,164
2002	0	0	0	0	0	0	69	66	1,640	14,430	1,882	18,087	69	66	1,640	14,430	1,882	18,087
2003	0	0	0	0	0	0	166	28	309	5,012	1,477	6,992	166	28	309	5,012	1,477	6,992
2004	0	0	0	0	0	0	164	6	654	19,936	880	21,640	164	6	654	19,936	880	21,640
2005	0	0	0	0	0	0	96	15	686	11,467	1,852	14,116	96	15	686	11,467	1,852	14,116
2006	0	0	0	0	0	0	136	38	1,760	14,670	722	17,326	136	38	1,760	14,670	722	17,326
2007	0	0	0	0	0	0	188	321	1,179	3,980	4,217	9,885	188	321	1,179	3,980	4,217	9,885
2008	0	0	256	2,699	623	3,578	146	95	2,337	10,155	350	13,083	146	95	2,593	12,854	973	16,661
2009	0	0	2,452	0	87	2,539	237	33	1,377	3,787	1,694	7,128	237	33	3,829	3,787	1,781	9,667
2010	3	2	5,586	2,039	17,212	24,842	59	32	2,020	9,620	1,133	12,864	62	34	7,606	11,659	18,345	37,706
2011	7	0	859	3	20,075	20,944	99	74	1,345	5,652	2,122	9,292	106	74	2,204	5,655	22,197	30,236
2012	2	14	573	31,055	3,791	35,435	57	52	1,143	7,635	1,056	9,943	59	66	1,716	38,690	4,847	45,378
2013	0	0	5,362	1,180	3,113	9,655	47	15	964	3,655	3,256	7,937	47	15	6,326	4,835	6,369	17,592
2014	28	47	4,156	7,888	13,560	25,679	36	91	1,720	7,363	1,719	10,929	64	138	5,876	15,251	15,279	36,608
2015	73	1,214	2,996	1,596	20,525	26,404	147	71	1,091	4,443	2,250	8,002	220	1,285	4,087	6,039	22,775	34,406
2016	17	157	880	15,346	5,331	21,731	35	29	844	6,747	1,006	8,661	52	186	1,724	22,093	6,337	30,392
2017	4	83	710	331	7,173	8,301	25	12	1,631	3,756	1,037	6,461	29	95	2,341	4,087	8,210	14,762
2018	31	75	2,995	4,171	25,070	32,342	50	83	1,369	6,944	773	9,219	81	158	4,364	11,115	25,843	41,561
2019	33	122	2,426	7,412	25,598	35,591	39	9	1,277	5,174	375	6,874	72	131	3,703	12,586	25,973	42,465
2020	64	227	1,964	1,987	11,536	15,778	77	65	862	5,270	139	6,413	141	292	2,826	7,257	11,675	22,191
2021	1	142	707	18,395	3,515	22,760	48	42	718	1,638	265	2,711	49	184	1,425	20,033	3,780	25,471
2022	0	183	965	1,473	8,701	11,322	23	32	927	4,612	677	6,271	23	215	1,892	6,085	9,378	17,593
2023	0	174	574	351	11,037	12,136	19	34	391	850	392	1,686	19	208	965	1,201	11,429	13,822
2024	0	79	338	759	1,819	2,995	10	40	449	3,213	556	4,268	10	119	787	3,972	2,375	7,263
2025	2	359	1,691	0	3,448	5,500	–	–	–	–	–	–	–	–	–	–	–	–
2021–2025 Average	1	187	855	4,196	5,704	10,943	25	37	621	2,578	473	3,734	25	182	1,267	7,823	6,741	16,037
2011–2020 Average	26	194	2,292	7,097	13,577	23,186	61	50	1,225	5,664	1,373	8,373	87	244	3,517	12,761	14,951	31,559

Note: En dashes indicate unavailable data.

Table 13.–Commercial and subsistence salmon catch by species, by year in Subdistrict 3, Norton Sound District, 2000–2025.

	Subdistrict 3 (Elim)																	
	Commercial						Subsistence						Combined					
Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total
2000	10	0	5,182	46,369	535	52,096	248	46	1,429	5,983	1,173	8,879	258	46	6,611	52,352	1,708	60,975
2001	7	0	1,696	0	681	2,384	427	70	1,352	1,390	898	4,137	434	70	3,048	1,390	1,579	6,521
2002	0	0	0	0	0	0	565	14	1,801	8,345	1,451	12,176	565	14	1,801	8,345	1,451	12,176
2003	0	0	0	0	0	0	660	39	1,143	2,524	1,687	6,053	660	39	1,143	2,524	1,687	6,053
2004	0	0	0	0	0	0	412	0	704	7,858	683	9,657	412	0	704	7,858	683	9,657
2005	0	0	0	0	0	0	225	9	1,011	3,721	598	5,564	225	9	1,011	3,721	598	5,564
2006	0	0	0	0	0	0	179	13	1,769	5,216	1,267	8,444	179	13	1,769	5,216	1,267	8,444
2007	1	0	5,908	1,648	4,567	12,124	260	0	2,295	1,742	2,334	6,631	261	0	8,203	3,390	6,901	18,755
2008	5	0	4,602	14,536	304	19,447	269	0	1,804	7,655	1,284	11,012	274	0	6,406	22,191	1,588	30,459
2009	0	1	9,582	35	597	10,215	545	13	2,434	1,522	600	5,114	545	14	12,016	1,557	1,197	15,329
2010	9	5	10,180	11,658	23,453	45,305	97	7	1,679	7,830	3,925	13,538	106	12	11,859	19,488	27,378	58,843
2011	4	12	8,336	165	23,531	32,048	160	3	1,688	704	3,671	6,226	164	15	10,024	869	27,202	38,274
2012	3	1	2,003	52,775	2,262	57,044	42	0	1,302	10,848	1,494	13,686	45	1	3,305	63,623	3,756	70,730
2013	6	27	6,675	601	1,434	8,743	39	15	1,515	1,134	1,218	3,921	45	42	8,190	1,735	2,652	12,664
2014	101	164	15,938	28,507	17,525	62,235	276	38	1,808	4,595	2,081	8,798	377	202	17,746	33,102	19,606	71,033
2015	533	1,535	14,155	2,787	30,116	49,126	198	154	1,158	1,828	1,573	4,911	731	1,689	15,313	4,615	31,689	54,037
2016	69	728	14,197	39,028	6,736	60,758	163	60	1,164	6,717	830	8,934	232	788	15,361	45,745	7,566	69,692
2017	51	538	19,410	2,877	11,779	34,655	51	35	2,362	3,664	1,109	7,221	102	573	21,772	6,541	12,888	41,876
2018	138	482	20,002	9,474	38,419	68,515	59	35	1,657	4,360	588	6,699	197	517	21,659	13,834	39,007	75,214
2019	121	724	11,450	14,911	13,803	41,009	105	20	853	3,065	570	4,613	226	744	12,303	17,976	14,373	45,622
2020	145	238	2,013	331	857	3,584	125	17	365	3,462	124	4,093	270	255	2,378	3,793	981	7,677
2021	1	41	883	6,601	452	7,978	133	9	464	1,194	103	1,903	134	50	1,347	7,795	555	9,881
2022	2	158	1,313	2,634	4,030	8,137	42	62	963	4,325	349	5,741	44	220	2,276	6,959	4,379	13,878
2023	8	44	1,221	21	1,104	2,398	16	34	729	288	214	1,281	24	78	1,950	309	1,318	3,679
2024	5	15	787	14	343	1,164	7	33	223	1,155	68	1,486	12	48	1,010	1,169	411	2,650
2025	1	67	4,428	35	116	4,647	–	–	–	–	–	–	–	–	–	–	–	–
2021–2025 Average	3	65	1,726	1,861	1,209	4,865	50	35	595	1,741	184	2,603	54	99	1,646	4,058	1,666	7,522
2011–2020 Average	117	445	11,418	15,146	14,646	41,772	122	38	1,387	4,038	1,326	6,910	239	483	12,805	19,183	15,972	48,682

Note: En dashes indicate unavailable data.

Table 14.–Commercial and subsistence salmon catch by species, by year in Subdistrict 4, Norton Sound District, 2000–2025.

	Subdistrict 4 (Norton Bay)																	
	Commercial						Subsistence						Combined					
Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total
2000	0	0	0	0	0	0	397	2	267	2,255	4,714	7,635	397	2	267	2,255	4,714	7,635
2001	0	0	0	0	0	0	460	14	276	5,203	4,445	10,398	460	14	276	5,203	4,445	10,398
2002	0	0	0	0	0	0	557	0	509	6,049	3,971	11,086	557	0	509	6,049	3,971	11,086
2003	0	0	0	0	0	0	373	46	510	4,184	3,397	8,510	373	46	510	4,184	3,397	8,510
2004	0	0	0	0	0	0	–	–	–	–	–	–	–	–	–	–	–	–
2005	0	0	0	0	0	0	–	–	–	–	–	–	–	–	–	–	–	–
2006	0	0	0	0	0	0	–	–	–	–	–	–	–	–	–	–	–	–
2007	0	0	0	0	0	0	–	–	–	–	–	–	–	–	–	–	–	–
2008	7	0	600	1,232	507	2,346	187	2	1,084	4,489	3,330	9,092	194	2	1,684	5,721	3,837	11,438
2009	0	0	1,714	558	1,850	4,122	259	2	891	2,508	3,183	6,843	259	2	2,605	3,066	5,033	10,965
2010	0	7	1,606	2,597	6,007	10,217	341	21	461	3,115	3,180	7,118	341	28	2,067	5,712	9,187	17,335
2011	5	9	4,836	652	7,558	13,060	239	1	549	1,132	3,529	5,450	6	558	5,968	4,181	13,008	13,066
2012	10	16	4,378	49,970	8,417	62,791	103	0	310	2,623	2,721	5,757	113	16	4,688	52,593	11,138	68,548
2013	8	4	5,485	487	36,021	42,005	123	2	826	1,341	3,853	6,145	131	6	6,311	1,828	39,874	48,150
2014	71	22	9,562	28,393	13,436	51,484	163	1	1,219	2,321	4,431	8,135	234	23	10,781	30,714	17,867	59,619
2015	245	335	9,468	8,297	23,568	41,913	269	56	1,005	1,692	3,646	6,668	514	391	10,473	9,989	27,214	48,581
2016	111	174	6,656	38,357	14,069	59,367	297	289	1,142	2,432	3,349	7,509	408	463	7,798	40,789	17,418	66,876
2017	61	265	2,990	3,666	31,653	38,635	318	229	1,487	2,845	6,553	11,432	379	494	4,477	6,511	38,206	50,067
2018	52	158	1,513	1,007	14,548	17,278	69	100	596	1,367	1,469	3,601	121	258	2,109	2,374	16,017	20,879
2019	8	106	199	1,320	1,982	3,615	16	135	1,544	4,466	2,306	8,467	24	241	1,743	5,786	4,288	12,082
2020	11	17	251	24	378	681	–	–	–	–	–	–	–	–	–	–	–	–
2021	0	8	166	14,190	61	14,425	–	–	–	–	–	–	–	–	–	–	–	–
2022	0	35	70	2,951	3,477	6,533	24	396	1,251	6,366	5,940	13,977	24	431	1,321	9,317	9,417	20,510
2023	0	59	8	17	23	107	113	347	1,402	2,266	3,901	8,029	113	406	1,410	2,283	3,924	8,136
2024	0	1	23	121	56	201	39	53	511	6,346	4,134	11,083	39	54	534	6,467	4,190	11,284
2025	0	285	0	0	6	291	–	–	–	–	–	–	–	–	–	–	–	–
2021–2025 Average	0	78	53	3,456	725	4,311	59	265	1,055	4,993	4,658	11,030	59	297	1,088	6,022	5,844	13,310
2011–2020 Average	58	111	4,534	13,217	15,163	33,083	177	90	964	2,247	3,540	7,018	214	272	6,039	17,196	20,559	43,096

Note: En dashes indicate unavailable data.

Table 15.–Commercial and subsistence salmon catch by species, by year in Subdistrict 5, Norton Sound District, 2000–2025.

	Subdistrict 5 (Shaktoolik)																	
	Commercial						Subsistence						Combined					
Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total
2000	160	3	7,779	85,493	2,751	96,186	440	20	2,799	5,432	2,412	11,103	600	23	10,578	90,925	5,163	107,289
2001	90	0	2,664	0	1,813	4,567	936	143	2,090	10,172	1,553	14,894	1,026	143	4,754	10,172	3,366	19,461
2002	1	0	680	0	261	942	1,230	4	2,169	8,769	800	12,972	1,231	4	2,849	8,769	1,061	13,914
2003	2	0	4,031	0	485	4,518	881	50	2,941	12,332	587	16,791	883	50	6,972	12,332	1,072	21,309
2004	0	0	12,734	0	1,372	14,106	943	12	1,994	7,291	139	10,379	943	12	14,728	7,291	1,511	24,485
2005	50	0	21,818	0	791	22,659	807	0	1,913	12,075	202	14,997	857	0	23,731	12,075	993	37,656
2006	8	0	32,472	0	3,321	35,801	382	36	1,968	4,817	351	7,554	390	36	34,440	4,817	3,672	43,355
2007	5	0	31,810	0	6,076	37,891	515	28	1,443	2,708	465	5,159	520	28	33,253	2,708	6,541	43,050
2008	6	24	37,624	8,219	6,042	51,915	422	2	1,504	4,920	201	7,049	428	26	39,128	13,139	6,243	58,964
2009	4	36	13,063	5,146	10,941	29,190	417	57	2,141	6,101	374	9,090	421	93	15,204	11,247	11,315	38,280
2010	4	18	11,868	4,622	40,483	56,995	327	115	1,940	6,406	1,680	10,468	331	133	13,808	11,028	42,163	67,463
2011	45	69	15,368	29	25,388	40,899	235	100	1,241	2,681	490	4,747	280	169	16,609	2,710	25,878	45,646
2012	25	29	7,828	19,253	20,141	47,276	214	9	1,110	4,609	634	6,576	239	38	8,938	23,862	20,775	53,852
2013	6	45	6,890	14	23,268	30,223	136	108	2,146	3,346	983	6,719	142	153	9,036	3,360	24,251	36,942
2014	16	47	19,753	33,137	29,455	82,408	158	82	1,159	3,961	682	6,042	174	129	20,912	37,098	30,137	88,450
2015	49	53	25,637	15,156	27,503	68,398	178	223	2,201	5,263	510	8,375	227	276	27,838	20,419	28,013	76,773
2016	23	510	25,866	28,308	12,149	66,856	290	128	2,142	4,082	645	7,287	313	638	28,008	32,390	12,794	74,143
2017	52	470	50,299	1,470	41,664	93,955	177	169	2,979	5,427	576	9,328	229	639	53,278	6,897	42,240	103,283
2018	19	516	71,468	2,489	41,482	115,974	162	56	2,107	1,121	319	3,765	181	572	73,575	3,610	41,801	119,739
2019	318	1,995	35,381	19,015	42,827	99,536	317	129	2,167	3,295	605	6,513	635	2,124	37,548	22,310	43,432	106,049
2020	238	364	1,646	1,292	3,864	7,404	–	–	–	–	–	–	–	–	–	–	–	–
2021	5	150	2,593	80,735	1,237	84,720	–	–	–	–	–	–	–	–	–	–	–	–
2022	10	499	5,402	33,103	7,491	46,505	215	79	1,052	3,855	768	5,969	225	578	6,454	36,958	8,259	52,474
2023	1	341	5,393	1,113	5,955	12,803	213	0	2,085	1,257	573	4,128	214	341	7,478	2,370	6,528	16,931
2024	2	86	4,585	719	950	6,342	78	195	3,391	6,816	677	11,157	80	281	7,976	7,535	1,627	17,499
2025	0	80	11,307	6	729	12,122	–	–	–	–	–	–	–	–	–	–	–	–
2021–2025 Average	4	231	5,856	23,135	3,272	32,498	169	91	2,176	3,976	673	7,085	173	400	7,303	15,621	5,471	28,968
2011–2020 Average	79	410	26,014	12,016	26,774	65,293	207	112	1,917	3,754	605	6,595	269	526	30,638	16,962	29,925	78,320

Note: En dashes indicate unavailable data.

Table 16.–Commercial and subsistence salmon catch by species, by year in Subdistrict 6, Norton Sound District, 2000–2025.

	Subdistrict 6 (Unalakleet)																	
	Commercial						Subsistence						Combined					
Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total
2000	582	11	29,803	17,278	2,700	50,374	2,429	212	5,878	10,540	3,000	22,059	3,011	223	35,681	27,818	5,700	72,433
2001	116	1	15,102	0	1,512	16,731	2,810	359	6,270	11,269	2,918	23,626	2,926	360	21,372	11,269	4,430	40,357
2002	4	1	1,079	0	339	1,423	2,367	280	4,988	15,915	3,877	27,427	2,371	281	6,067	15,915	4,216	28,850
2003	10	21	13,029	0	3,075	16,135	2,585	297	6,192	21,779	1,785	32,638	2,595	318	19,221	21,779	4,860	48,773
2004	22	47	29,282	0	4,924	34,275	2,829	417	6,653	22,755	2,154	34,808	2,851	464	35,935	22,755	7,078	69,083
2005	101	12	63,705	0	3,192	67,010	2,193	656	7,886	25,447	2,660	38,842	2,294	668	71,591	25,447	5,852	105,852
2006	12	3	98,336	0	6,721	105,072	2,537	326	9,905	22,547	2,712	38,027	2,549	329	108,241	22,547	9,433	143,099
2007	13	2	88,418	2,121	11,788	102,342	1,666	292	5,859	11,674	2,057	21,547	1,678	294	94,277	13,795	13,845	123,889
2008	65	36	77,227	48,839	17,648	143,815	1,402	137	7,452	15,116	2,805	26,912	1,467	173	84,679	63,955	20,453	170,727
2009	80	89	60,230	11,625	20,647	92,671	1,892	200	6,923	11,707	2,708	23,430	1,972	289	67,153	23,332	23,355	116,101
2010	124	71	32,839	10,641	30,588	74,263	1,257	297	3,780	9,002	3,159	17,495	1,381	368	36,619	19,643	33,747	91,758
2011	124	279	29,518	6,292	34,003	70,216	607	189	2,486	5,608	3,316	12,206	731	468	32,004	11,900	37,319	82,422
2012	157	74	22,274	52,445	28,161	103,111	808	192	4,558	9,460	3,973	18,991	965	266	26,832	61,905	32,134	122,102
2013	131	171	29,390	6,056	54,873	90,621	468	221	6,117	7,724	3,129	17,659	599	392	35,507	13,780	58,002	108,280
2014	70	232	63,308	83,312	32,313	179,235	442	146	7,232	12,707	3,476	24,003	512	378	70,540	96,019	35,789	203,238
2015	384	738	101,659	34,543	40,924	178,248	1,139	294	6,723	8,940	2,821	19,917	1,523	1,032	108,382	43,483	43,745	198,165
2016	101	1,309	55,173	86,466	12,229	155,278	837	429	8,074	13,145	3,728	26,213	938	1,738	63,247	99,611	15,957	181,491
2017	327	1,097	111,872	10,372	64,416	188,084	496	304	8,680	11,069	3,625	24,174	823	1,401	120,552	21,441	68,041	212,258
2018	648	1,966	155,649	19,378	108,305	285,946	810	235	5,204	5,017	2,227	13,493	1,458	2,201	160,853	24,395	110,532	299,439
2019	1,035	3,440	82,626	29,417	58,990	175,508	1,459	571	5,584	8,055	1,795	17,464	2,494	4,011	88,210	37,472	60,785	192,972
2020	491	355	2,152	3,278	2,643	8,919	1,778	381	4,183	9,235	685	16,262	2,269	736	6,335	12,513	3,328	25,181
2021	6	106	2,432	169,991	895	173,430	1,479	245	3,179	4,881	890	10,674	1,485	351	5,611	174,872	1,785	184,104
2022	16	285	5,131	44,107	3,592	53,131	465	386	2,410	6,756	1,270	11,287	481	671	7,541	50,863	4,862	64,418
2023	11	74	1,917	2,730	1,028	5,760	489	177	5,005	3,606	1,243	10,520	500	251	6,922	6,336	2,271	16,280
2024	7	97	7,970	1,454	942	10,470	55	136	6,908	10,701	1,226	19,026	62	233	14,878	12,155	2,168	29,496
2025	2	62	13,833	0	606	14,503	–	–	–	–	–	–	–	–	–	–	–	–
2021–2025 Average	8	125	6,257	43,656	1,413	51,459	622	236	4,376	6,486	1,157	12,877	632	377	8,738	61,057	2,772	73,575
2011–2020 Average	347	966	65,362	33,156	43,686	143,517	884	296	5,884	9,096	2,878	19,038	1,231	1,262	71,246	42,252	46,563	162,555

Note: En dashes indicate unavailable data.

Table 17.–Subsistence surveys conducted in Port Clarence District, 1994–2025.

Year	Families interviewed/ permits issued	Chinook	Sockeye	Coho	Pink	Chum	Total
1994	127	203	2,220	1,892	4,309	2,294	10,918
1995	122	76	4,481	1,739	3,293	6,011	15,600
1996	117	194	2,634	1,258	2,236	4,707	11,029
1997	126	158	3,177	829	755	2,099	7,018
1998	138	289	1,696	1,759	7,815	2,621	14,180
1999	155	89	2,392	1,030	786	1,936	6,233
2000	134	72	2,851	935	1,387	1,275	6,520
2001	160	84	3,692	1,299	1,183	1,910	8,168
2002	159	133	3,732	2,194	3,394	2,699	12,152
2003	204	177	4,495	1,434	4,113	2,430	12,649
2004	376	278	8,688	1,131	5,918	2,505	18,520
2005	335	152	8,492	726	6,615	2,479	18,464
2006	345	102	9,940	1,061	4,939	4,353	20,395
2007	363	85	9,484	705	1,468	4,454	16,196
2008	408	125	5,069	512	7,527	2,449	15,682
2009	326	40	1,643	804	1,882	3,060	7,429
2010	290	63	824	596	5,202	5,232	11,917
2011	270	57	1,611	393	2,610	4,338	9,008
2012	335	44	1,422	703	5,200	7,802	15,171
2013	431	38	5,243	651	1,788	6,588	14,308
2014	430	21	3,969	564	5,040	5,085	14,679
2015	549	64	13,872	550	2,982	4,231	21,699
2016	664	40	12,140	627	4,322	4,303	21,432
2017	665	39	15,424	697	5,365	6,886	28,411
2018	689	55	12,381	764	4,556	5,625	23,381
2019	575	60	12,309	733	5,654	2,906	21,662
2020	785	40	7,754	560	6,130	2,303	16,787
2021	558	31	2,869	363	2,805	1,719	7,787
2022	486	14	673	348	1,975	4,710	7,720
2023	281	8	456	151	624	1,652	2,891
2024	473	10	6,051	47	366	444	6,918
2025	343	–	–	–	–	–	–
2021–2025 Average	428	16	2,512	227	1,443	2,131	6,329
2011–2020 Average	521	46	8,613	624	4,365	5,007	18,654

Note: En dashes indicate unavailable data.

Table 18.–Number of commercial salmon permits fished, Norton Sound District, 1990–2025.

	Subdistrict						
Year	1 (Nome)	2 (Golovin)	3 (Elim)	4 (Norton Bay)	5 (Shaktoolik)	6 (Unalakleet)	District total
1990	0	15	23	0	28	73	128
1991	0	16	24	0	25	75	126
1992	2	1	21	9	25	71	110
1993	1	8	26	15	37	66	153
1994	1	5	21	0	39	71	119
1995	2	7	12	0	26	58	105
1996	1	4	12	0	20	54	86
1997	0	11	21	9	19	57	102
1998	0	16	23	0	28	52	82
1999	0	0	0	0	15	45	60
2000	0	12	13	0	26	49	79
2001	0	5	5	0	13	29	51
2002	0	0	0	0	7	5	12
2003	0	0	0	0	10	20	30
2004	0	0	0	0	11	25	36
2005	0	0	0	0	12	28	40
2006	0	0	0	0	22	40	61
2007	0	0	11	0	15	47	71
2008	0	4	12	4	23	58	91
2009	0	5	17	7	21	49	88
2010	0	10	19	5	35	59	115
2011	0	13	32	12	30	65	123
2012	0	14	24	18	21	55	123
2013	1	14	21	18	24	57	124
2014	3	18	29	20	24	63	128
2015	4	12	26	16	23	56	128
2016	5	10	25	18	28	68	141
2017	6	10	26	18	31	69	139
2018	7	18	34	12	36	80	149
2019	7	18	27	9	36	77	145
2020	10	17	25	7	27	55	122
2021	7	11	18	9	25	64	131
2022	9	11	15	8	22	49	108
2023	6	17	14	6	12	34	83
2024	6	10	17	3	11	45	90
2025	3	10	14	3	12	36	76
2021–2025 Average	6	12	16	6	16	46	98
2011–2020 Average	4	8	16	7	24	55	100

Note: District total is the number of participants that actually fished in Norton Sound; some participants may have fished more than 1 subdistrict.

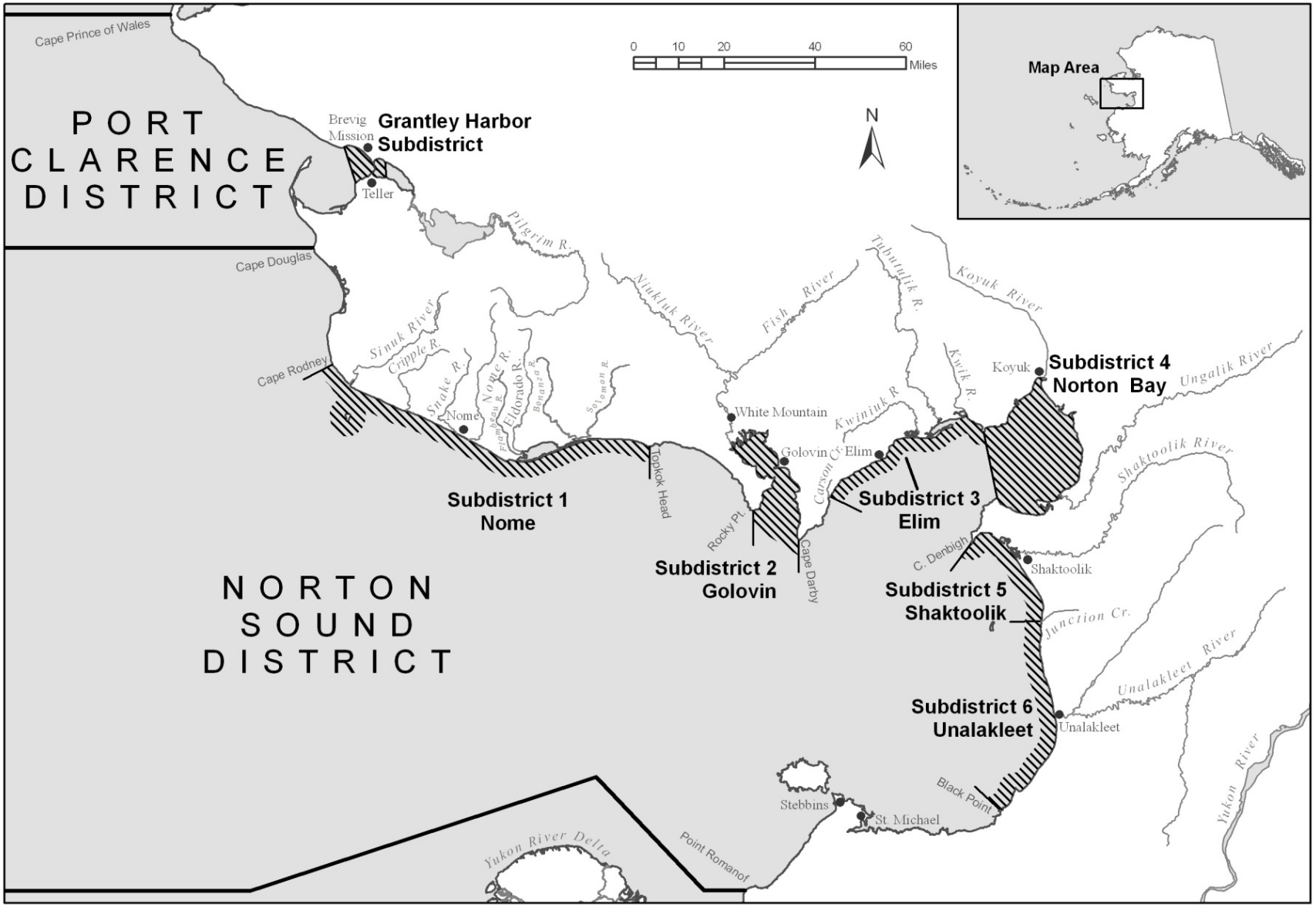

Figure 1.–Norton Sound commercial salmon fishing districts and subdistricts.

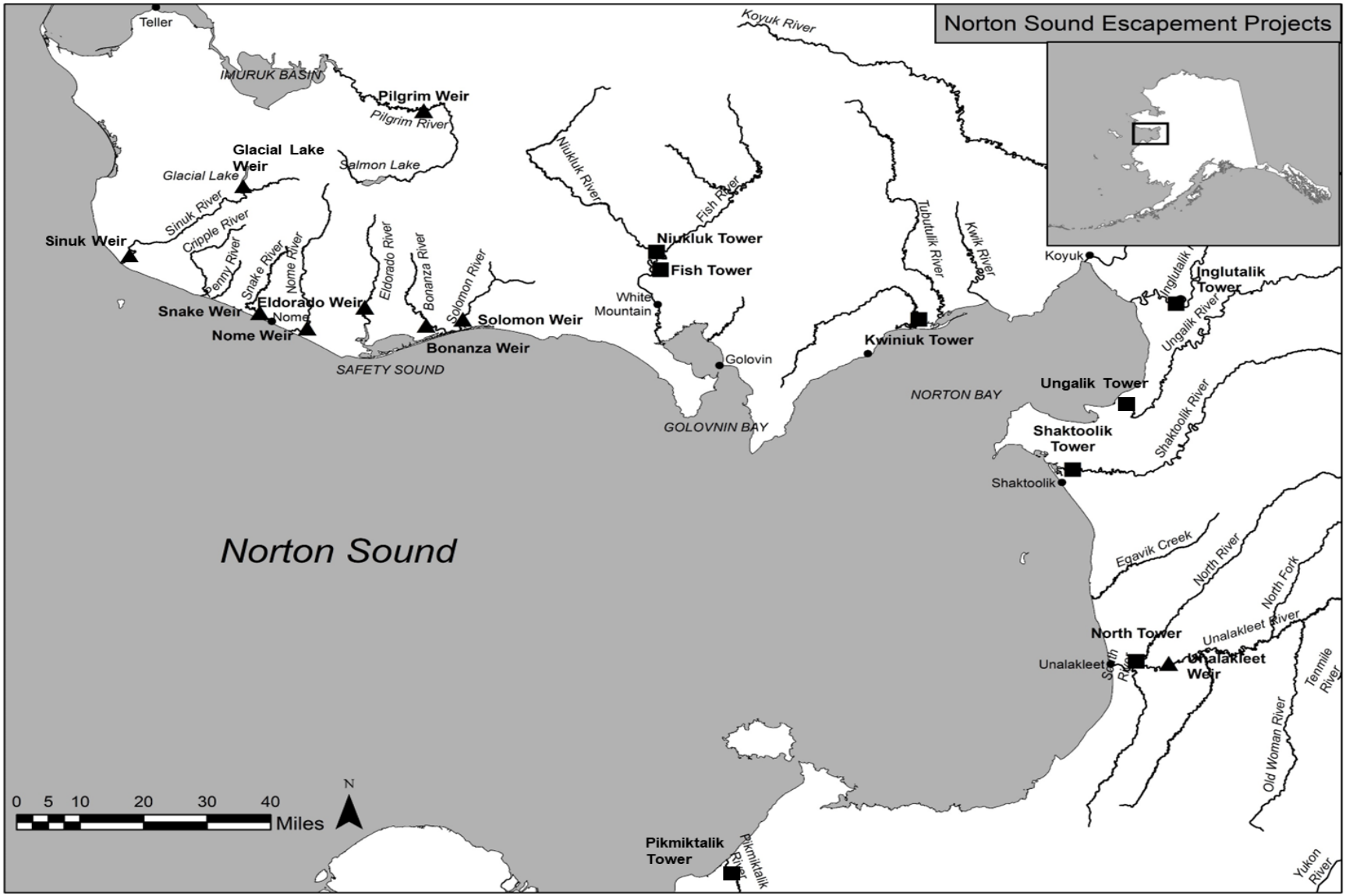

Figure 2.–Current and historical escapement projects in Norton Sound.

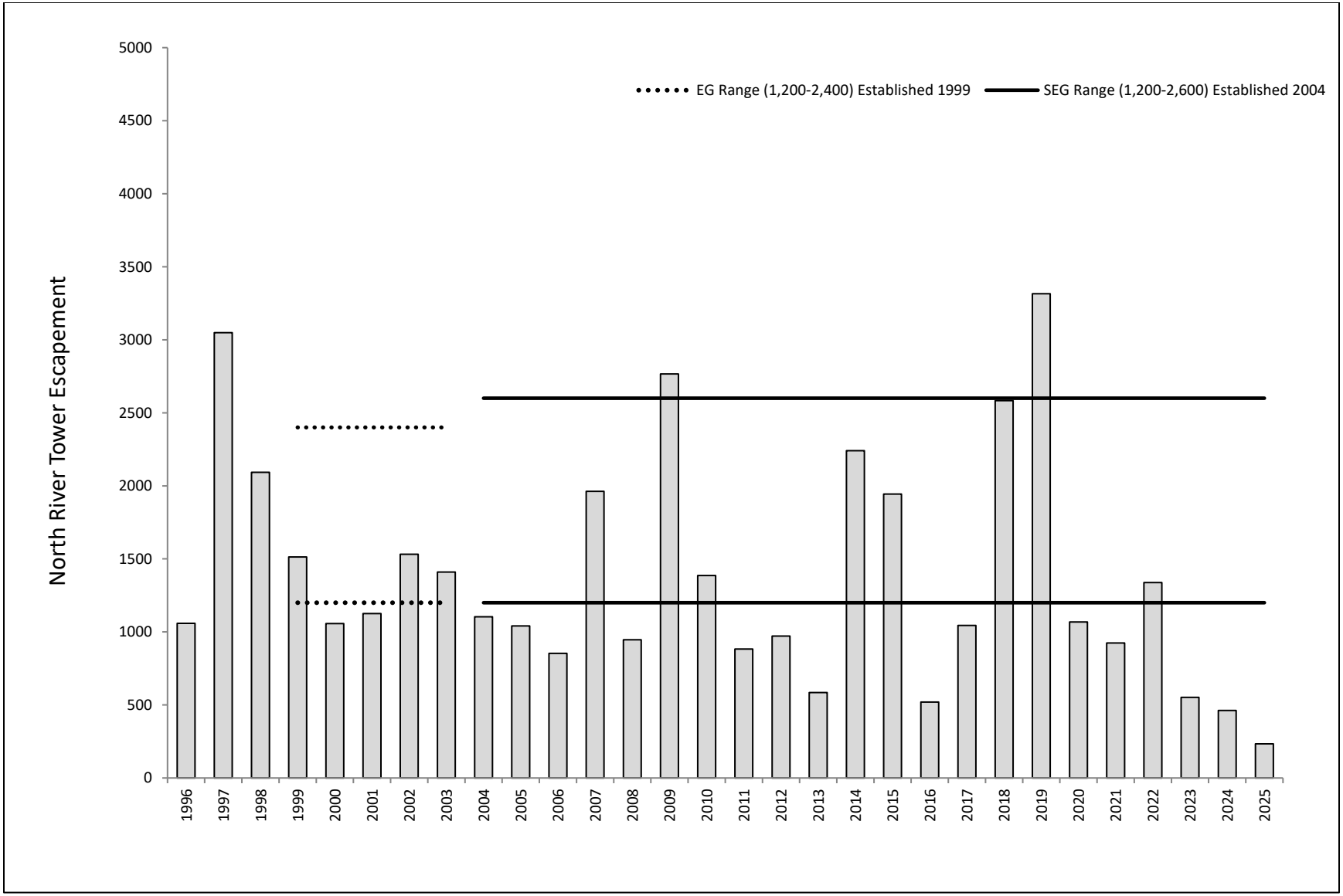

Figure 3.–Annual Chinook salmon escapement compared with established escapement goal ranges, North River counting tower, 1996–2025.

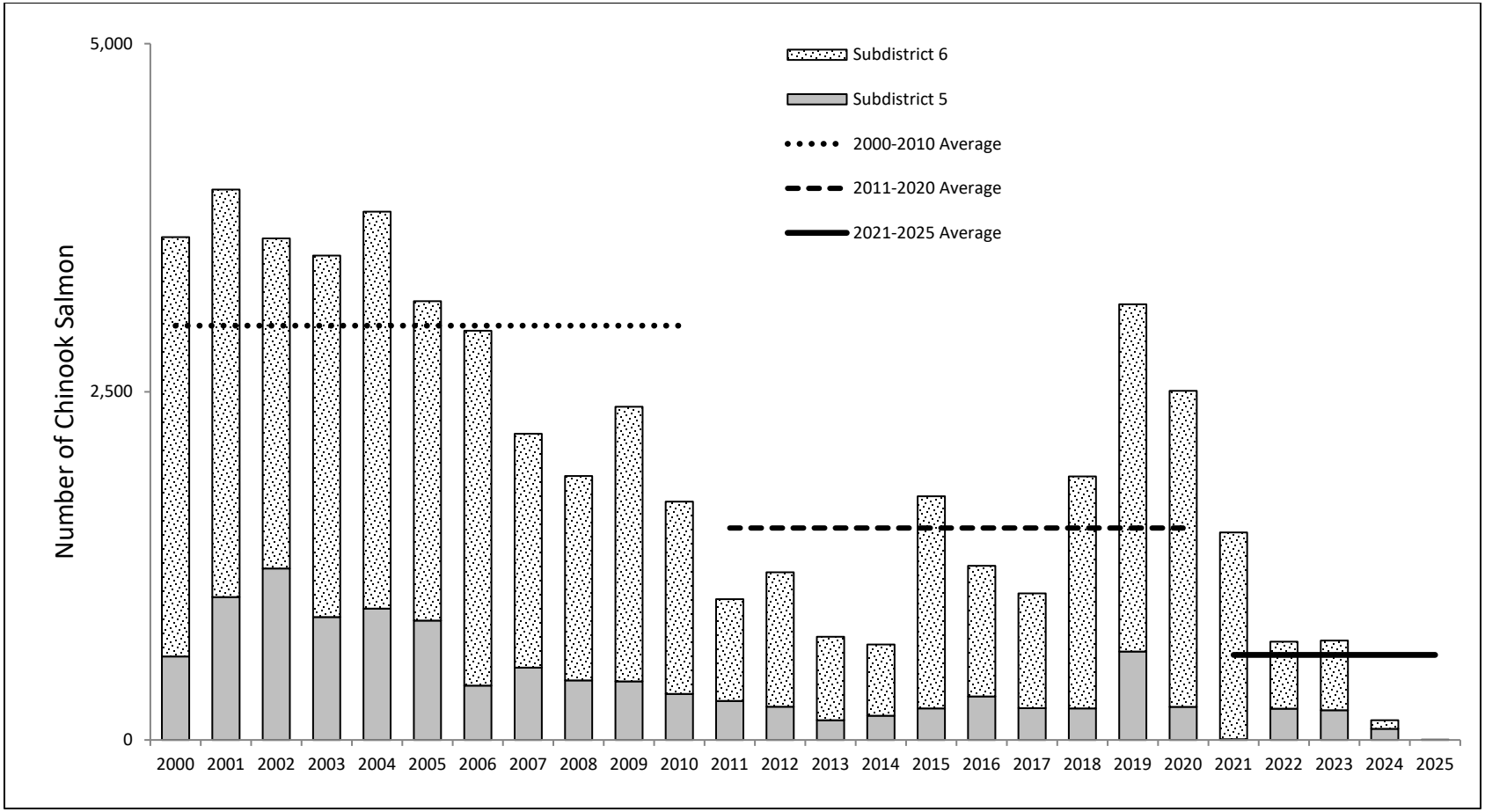

Figure 4.–Subdistricts 5 and 6 combined Chinook salmon commercial and subsistence salmon harvest, compared to the 2021–2025, 2011–2020, and 2000–2010 averages.

Note: Subsistence harvest data is unavailable for 2025.